

RĒZEKNES TEHNOLOĢIJU AKADEMIJA
Izglītības, valodu un dizaina fakultāte

REZEKNE ACADEMY OF TECHNOLOGIES
Faculty of Education, Language and Design

ISSN 1691-5887

**SABIEDRĪBA. INTEGRĀCIJA.
IZGLĪTĪBA**

Starptautiskās zinātniskās konferences materiāli
2020.gada 22.-23.maijs

**III daļa
SKOLAS PEDAGOĢIJA
PIRMSSKOLAS PEDAGOĢIJA**

**SOCIETY. INTEGRATION.
EDUCATION**

Proceedings of the International Scientific Conference
May 22th - 23th, 2020

**Volume III
SCHOOL PEDAGOGY
PRESCHOOL PEDAGOGY**

Rēzekne
2020

SABIEDRĪBA. INTEGRĀCIJA. IZGLĪTĪBA. Starptautiskās zinātniskās konferences materiāli. III daļa. Skolas pedagogija. Pirmsskolas pedagogija. 2020.gada 22.-23.maijs. Rēzekne, Rēzeknes Tehnoloģiju akadēmija, 2020, 776 lpp.

SOCIETY. INTEGRATION. EDUCATION. Proceedings of the International Scientific Conference. Volume III. School pedagogy. Preschool pedagogy. May 22th - 23th, 2020. Rezekne, Rezekne Academy of Technologies, 2020, p. 776.

Rekomendējusi publicēšanai Rēzeknes Tehnoloģiju akadēmijas Zinātnes padome, 2020.gada 24.martā.

Recommended for publication by the Scientific Council of Rezekne Academy of Technologies on March, 24, 2020.

Redaktori/Edited by Velta Lubkina, Līga Danilāne

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ISSN 1691-5887

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***Influence of Didactic Conditions on Effectiveness of Formation at
Younger School Students of Informative Universal Educational
Actions of Statement and a Solution***

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Abstract. *The article presents methodological, diagnostic and technological (procedural) components of the formation in younger schoolchildren of cognitive universal educational actions (PAP) of the setting and solution of the problem. The methodology of forming the components of «problem setting» and «problem solving» is disclosed in the article from the perspective of the system approach. The diagnostic component presents the diagnostic tactics (criteria, indicators, model of formation levels) of the PDS «problem setting» and «problem solving» in younger schoolchildren; There is provided didactic-methodical instrumentation for determining possible levels of UDM formation, problem setting and problem solution at the control stage of the experiment (qualitative and quantitative analysis of the execution of complex diagnostic tasks by junior students). The procedural component shows that compliance in the educational activity of the primary school with the principles of technology of intellectual and developing education, provision of visualization of problem situations, implementation of speech control of the process of setting and solving the problem through the development of speech logic in children increases the efficiency of the process of formation of education of students of the primary school in the younger schoolchildren in the ability to formulate and solve problems.*

The study carried out and the analysis of its results make it possible to draw a conclusion on the expediency of implementing in the educational activity of the primary school a designated didactic strategy, which helps the teacher to master the universal didactic tools of teaching younger schoolchildren to solve the educational problem and solve it.

Keywords: *didactic conditions, levels of formation of informative universal educational actions of statement and solution, didaktiko-methodical tools.*

Введение *Introduction*

Актуальность проблемы, рассматриваемой в данной статье, объясняется противоречием между объективной потребностью педагогов-практиков в дидактическом и диагностическом инструментарии формирования у младших школьников познавательных универсальных учебных действий постановки проблемы и решения проблемы в образовательном процессе начальной школы и его теоретической и практической неразработанностью.

Разрешение обозначенного противоречия невозможно без осознания педагогами потребности в знании и применении в образовательной деятельности совокупности дидактических условий, направленных на повышение результативности формирования у младших школьников познавательных универсальных учебных действий (ПУУД) «постановка проблемы» и «решения проблемы», а также разработки дидактико-методического инструментария диагностирования у школьников степени сформированности обозначенной группы УУД.

Теоретическое описание и эмпирическое осмысление педагогического опыта реализации совокупности дидактических условий в образовательной деятельности начальной школы было проведено нами ранее (Alekseeva, 2018).

Решение задачи разработки дидактико-методического инструментария и его апробации опирается на знание типовых диагностических заданий, а также проведения на их основе эмпирического исследования по определению итогового уровня сформированности познавательных УУД.

Таким образом, цель данной статьи заключается в экспериментальном обосновании влияния выявленных дидактических условий на степень сформированности познавательных УУД «постановка проблемы» и УУД «решение проблемы» у младших школьников посредством выполнения ими типовых диагностических заданий.

Методами исследования являются теоретический анализ литературных источников, педагогический эксперимент.

Теоретическая основа темы *The theoretical background*

Теоретическую основу для организации эмпирического исследования по выявлению влияния совокупности дидактических условий на повышение степени сформированности познавательных УУД «постановка проблемы»

и УУД «решение проблемы» у младших школьников составили следующие теоретические положения:

- методологической основой формирования у младших школьников ПУУД постановки и решения проблем выступает системный подход, предполагающий рассмотреть категорию «познавательные универсальные учебные действия постановки и решения проблемы» как целостную систему, состоящую из некоторой совокупности взаимосвязанных структурных компонентов (Meadows, 2008; O'Connor, 2010);
- познавательные универсальные учебные действия постановки проблемы и решения проблемы представляют собой сложные обобщённые интеллектуальные умения, в структуре которых выделяются перцептивные, мыслительные, имагинативные, речевые умения, приёмы и операции (Solovyeva & Smirnova, 2016);
- структурными компонентами сложного интеллектуального «умения формулировать проблему» являются «осознание противоречия» младшими школьниками и «постановка обобщенного проблемного вопроса» совместно с педагогом; в структуру «умения решать проблему» входят: «умение выдвигать предположения, первоначальные идеи», «умение доказывать гипотезы», «умение проверять доказанные гипотезы» (Solovyeva & Smirnova, 2016);
- критериями диагностирования степени сформированности у младших школьников познавательных УУД постановки и решения проблемы выступают: способность младшего школьника чувствовать противоречия; признаки эмоциональности в процессе постановки проблемы; лингвистические умения пояснить выявленное противоречие; качественная характеристика задаваемых школьником дополнительных вопросов на этапе постановки проблемы; способность выдвигать предположения, первоначальные идеи; способность приводить доводы, доказывающие гипотезу; способность учеником проверять доказанные гипотезы (Alekseeva, 2017);
- теоретическая модель уровней становления у обучающихся познавательных универсальных учебных действий постановки проблемы и решения проблемы включает в себя пять возможных уровней сформированности интеллектуальных умений по формулировке учебной проблемы и ее решению. Данные уровни отображают последовательное овладение учащимися начальной школы сложными обобщенными интеллектуальными умениями,

Alekseeva, 2020. Влияние дидактических условий на результативность формирования у младших школьников познавательных универсальных учебных действий постановки и решения проблемы

демонстрируя динамику перехода младшего школьника от менее совершенного уровня сформированности составляющих его способов действий (приёмов, операций) к более совершенному: низкий; ниже среднего; средний; выше среднего; высший (Alekseeva, 2017);

- к дидактическим условиям формирования познавательных универсальных учебных действий постановки и решения проблемы у младших школьников относятся: использование технологии интеллектуально-развивающего обучения (с опорой на принципы принципа сопряженной реализации развивающей и образовательной функций урока; принципа обмена субъективным опытом между учителем и обучающимися; принципа подготовки успешности выполнения школьниками развивающих заданий за счет обеспечения у них антиципации искомого; принципа внешней и скрытой опосредованной педагогической коррекции); речевое управление процессом постановки и решения проблемы посредством развития у детей логичности речи; обеспечение визуализации проблемных ситуаций в образовательной деятельности младших школьников (Alekseeva, 2018).

Результаты эмпирического исследования *The results of empirical research*

В 2016-ом году с целью выявления исходного уровня сформированности познавательных УУД постановки и решения проблемы у младших школьников было проведено входное диагностирование. Для решения поставленной задачи 386 младшим школьникам были предложены для выполнения диагностические задания из авторской методики определения уровней сформированности познавательных универсальных учебных действий постановки и решения проблем (Alekseeva, 2017). Базой исследования являлись образовательные учреждения г. Пскова и Псковской области.

Качественный и количественный анализ результатов выполнения диагностических заданий младшими школьниками показал, что низкий уровень сформированности преобладает у 63 % обучающихся начальной школы; на уровне ниже среднего находятся 32 % учащихся; средний уровень был зафиксирован лишь у 4 % школьников; а уровень выше среднего и высший уровень сформированности познавательных УУД постановки и решения проблемы не были диагностированы (Alekseeva, 2017).

Полученные данные продемонстрировали недостаточную степень овладения учащимися начальной школы познавательными универсальными учебными действиями постановки проблемы и решения проблемы. В связи с чем было принято решение о проведении формирующего этапа эксперимента, на котором в образовательной деятельности начальной школы был реализован комплекс дидактических условий, обозначенных в качестве единой стратегии повышения уровня сформированности у школьников структурных составляющих познавательных универсальных учебных действий постановки и решения проблем.

Базой исследования являлось МБОУ «Средняя общеобразовательная школа № 23 с углубленным изучением английского языка» г. Пскова. В педагогическом эксперименте были задействованы 68 третьеклассников.

По завершении локального эксперимента в 2018 - ом году было проведено итоговое диагностирование с целью выявления зависимости успешности процесса формирования у младших школьников УУД постановки и решения проблем от влияния совокупности дидактических условий, реализуемых в образовательной деятельности экспериментальных третьих классов.

В качестве дидактико-методического инструментария определения возможных уровней сформированности УУД постановка проблемы и решение проблемы на контрольном этапе эксперимента нами использовались диагностические комплексные задания. Одной из задач данной статьи является подробный анализ содержания данных заданий.

Важным для нашего исследования является дидактико-методическая направленность используемого на контрольном этапе эксперимента диагностического инструментария. Дидактическое содержание каждого из диагностических заданий спроектировано с опорой на структурные составляющие сложных интеллектуальных умений. Методическая значимость обозначенных заданий основывалась на их тематическом содержании, адекватном возрасту диагностируемых.

Охарактеризуем составленные нами и предложенные младшим школьникам диагностические задания.

В первом комплексном задании учащимся необходимо было самостоятельно прочитать противоречивый текст об ухудшении работы кишечника, нарушении сердечного ритма, развитии малокровия при дефиците и избытке минеральных солей в организме человека; о значении соли как структурного материала при образовании соляной кислоты в желудке, построения клеток тканей и органов, клеток крови, последствиях чрезмерного употребления соленой пищи в виде отеков и нагрузки на сердце и почки.

Alekseeva, 2020. Влияние дидактических условий на результативность формирования у младших школьников познавательных универсальных учебных действий постановки и решения проблемы

После прочтения текста требовалось сформулировать как можно больше вопросов и предложить собственный совет по употреблению поваренной соли в пищу.

Дидактическое содержание данного задания позволяло диагностировать уровень сформированности умения «осознавать противоречия» (УУД «постановка проблемы»), предоставляя педагогу-практику возможность проверить, способен ли школьник обнаружить явные и скрытые противоречия о влиянии на состояние здоровья человека несбалансированности минеральных веществ в его организме, используя мыслительные умения анализа и сравнения; имагинативные умения по акцентированию положительной и отрицательной функций поваренной соли в качестве «строительного материала» и «накопителя» излишней жидкости в человеческом организме.

Постановка младшими школьниками вопросов по текстовому содержанию анализируемого задания была направлена на оценку у них сформированности умения формулировать обобщенный проблемный вопрос (УУД постановка проблемы). Интерпретация полученных результатов позволяет зафиксировать качество реализации обучающимися речемыслительных умений за счет различной формы сформулированных вопросов: вопросы в общей неопределенной форме; вопросы в конкретной форме; вопросы в конкретно-качественной форме.

Второе диагностическое задание содержало текстовую информацию об особенностях внешнего вида и образа жизни белого полярного медведя. После прочтения текста от младшего школьника требовалось поставить и записать вопрос, возникающий по ходу его ознакомления с противоречивой информацией о внешнем виде и образе жизни морского медведя (диагностирование «умения осознавать противоречия» и «умения формулировать обобщенный проблемный вопрос»); сформулировать предположение по решению ряда учебных проблем: «*За счет чего белые полярные медведи могут так долго находиться в воде?*»; «*С какой целью белый медведь, находясь в засаде во время охоты на тюленей, прикрывает лапой свой голый нос?*»; «*Можно ли назвать морского медведя всеядным животным?*» (диагностирование «умения выдвигать предположения»); привести аргументы, доказывающие истинность сформулированных гипотез, а в случае возникновения затруднений выбрать одно из приведенных ниже предположений; записать аргументы, доказывающие истинность выбранного предположения; самостоятельно сформулировать предположение относительно размера носа бурого, белого и гималайского медведей (диагностирование умения формулировать и доказывать гипотезы).

Дидактическое содержание данного диагностического задания и ему подобных обеспечивает создание у младшего школьника ситуации возникновения поисковой познавательной потребности, способствующей выдвижению им первоначальных идей по поиску ответа на проблемный вопрос. Выдвижение предположений детьми иллюстрирует выполнение ими мыслительной операции анализа в ходе обнаружения зависимости образа жизни полярного медведя от его внешнего вида; демонстрирует наличие умения конкретизировать, описывая причинно-следственные отношения, зависимость плавучести белого медведя от строения его тела.

Через выполнение данного типа задания мы смогли диагностировать овладение учащимися умением доказывать выдвинутые гипотезы, т.е. наличие у них речевых умений по формулировке и аргументации тезиса.

Интерпретация результатов выполнения данного диагностического задания показала в ответах испытуемых различную степень полноты логической структуры доказательства. В частности, решая учебную проблему: *«с какой целью белый медведь, находясь в засаде во время охоты на тюленей, прикрывает лапой свой голый нос?»* некоторые школьники формулировали тезис и доводы к нему: *«для маскировки во время охоты», «чтобы его не заметили», «он сливается со снегом», «чтобы не привлечь к себе внимание и слиться с окружающей средой»*. Однако, аргументов, подтверждающих истинность сформулированного тезиса, в подобных работах обнаружено не было.

Анализ поиска учащимися решения проблемы: *«С чем связано, что нос у полярного медведя короче, чем у бурого медведя, проживающего в более теплой лесной полосе, а у бурого медведя нос короче, чем у гималайского медведя, предпочитающего селиться еще южнее?»* позволил зафиксировать в ответах школьников наличие не только умения приводить доводы к сформулированному тезису, но и умения убедительно его аргументировать (доказывать): *«С температурой в зоне обитания того или иного медведя. Чем теплее в зоне обитания тем длиннее нос», «Чтобы отдавать лишнее тепло. Чем холоднее климат, тем короче нос»*.

С целью определения у младших школьников степени сформированности умения проверять сформулированные гипотезы данное диагностическое задание предлагалось обучающимся дважды. Содержание повторного задания включало в себя справочный материал, чтобы на его основе младший школьник мог исправить допущенные им ошибки, осуществляя проверку достоверности сформулированных им гипотез и их аргументации, применяя приемы вербальной, имагинативной детализации, речевого достраивания.

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Проверь, правильно ли ты выполнил задание № 2. Исправь допущенные ошибки, ориентируясь на справочный материал, представленный ниже:

- Благодаря воздуху, находящемуся в каждой ворсинке, северный олень, как будто, одет в спасательный жилет.*
- Вся голая кожа у медведя имеет одинаковый черный цвет.*
- Всеядными животными называются такие животные, которые способны питаться и растительной, и животной пищей.*
- Чем жарче климат, тем длиннее выступающие части тела животного: нос, уши, хвост. Это необходимо для того, чтобы отдавать лишнее тепло. У животных, обитающих в холодном климате форма тела шарообразная. Все выступающие части тела укорочены.*

Дидактико-методическое осмысление содержания диагностических заданий, сконструированных с опорой на структуру познавательных УУД постановки и решения проблемы у младших школьников, и их апробация позволили нам перейти к количественному анализу полученных результатов.

В ходе сравнительного анализа обобщенных результатов выполнения комплексных диагностических заданий было установлено, что у обучающихся экспериментальных начальных классов произошел сдвиг уровня сформированности познавательных УУД постановки и решения проблемы, а именно: показатели низкого уровня сформированности данных УУД у младших школьников составили 22% (по сравнению с 63% на первоначальном этапе эксперимента); уровень ниже среднего был выявлен у 26% обучающихся (по сравнению с 32 %); существенно возросло процентное соотношение школьников со средним уровнем сформированности сложных интеллектуальных умений (с 4% до 28%); был обнаружен уровень сформированности познавательных учебных действий постановки и решения проблемы выше среднего, равный 24% (на первоначальном этапе исследования данный уровень отсутствовал). Высший уровень у младших школьников по-прежнему зафиксировать не удалось. Сравнительные результаты первичной и итоговой диагностики представлены на рисунке 1.

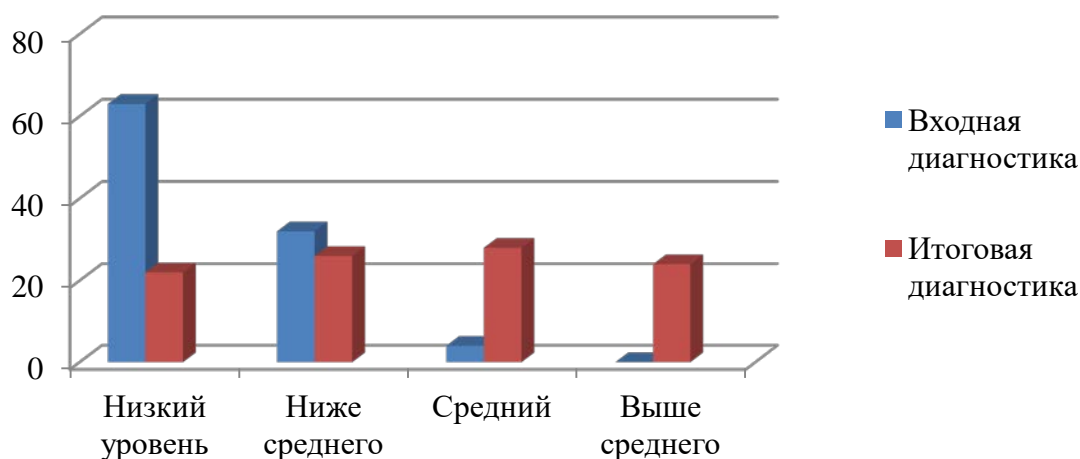


Рисунок 1. Сравнительные результаты исходного и итогового уровня сформированности познавательных универсальных учебных действий постановки и решения проблемы у младших школьников

Figure 1 Comparative results of initial and final level of formation of cognitive universal educational actions of setting and solving the problem in younger schoolchildren

Анализ диагностических работ третьеклассников позволяет говорить о тенденции повышения уровней сформированности у младших школьников сложных интеллектуальных умений по формулированию и решению учебных проблем за счет роста количества школьников со средним уровнем сформированности и появления уровня сформированности выше среднего.

Иными словами соблюдение дидактических условий в образовательной деятельности начальной школы сказалось на появлении в перечне сформированных у младших школьников УУД более сложных структурных составляющих сложных интеллектуальных умений по постановке и решению проблемы.

Таким образом, проведенное экспериментальное исследование позволило доказать, что выполнение сформулированных выше дидактических условий организации и осуществления образовательной деятельности в начальной школе позволяет повысить у младших школьников уровень сформированности сложных интеллектуальных умений по постановке и решению проблемы.

Обобщение *Conclusions*

На основании проведенного эмпирического исследования влияния дидактических условий на результативность формирования познавательных

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универсальных учебных действий постановки и решения проблемы у младших школьников мы сделали следующие выводы:

- в качестве дидактических условий формирования познавательных универсальных учебных действий постановки и решения проблемы у младших школьников выделяются: использование технологии интеллектуально-развивающего обучения; речевое управление процессом постановки и решения проблемы посредством развития у детей логичности речи; обеспечение визуализации проблемных ситуаций в образовательной деятельности младших школьников;
- обозначенные дидактические условия формирования познавательных универсальных учебных действий постановки и решения проблемы взаимосвязаны друг с другом, а практические механизмы их реализации позволяют педагогу освоить универсальные дидактические инструменты обучения школьников постановке учебной проблемы и ее решению;
- с целью определения итоговой степени сформированности познавательных универсальных учебных действий постановки и решения проблемы у младших школьников на контрольном этапе эксперимента использовались типовые диагностические задания дидактико-методического содержания. Дидактическое содержание каждого из типовых диагностических заданий спроектировано с опорой на структурные составляющие сложных интеллектуальных умений; методическая значимость анализируемых в статье заданий основывалась на их тематическом содержании, адекватном возрасту диагностируемых.

На основании анализа полученных результатов эмпирического исследования были зафиксированы следующие тенденции: сокращение числа учащихся с низким уровнем сформированности рассматриваемой группы УУД (с 63% до 22%), незначительное уменьшение количества младших школьников с уровнем сформированности ниже среднего (с 32% до 26%), рост количества обучающихся (с 4% до 28%); диагностирование школьников с уровнем сформированности познавательных УУД постановка проблемы и решение проблемы выше среднего, равного 24 % испытуемых.

Summary

On the basis of the conducted empirical research of influence of didactic conditions on effectiveness of formation of informative universal educational actions of statement and a solution at younger school students we drew the following conclusions:

- as didactic conditions of formation of informative universal educational actions of statement and a solution at younger school students are allocated: use of technology

of the intellectual developing training; speech management of process of statement and a solution by means of development in children of logicity of the speech; ensuring visualization of problem situations in educational activity of younger school students;

- the designated didactic conditions of formation of informative universal educational actions of statement and a solution are interconnected with each other, and practical mechanisms of their realization allow the teacher to master universal didactic instruments of training of school students in statement of an educational problem and to its decision;
- for the purpose of definition of total degree of formation of informative universal educational actions of statement and a solution at younger school students at a control stage of an experiment standard diagnostic tasks of didaktiko-methodical contents were used. Didactic keeping of each of standard diagnostic tasks is designed with a support on structural components of difficult intellectual abilities; the methodical importance of the tasks analyzed in article was based on their thematic contents adequate I will increase diagnosed.

On the basis of the analysis of the received results of an empirical research the following trends were recorded: reduction of number of pupils with the low level of formation of the considered UUD group (from 63% to 22%), insignificant reduction of number of younger school students with formation level below an average (from 32% to 26%), growth of number of students (from 4% to 28%); diagnosing of school students with the level of formation of informative UUD statement of a problem and a solution is higher than the average equal to 24% of examinees.

Литература References

- Alekseeva, T. (2017). Empirical study of the levels of formation of universal cognitive educational actions of setting and solving problems in younger schoolchildren. *Society, Integration, Education. Proceedings of the International Scientific Conference, Volume II*, 17-28.
- Alekseeva, T. (2018). Substantive description of didactic conditions of formation of cognitive universal educational actions of setting and solving the problem and ways of their implementation in educational activities of primary school. *Society, Integration, Education. Proceedings of the International Scientific Conference, Volume II*, 17-30.
- O'Connor, J. (2010). *The Art of Systems Thinking: Essential Skills for Creativity and Problem Solving*. San Francisco: Thorsons.
- Meadows, D. (2008). *Thinking in Systems – A Primer*. London: Earthscan.
- Solovyeva, T., & Smirnova, T. (2016). Formation of universal cognitive educational actions of setting and solving problems in younger schoolchildren. *Society, Integration, Education. Proceedings of the International Scientific Conference, Volume II*, 446-459.

ВОЗМОЖНОСТИ ТЕХНОЛОГИИ СМЕШАННОГО ОБУЧЕНИЯ В ОРГАНИЗАЦИИ ОБРАЗОВАТЕЛЬНОЙ ДЕЯТЕЛЬНОСТИ МЛАДШИХ ШКОЛЬНИКОВ

Possibilities of Blended Learning Technology in the Organization of Educational Activities of Primary School Students

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Abstract. *The article substantiates the relevance of using the technology of blended learning as one of the means of personalizing the education of primary school students. In modern conditions for the teacher, the formation of the ability to learn independently on the part of primary school children is becoming a leading priority. This problem is especially relevant in conditions of small schools in classes with low occupancy, in which 2-3 study groups are engaged in the same classroom with one teacher. In this regard, it becomes important to solve the problem of organizing the educational space in such a way that the younger student takes a subjective position in the learning process, actively acts in the development of educational material, is able to carry out planning and self-control, and interact in a small group. The "Change of working areas" model contributes to the solution of this problem. The use of this model in classes with low occupancy allows the teacher to realize differentiation, to work individually with the student at each moment of time, use interactive forms of work in the lesson, and organize regular group work. The aim of the study is to determine and experimentally prove the effectiveness of pedagogical conditions of use in the primary low-grade school model "Change of working areas". The tools and methods that ensure the use of this model in the education of primary school children are described. The formative experiment on the implementation of the "Change of working areas" model has shown positive results: learning using the model has a positive effect on the development of meta-subject and personal learning actions.*

Keyword: *blended learning, Change of working areas, primary school students.*

Введение *Introduction*

Актуальность проблемы, рассматриваемой в настоящей статье, обусловлена тем, что малокомплектная начальная школа в соответствии с федеральным государственным образовательным стандартом начального общего образования (Federal'nyj gosudarstvennyj obrazovatel'nyj standart nachal'nogo obshhego obrazovanija (FGOS NOO), 2009) призвана обеспечить формирование у младших школьников умения самостоятельно учиться.

Реализация данной задачи усугубляется малой наполняемостью классов, в которых две-три учебные группы занимаются в одном классном помещении с одним и тем же педагогом. Следовательно, первостепенную значимость приобретает необходимость обеспечения персонализации малокомплектного образовательного пространства, активизации познавательной деятельности обучающихся. Это предполагает, прежде всего, предоставление младшему школьнику возможности чувствовать себя полноправным субъектом образовательной деятельности, активно мыслящим, способным решать проблемные задачи, эффективно взаимодействующим в малой группе.

Решению данной задачи будет содействовать обращение к технологии смешанного обучения, которая отвечает требованиям ФГОС НОО (FGOS NOO, 2009), в частности, к технологической модели «смена рабочих зон», а также проведение эмпирического исследования по реализации в образовательной деятельности начальной малокомплектной школе данной модели.

Цель статьи заключается в теоретическом описании преимуществ использования в начальной малокомплектной школе модели «смена рабочих зон» и эмпирическом осмыслении педагогического опыта реализации данной модели в образовательной деятельности начальной школы в классах малой наполняемости, осуществленной с целью развития познавательной активности и самостоятельности младших школьников.

В статье представлены материалы, полученные с помощью теоретического анализа литературных источников, стандартизированного наблюдения за образовательной деятельностью младших школьников и педагогического эксперимента.

Эмпирическая часть исследования заключается в презентации модели «смена рабочих зон» при изучении математического содержания учащимися малокомплектных школ, организованной в результате стандартизированного наблюдения за деятельностью младших школьников малокомплектных школ.

Теоретическая основа темы *The theoretical background*

Теоретико-методологическую основу использования технологии смешанного обучения как одного из средств развития познавательной активности и самостоятельности младших школьников в малокомплектной начальной школе составили:

- исследования в области смешанного обучения, рассматривающие смешанное обучение как форму (Curtis & Bonk, 2006) и как метод, совмещающий традиционное обучение «лицом к лицу» и некоторые элементы дистанционного обучения» (Loginova, 2016);
- положения интегративного подхода к организации смешанного обучения, в том числе роль интеграции онлайн – и офлайн-методов обучения (Khorn & Steyker, 2015);
- технологическая модель смены рабочих зон как основа использования технологии смешанного обучения в малокомплектной начальной школе (Panova, 2019);
- теория развития познавательной активности и самостоятельности школьников (Shamova, 2012; Shchukina, 2014).

Осмысление литературных источников (Andreyeva, Rozhdestvenskaya, & Yarmakhov, 2016) позволило под смешанным обучением понимать технологию, сочетающую очное обучение (с участием учителя) с онлайн-обучением, включающую элементы самостоятельного контроля учеником пути, времени, места и темпа обучения, а также интеграцию опыта обучения в этих средах.

D. Randy Garrison и Norman D. Vaughan в работе «Blended learning in higher education: Framework, principles, and guidelines» уточняют: «Смешанное обучение - это не просто дополнительный и при этом дорогой уровень образования. Оно подразумевает коренное изменение классической структуры в целях увеличения участия студентов и расширения доступа к образовательным структурам в сети Интернет» (Garrison & Vaughan, 2008, 5).

Позиции педагогов относительно преимуществ моделей смешанного обучения противоречивы. Так, педагогический психолог R. Clark, длительное время изучавший вопросы эффективности использования различных моделей смешанного обучения, пришел к неоднозначным выводам, как подтверждающим преимущества смешанного обучения по сравнению с традиционным обучением в классе, так и его опровергающим (Clark, 1983). L. Cuban показал, что использование смешанного обучения не

оказало сколь-нибудь значительного влияния на повышение качества образования в США (Cuban, 2003).

Для нашего исследования представляет интерес позиция В. Benard, согласно которой деятельность учителя при реализации моделей смешанного обучения осуществляется в трех направлениях: менеджера учебной деятельности учащихся, педагогического дизайнера, проектирующего свою собственную учебную программу, и педагога-психолога, понимающего учащегося (Benard, 2004).

На основании всего перечисленного выше, можно говорить о том, что педагогические модели, направленные на реализацию технологии смешанного обучения, были неоднократно охарактеризованы в научных работах, однако они не удовлетворяли особенностям организации образовательной деятельности в малокомплектной начальной школе.

На поисковом этапе нашей экспериментальной работы, осуществляя стандартизированное наблюдение за включенностью младших школьников в различные виды деятельности в рамках одного и того же урока в малокомплектной начальной школе, мы заметили, что одни школьники предпочтительны к определенному виду деятельности, а другие к нему безразличны. Возникает вопрос: «Почему организация того или иного вида деятельности содействует персонализации обучения одних учащихся, а для других детей остается нейтральным?»

Изучение педагогической литературы позволило нам найти ответ на сформулированный вопрос. Оказалось, что первостепенным фактором использования технологии смешанного обучения в организации образовательной деятельности младших школьников, выступает ее персонализация, то есть ориентация на интересы каждого учащегося, предоставление школьнику права самому выбирать каким способом, когда, как и (в какой мере) он будет осваивать новые знания (Andreyeva et al., 2016).

Развивая мысль о факторах использования технологии смешанного обучения, отметим, что персонализация обучения младших школьников достигается в условиях малокомплектной начальной школы за счет создания среды высоких ожиданий для каждого школьника (стремление к личной цели, проявление учебной активности на пути к этой цели); достижения личной ответственности (осознание ответственности за результативность собственного обучения), организации различных форм групповой работы младших школьников.

Другими словами, в классах с малой наполняемостью, где несколько учебных групп занимаются одновременно с одним педагогом, организация образовательного пространства должна осуществляться таким образом, чтобы младший школьник занимал субъектную позицию в процессе обучения, активно действовал при освоении учебного материала, был

способен осуществлять планирование и самоконтроль, взаимодействовать в малой группе.

Предпримем попытку описания технологии смешанного обучения как одного из средств персонализации обучения младших школьников с позиции смены рабочих зон в образовательной деятельности начальной малокомплектной школы.

Использование модели «смена рабочих зон» является наиболее целесообразным для данного исследования. Учитывая специфику образовательной деятельности в малокомплектной начальной школе, младшим школьникам предоставляется возможность, по словам Н.В. Андреевой, активно осваивать учебный материал посредством разных видов деятельности в рамках одного урока (Andreyeva et al., 2016). В данном случае для учителя первоначально важным является умения организовывать работу в малых группах и эффективно управлять данным процессом. Отметим, что для осуществления данной модели требуется наличие компьютеров или планшетов в классе.

Сущность модели «смена рабочих зон» состоит в том, что в классе образуются «станции», между которыми учащиеся перемещаются по сигналу учителя (Khorn & Steyker, 2015). Оптимальное количество зон не превышает трех-четырёх, например, станция работы с учителем, станция онлайн-работы (индивидуальная работа по инструкции учителя), станция работы в группах (групповая (проектная) работа по инструкции учителя).

Так, младшие школьники, находящиеся на станции работы с учителем получают от него персональную помощь по повышению их успеваемости (повторное изучение трудной темы, индивидуальный план работы над материалом). В свою очередь, педагог получает возможность получить от каждого ученика эффективную обратную связь.

Обучающиеся, занимающиеся на станции онлайн-работы, при знакомстве с новым материалом проверяют свои знания и развивают умения самостоятельно учиться, вырабатывая личную ответственность за результат обучения, начиная от целеполагания и заканчивая саморегуляцией и рефлексией. Обеспечение возможности каждому учащемуся «двигаться в своем темпе» становится выполнимым при условии предоставления доступа к материалам не только одного урока, но и всей темы. С целью повышения качества обратной связи с учащимися и контроля их результатов в автоматизированном режиме педагог может использовать видео, презентации, тренажеры и другие инструментов онлайн-среды.

Школьники, оказавшиеся на станции групповой (проектной) работы, стремятся применить знания и умения в новых, практико-ориентированных ситуациях, овладеть новыми способами действий, играя в настольные игры по изучаемой теме, выполняя групповые практико-ориентированные

задания, проектные задания, участвуя в квестах, небольших исследованиях, мини-соревнованиях др.

Реализация в практике обучения младших школьников технологии смешанного обучения, модели «смена рабочих зон» поможет в некоторой степени сгладить негативные особенности организации учебно-воспитательного процесса в малокомплектных школах: процесс обучения в данных школах осуществляется на фоне отрицательных эмоциональных состояний - безразличия, скуки, аффекта в форме плаксивости, напряженности, психологического пресыщения, монотонии, отсутствия познавательной активности и самостоятельности (Lebedeva & Akraeva, 2010).

Анализ литературы по проблемам развития познавательной активности свидетельствует, что этот термин ученые понимают по-разному. Одни отождествляют активность с деятельностью, другие считают активность результатом деятельности, третьи утверждают, что активность - более широкое понятие, чем деятельность. По мнению Т.И. Шамовой «познавательная активность рассматривается как качество деятельности личности, которое проявляется в отношении ученика к содержанию и процессу деятельности, в стремлении его к эффективному овладению знаниями и способами деятельности за оптимальное время, в мобилизации нравственно-волевых усилий на достижение учебно-познавательных целей» (Shamova, 2012, 176). Познавательная активность отражает определенный интерес младших школьников к получению новых знаний, умений и навыков, внутреннюю целеустремленность и постоянную потребность использовать разные способы действия к расширению знаний, расширение кругозора. Вслед за Г.И. Щукиной будем определять «познавательную активность» как качество личности, которое включает стремление личности к познанию, выражает интеллектуальный отклик на процесс познания. Качественным личностью «познавательная активность» становится при устойчивом проявлении стремления к познанию (Shchukina, 2011).

Представив теоретическую основу исследования, проиллюстрируем опыт реализации в начальной малокомплектной школе технологической модели «смена рабочих зон».

Методы и организация исследования *Methodology and organization of the research*

Для эмпирического осмысления педагогического опыта реализации модели «смена рабочих зон» в образовательной деятельности начальной малокомплектной школы (школы малой наполняемости) с целью повышения познавательной активности и самостоятельности младших школьников был проведен педагогический эксперимент. Эмпирическая

часть исследования была выполнена в рамках магистерской научной работы Пановой Н.В. экспериментальном исследовании приняли участие ученики малокомплектных школ Псковской области: МБОУ «Ущицкая средняя общеобразовательная школа» Куньинского района, Жадрицкая начальная общеобразовательная школа» филиала МОУ «Новоржевская средняя школа» Новоржевского района.

Исследование проводилось с использованием таких методов как:

- ✓ анкетирование студентов Института образования и социальных наук Псковского государственного университета с целью обоснования цели исследования; определения затруднений методического характера, связанных с организацией учителем самостоятельной работы учащихся малокомплектных школ в случае «класс-комплекта», в котором в одном классном помещении учатся дети разного возраста (2-3-х классов);
- ✓ для выявления личностных предпочтений, особенностей младших школьников применялся метод наблюдений, анализ ученических работ; диагностика доминирующей перцептивной модальности С. Ефремцева (Efremsev, 2013), измененная с учетом особенностей сельской местности; для исследования степени концентрации и устойчивости внимания обучающихся использовались корректурные пробы Бурдона;
- ✓ анализ учебных планов, рабочих программ по математике школ, выбранных в качестве базы исследования с целью выявления возможности реализации модели «смена рабочих зон» при организации обучения математике в «класс-комплекте»;
- ✓ эксперимент, направленный на реализацию модели «смена рабочих зон» при изучении математических дисциплин учащимися малокомплектных школ с целью достижения личностных результатов обучения, в частности, развития познавательной активности младших школьников.

Проведенное анкетирование студентов-будущих учителей начальной школы показало, что студенты испытывают затруднения методического характера, связанные с организацией самостоятельной работы младших школьников, с возможностью использования технологии «смешанное обучение» в «класс-комплектах».

Для персонализации обучения младших школьников при реализации технологии «смешанное обучение» был проведен анализ ученических работ, беседа с учителями. В большинстве случаев дети, посещающие малокомплектные школы, выбранные в качестве базы исследования, живут в семьях, имеющих статус малообеспеченных. Присутствуют школьники из многодетных семей, из неблагополучных и неполных семей. Были

выявлены интересы и предпочтения детей для организации работы в «рабочих зонах», доминирующая перцептивная модальность учеников.

На основе анализа учебных планов, рабочих программ по математике было разработано содержание и методическая составляющая изучения математики с использованием модели «смена рабочих зон» для каждого класса:

- ✓ определены основные темы, предназначенные для «параллельного» изучения в классах, занимающихся одновременно у одного учителя;
- ✓ определены схемы передвижения учащихся двух классов между рабочими зонами на протяжении конкретного урока. Так, в таблице 1 приведен пример «смены рабочих зон» одного урока для учащихся 2-го и 3-го классов Жадрицкой начальной общеобразовательной школы;
- ✓ отобран теоретический материал, определена форма, в которой данное содержание следует предложить ученикам, а именно: компьютерная презентация; текст учебника с дополнительными вопросами; страница на сайте для самостоятельной работы; видео; работа с учителем;
- ✓ созданы различные виды контроля знаний и умений школьников по изученному на каждом уроке учебного материала: компьютерное тестирование; письменная самостоятельная работа; тренажеры;
- ✓ выбраны для организации групповой работы на каждом уроке игры, связанные с темой урока, практико-ориентированные и проектные задания, квесты, тематика небольших исследований и др.

Таблица 1. Смена рабочих зон» для учащихся 2 и 3 классов Жадрицкой начальной общеобразовательной школы

Table 1 Change of work areas” for students in grades 2 and 3 of the Zhadritsky primary school

2 класс	3 класс
Тема урока: «Приёмы сложения и вычитания двузначных чисел».	Тема урока: «Приёмы сложения и вычитания в пределах 1000».
Зона работы с учителем. Помощь учителя в усвоении нового вычислительного приема с использованием текста учебника.	Зона онлайн. Самостоятельное изучение учащимися темы: «Сложение и вычитание в пределах 1000» (презентация), ответы на контрольные вопросы.

<p>Зона групповой работы. Для закрепления нового вычислительного приема предлагается групповая игра – путешествие.</p>	<p>Зона работы с учителем. Проверка усвоение учащимися алгоритма письменного сложения и вычитания концентре «Тысяча». Ответы учащихся на вопросы к презентации. Помощь учителя в случае затруднений.</p>
<p>Зона онлайн. Задание на тренажере по теме «Приемы сложения и вычитания двузначных чисел»</p>	<p>Зона групповой работы. Краткосрочный проект: Сформулировать практико-ориентированные задачи с использованием предложенного учителем фактического материала (с учетом интересов учащихся) на сложение и вычитание чисел в концентре «Тысяча».</p>

В online зоне использовались различные цифровые образовательные ресурсы.

Образовательный интернет-ресурс «Я Класс» создан для учителей и школьников. Например, учитель задаёт школьнику проверочную работу. Ученик заходит на сайт «Я Класс» и выполняет задание педагога. Если ученик допускает ошибку, «Я Класс» объяснит ход решения. При повторной попытке ученику будет предложен другой вариант задачи. Ответы не получится скопировать или списать. Учителю приходит отчёт об успешности выполнения учеником задания.

Система дистанционного обучения «Прометей» также позволяет ученикам осуществлять ознакомление с электронными лекциями, содержащимися в библиотеке. Учитель имеет возможность создавать тесты в данной системе.

Для проведения уроков использовались видео уроки InternetUrok.ru, videouroki.net.

Результаты эмпирического исследования

The results of empirical research

Целью эмпирического исследования было показать возможность и целесообразность использования при организации учебного процесса малокомплектной школы модели смешанного обучения «смена рабочих зон» для преодоления отрицательных эмоциональных состояний обучающихся в классах с малой наполняемостью - безразличия, отсутствия концентрации и устойчивости внимания детей в ходе урока, интереса; отсутствия познавательной активности и самостоятельности.

Характеристика познавательной активности обучающихся в учебной деятельности проводилась на основании работ А.К. Марковой,

Г.И. Шукиной, которые выделяют внешние и внутренние показатели ее проявления (Medvedeva, 2009; Shchukina, 2012). К внешним показателям познавательной активности относятся: активность, диалог с учителем, диалог с учениками, выполнение домашнего задания, чтение дополнительной литературы, внеклассная работа, работоспособность, самостоятельные задания, успеваемость, ожидание конца урока. К внутренним показателям относятся: эмоциональное состояние (реакция), открытость, быстрота вхождения в учебную ситуацию, мотивация, внимание.

Был определен диагностический инструментарий для определения основных характеристик познавательной активности младших школьников: методика «Изучение мотивации обучения у младших школьников» М.Р. Гинзбурга, методика «Познавательная самостоятельность младшего школьника» А.А. Горчинской (Gorchinskaya, 1999), методика «Нерешаемая задача» (для выявления уровня самостоятельности учащихся).

По результатам проведения методик мы определили следующие уровни активности младших школьников до и после проведения формирующего этапа эксперимента:

- низкий уровень, репродуктивно-подражательная активность;
- средний уровень, поисково-исполнительная активность;
- высокий уровень, творческая активность, в этом случае и сама задача может ставиться школьником и пути ее решения избираются новые, нешаблонные, оригинальные.

Апробация модели технологии смешанного обучения «смена рабочих зон», реализуемая при обучении математике учащихся малокомплектных школ на этапе контрольного среза показала, что в классах, где была реализована данная модель, познавательная активность школьников возросла (на 29,4% увеличилось количество младших школьников, имеющих высокий уровень, 23,5% детей, характеризующихся низким уровнем, перешли на средний уровень); возросла мотивация школьников при решении математических задач.

Изменились направления познавательного интереса. Так после реализации модели «смена рабочих зон» возрос интерес школьников к процессу деятельности – групповой работе, работе в онлайн-зоне (возрос на 53%), к решению трудных математических задач (возрос на 17,6%), к изучению нового с использованием Интернет-ресурсов (возрос на 35,3%).

Для осуществления психолого-педагогической диагностики обучающихся в классах с малой наполняемостью использовались также корректурные пробы Бурдона для исследования степени концентрации и устойчивости внимания обучающихся в ходе реализации модели

смешанного обучения «смена рабочих зон» (Sidorov, 2012). Анализ результатов диагностических работ позволил сделать выводы о повышении уровня концентрации и устойчивости внимания учащихся на уроках с использованием модели «смена рабочих зон» (тестирование проводилось на 15 минуте уроков). Так, по показателю концентрации внимания высокий уровень показали 35,3% учеников (по сравнению с 11,8% на традиционных уроках математики), средний уровень – 29,4% (процент школьников, находящихся на данном уровне, одинаковый), низкий уровень – 35,3% (по сравнению с 58,8%). Аналогичные результаты по показателям устойчивости внимания: высокий уровень у 41,2% учеников (по сравнению с 23,5%), средний – 35,3% (по сравнению с 29,4%), низкий – 23,5% учащихся (по сравнению с 47,1%).

Продуктивность реализации модели смешанного обучения «смена рабочих зон» в классах с малой наполняемостью связана и с тем, что один и тот же учебный материал был предоставлен с учетом доминирующей перцептивной модальности школьников - на разных носителях (текст, презентация, фильм), с использованием различных форм организации деятельности детей – индивидуальная, групповая формы работы. Кроме того, при разработке учебных материалов учитывались предпочтения и интересы всех детей класса, что также положительно сказалось на активизации познавательной деятельности обучающихся, на направленности их познавательного интереса.

В целом следует говорить о том, что процесс формирования познавательной активности младших школьников при реализации модели «смена рабочих зон» продуктивен.

Обобщение **Conclusions**

Проведенное исследование позволило сделать следующие выводы.

Решению задачи формирования у обучающихся малокомплектных школ умения самостоятельно учиться будет содействовать обращение к модели технологии смешанного обучения «смена рабочих зон». Реализация в практике обучения данной модели в классах с малой наполняемостью поможет в некоторой степени сгладить негативные особенности организации учебно-воспитательного процесса в малокомплектных школах, в частности, проблему отсутствия познавательной активности и самостоятельности младших школьников.

Согласно цели исследования было выделено содержание и методическая составляющая изучения математики с учетом интересов и

предпочтений учащихся в «классах-комплектах» с использованием модели «смена рабочих зон».

Результаты проведенного исследования показали положительное влияние реализации данной модели смешанного обучения в образовательном процессе малокомплектной начальной школы на развитие познавательной активности и самостоятельности младших школьников.

Summary

At present, one of the urgent problems of modern education is the organization of the educational process in small schools in connection with its specifics: one elementary school teacher conducts lessons with students of several classes in the same classroom. The organization of the educational process in small schools is difficult due to the possible negative emotional states of students - indifference, boredom, tension, psychological satiety, lack of cognitive activity and independence. The aforesaid determined the relevance of the implementation of the model of technology of blended learning “change of work zones” in low occupancy classes at the lessons of various educational disciplines.

The theoretical understanding of the psychological, pedagogical and scientific-methodical literature allowed us to formulate a position in the implementation of the model “change of work areas” in classes with low occupancy and to develop the content and methodological component of the study of mathematics using this model taking into account the needs and interests of students. The main topics for “parallel” study in classes were selected, patterns of movement of students of classes between work areas during a specific lesson were determined, a form in which the selected content will be offered to students was determined, various types of control were created, forms of group work organization were selected for each lesson.

The results of the study showed the positive impact of the implementation of the model of technology of blended learning “change of work zones” in the educational process of a low-grade elementary school on the development of cognitive activity and independence of younger students.

References

- Andreyeva, N.V., Rozhdestvenskaya, L.V., & Yarmakhov, B.B. (2016). *Shag shkoly v smeshannoye obucheniye*. Moskva: Buki Vedi.
- Benard, B. (2004). *Resiliency: What We Have Learned*. San Francisco: WestEd.
- Clark, R. (1983). Reconsidering research on learning from media. *Review of educational research*, 5(4), 449–454.
- Cuban, L. (2003). Computers Meet Classroom: Classroom Wins. *Teachers College Record*, 95(2), 185–210.
- Curtis, J. Bonk, & Charles R. Graham (2006). *The Handbook of Blended Learning: Global Perspectives, Local Designs*. Pfeiffer.
- Efremcev, S. (2013). *Diagnostika dominiruyushchey pertseptivnoy modal'nosti*. Retrieved from <https://psycabi.net/testy/289-test-audial-vizual-kinestetik-diaagnostika-dominiruyushchey-pertseptivnoj-modalnosti-s-efremtseva>
- Federal'nyj gosudarstvennyj obrazovatel'nyj standart nachal'nogo obshhego obrazovaniya*

- (FGOS NOO). (2009). Retrieved from https://kpfu.ru/docs/F2009061155/FGOS.NOO_23_10_09_Minjust_3._1_.pdf
- Garrison, D., & Vaughan, N. (2008). *Blended learning in higher education: Framework, principles, and guidelines*. Jossey-Bass.
- Gorchinskaya, A.A. (1999). *Razvitiye poznavatel'nogo interesa mladshikh shkol'nikov v uchebnoy deyatel'nosti*. Diss. ... kand. ped. nauk: 13.00.01. Chelyabinsk.
- Khorn, M., & Steyker, KH. (2015). *Smeshannoye obucheniye. Ispol'zovaniye proryvnykh tekhnologiy dlya uluchsheniya shkol'nogo obrazovaniya*. San-Frantsisko: Wiley.
- Lebedeva, L.A., & Akpayeva, A.B. (2010). *Teoriya i tekhnologiya pedagogicheskogo protsessa v malokomplektnoy nachal'noy shkole*. Almaty, Kazakhskiy Natsional'nyy Pedagogicheskii Universitet im. Abaya.
- Loginova, A. (2016). Smeshannoye obucheniye: preimushchestva, ogranicheniya i opaseniya. *Molodoy uchonyy*, 7, 156-161. Retrieved from <http://www.moluch.ru/archive/87/16877>
- Medvedeva, M.V. (2009). Aktivizatsiya poznavatel'noy deyatel'nosti na urokakh khimii. *Sredneye professional'noye obrazovaniye*, 6, 24-26.
- Panova, N. (2019). Ispol'zovaniye tekhnologii smeshannogo obucheniya v malokomplektnoy shkole. *Obshchestvo i obrazovaniye v XXI veke: opyt proshlogo – vzglyad v budushcheye*. Pskov: Pskovskiy gosudarstvennyy universitet.
- Shamova, T.I. (2012). *Aktivizatsiya ucheniya shkol'nikov*. Moskva: Pedagogika.
- Shchukina, G.I. (2011). *Aktivizatsiya poznavatel'noy deyatel'nosti uhashchikhsya v uchebnom protsesse*. Moskva: Prosveshcheniye.
- Shchukina, G.I. (2012). *Pedagogicheskiye problemy formirovaniya poznavatel'nykh interesov uhashchikhsya*. Moskva: Pedagogika.
- Shchukina, G.I. (2014). Issledovaniye problemy aktivizatsii uchebno - poznavatel'noy deyatel'nosti. *Sov. Pedagogika*, 11, 46–51.
- Sidorov, K.R. (2012). Kolichestvennaya ocenka produktivnosti vnimaniya v metodike «Korrektornaya proba» B.Burdona. *Vestnik Udmurtskogo universiteta. Filosofiya. Sociologiya. Psihologiya. Pedagogika*, 4, 51-57. Retrieved from <https://cyberleninka.ru/article/n/kolichestvennaya-otsenka-produktivnosti-vnimaniya-v-metodike-korrektornaya-proba-b-burdona/viewer>

THE CIVIC SELF-CONSCIOUSNESS OF CONTEMPORARY SECONDARY SCHOOL STUDENTS IN THE ASPECT OF THE HUMANISTIC PARADIGM OF EDUCATION

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Abstract. Civic self-consciousness is a topical issue in present-day Latvia. After regaining of independence and joining the European Union, there appeared an opportunity to ensure real freedom and genuine democracy for all inhabitants in Latvia. Thus, new conditions were created for the development of civic self-consciousness in senior secondary school students. New guidelines are developed in the European system of education according to the new understanding of humanism. The key reference-point is the understanding that the main goal of education is to support the development of personality that will become an EU citizen and a professional. The study established that it is necessary to develop civic self-consciousness so that Latvian secondary school students could become European-type citizens and professionals. The research deals with the analysis of a new model of education, the basis for developing civic self-consciousness in senior secondary school students. The research has determined the structure of civic self-consciousness and demonstrated the interconnectedness of its structural components (tolerance, responsibility and intercultural identity).

The aim of the research: to analyse the possibilities of a new model of education in developing the civic self-consciousness of senior secondary school students, to determine its essence, structure and characteristics. The research methods include analysis, survey, testing, conversation, an ascertaining experiment, mathematical statistics.

The research results: there was determined the structure of civic self-consciousness as a precondition for the development of civic self-consciousness in senior secondary school students and conducted the analysis of ideas concerning new humanism in education and a new model of education (education – culture – individual).

Keywords: civic self-consciousness, humanistic paradigm of education, identity, responsibility, the cultural component of education, tolerance.

Introduction

The topicality of the issue concerning the development of civic self-consciousness of Latvian youth is underpinned by social and political transformations taking place in Europe and in Latvia in the 21st century (the creation of the European Union and Latvia's accession to the European Union). The importance of tackling this issue in Latvia was also highlighted by the president of Latvia Egils Levits in his New Year address on the 31st of December 2019. In this regard, it has become necessary to create a new model of education based on the humanistic paradigm. The humanistic paradigm of education presupposes the transition from utilitarian and pragmatic goals of education as a combination of knowledge, skills and abilities necessary for successful professional activity to a humanistic goal focused on the subject and his/her personal development. In 2006, a humanitarian model of education was developed in Latvian science, in accordance with the humanistic ideas aimed at educating a European citizen (Čehlovs, 2011). The title "humanitarian model of education" emphasizes the focus on the person as the highest value. Consequently, the humanitarian model of education is considered in contemporary pedagogy as the basis for the development of the civic self-consciousness of senior secondary school students.

The research object – the humanitarian model of education.

The research subject - the civic self-consciousness of contemporary senior secondary school students.

The aim of the research - to analyse the possibilities of a new model of education in developing the civic self-consciousness of senior secondary school students; to determine the essence, structure and characteristics of the civic self-consciousness of senior secondary school students.

The research methodology – the research was carried out using the following approaches: the humanistic approach, the personal activity approach, the cultural approach and the competency-based approach.

The research methods - analysis, survey, testing, conversation, an ascertaining experiment, mathematical statistics (the data processing was done using the software SPSS16).

The research basis - Riga Classical Gymnasium, Riga State Technical School, and Teterov Gymnasium in Germany.

The European Dimension in Education: Reorganizing the Traditional System

The European system of education has developed new guidelines in accordance with the new understanding of humanism. They have been formulated

by Y. Neimatov in the monograph “Education in the 21st century: the trends and predictions” (Neimatov, 2002). The new guidelines set in this work correspond to new ideas about education and serve as the basis for the reorganization of the traditional system of education.

The first postulate is that the aim of education is the formation of a person who will become a European-type citizen and a professional who upholds tolerance and pluralism, appreciates the cultural heritage of society, is a conscious participant in the process of European integration, a person with a developed civic consciousness. The task of education is to teach the young person how to change living conditions and improve them, rather than accept them passively from the previous generations, to cultivate valuable relations with the state whose citizen a particular person is.

The second postulate concerns the socialization of a personality in a multi-cultural society. In this regard, a new understanding of culture appears. The contemporary culture is the aggregate of interacting cultures in society, the space of human coexistence, while common cultural values serve as the basis of intercultural interaction.

The third postulate shifts the focus in the process of education from a teacher to a learner. A learner is a subject with individual characteristics, abilities and aspirations. This is a personality who opens and creates culture in society where he/she independently forms himself/herself and becomes a free citizen.

The fourth postulate is that real life and direct experience are the main sources of contemporary learning. Education should be brought closer to contemporary life and take place in collaboration.

The fifth postulate is that general cultural values and the common philosophical principles of education (the principles of equality and freedom), the recognition of human rights, including the right to education for all, constitute the basis for the harmonization of contemporary education. The civic self-consciousness is seen as a general cultural value.

These guidelines constitute the theoretical framework for the reorganization of the traditional system of education and the creation of a new model of education.

“The Humanistic Dimension in Education”: Creation of a Humanitarian Model of Education

In the 21st century, there arose a need to develop a new model of education both in the European and Latvian systems of education in the context of the humanistic paradigm. Humanization is a socio-cultural position that derives from the priority of a human being as the highest value, which implies the restructuring of the whole culture and, consequently, the entire system of education in a homo-

centric direction. The essence of this refocusing lies in the implementation of the ideas of new humanism: from an individual as an object of education (a passive recipient of information) to an individual as a subject of education, capable of self-education and self-development (Alijevs, 2005). The new humanistic paradigm of education presupposes a transition from utilitarian and pragmatic goals of education as the aggregate of knowledge, skills and abilities to a humanistic goal focused on the subject and his/her personal development. The humanistic paradigm of education involves a change in its goals. The goal is the development of personality, the formation of individuality, not only the formation of professional suitability, i.e., the acquisition of knowledge and skills. The principal relationship of the educational process “teaching – learning” is changing. It is specified by taking the cultural component into account and acquires the content “education – culture – person”. In the humanitarian model of education, content is culture as a system of universal human values. The cultural component of the content of education in the humanitarian model consists of the following interrelated elements:

- the subject content, including the cultural experience of humanity in the form of knowledge;
- the communicative-activity content, revealing the kinds of human activity and communication in the cultural system;
- creativity as the transformation of activities into new conditions;
- subjective content, including personal socio-cultural experience of emotional value-based relationships (motives, interests, meanings) (Čehlovs, 2011).

Understanding of contemporary education as a cultural phenomenon corresponding to the trends and dynamics of present-day culture changes the nature of education and expands the scope of design, helping its subjects to tackle innovative, high-quality and value-based tasks. Therefore, it is necessary to expand the cultural content of the key educational processes: teaching, upbringing and pedagogical support (Neimatov, 2002). It implies a different value-based filling of the processes of teaching and upbringing, i.e., a different culture that cannot be studied. Culture is absorbed in communication and in general life activity; this is just what our education is deprived of, still being aimed at the effective implementation of the knowledge-based approach (Matsumoto, 2007). As a result of replacing the disciplinary knowledge-based dominant of education with the dominant of cultural activity and creativity, independent creative activity (productive and practical, not only cognitive) of secondary school students becomes the principal educational space. This is a pre-condition for the development of the civic self-consciousness of contemporary secondary school students. The elaborated humanitarian model of education represents a meta-

structure. Various pedagogical phenomena can be structured based of this model, including the development of the civic self-consciousness of secondary school students, both as a phenomenon and a process. The concept of the “humanitarian model” draws attention to another important idea: this concept focuses on the natural essence of pedagogy as part of the humanities. There is another important idea: the humanitarian nature of pedagogy suggests the need to develop a humanitarian paradigm of education as its own methodological basis for the study of pedagogical phenomena and processes (Čehlova, 1995; Chehlova, Chehlov, & Gode, 2019).

The Essence of Civic Self-Consciousness

There is an opinion in academic literature that civic identity is a non-national identity, since there are virtually no countries with 100% mono-ethnic population (Ross, 2006). Different ethnic groups have always lived in Latvia as well; therefore, we agree with the opinion that civic self-consciousness is really a non-national entity. We are all the citizens of Latvia, and we share a common goal – the prosperity of our country. Scholars regard civic self-consciousness as an integrative personal quality, comprising inner freedom and respect for state authorities, love for one’s homeland and self-actualization in professional activity for the benefit of society (Ginzburg, 1994). In the last decades, the content of this concept has been enriched with new ideas; this is due to socio-political changes that have taken place in Europe (the creation of a single European educational space and a single labour market). This implies the education of a European-type citizen. Researchers identify psychological, pedagogical and social aspects in the content of civic self-consciousness.

The content of civic self-consciousness of a contemporary secondary school student includes civic responsibility, tolerance and intercultural identity (Krzywosz-Rynkiewicz, 2012; Ross, 2013). Each of these properties is an integrative formation based on social values (Neimatov, 2002). We regard the attitude to the state as a value as the core of civic responsibility. At the core of tolerance, we see the treatment of another person as a value (Chehlova, Kevisha, & Chehlov, 2013). At the core of European identity, we see the attitude to the cultural diversity in Latvia and in the world as a value (Spinthourakis, Acar, & Korhonen, 2010). The development of the civic self-consciousness of a secondary school student is a topical issue since civic self-consciousness contributes to the development of a European citizen and the development of a personality competitive in the labour market (Chehlova, 2006; Chehlov & Chehlova, 2015). The objective of the study was verified in the course of an ascertaining experiment.

A Study of the Development of Civic Self-Consciousness in a Contemporary Secondary School Student

The Aim and the Programme of the Ascertaining Experiment

The aim of the experiment was to analyse the development of integrative properties of the civic self-consciousness of secondary school students: civic responsibility, tolerance and European identity. There was used a personal maturity test questionnaire (Gilbuh, 1995). The research methods used in the experiment included observation, surveying, interviewing, testing and mathematical statistics. The experiment was carried out in the 12th form of Riga Classical Gymnasium (60 students), Zolitude Gymnasium (55 students), Riga State Technical School (50 students) and Teterov Gymnasium in Germany (20 students).

The Study of Civic Responsibility

The study of civic responsibility was conducted by means of the questionnaire “Where do you want to study and work?”.

Table 1 Students’ answers to the question “Where do you want to study and work?”

School	Own country (%)	Another country (%)
Riga Classical Gymnasium	40	60
Zolitude Gymnasium	39	61
State Technical School	38	62
Teterov Gymnasium (Germany)	90	10

The analysis of the results of the survey (see Table 1) indicates that most of the secondary school students are going to work abroad (60%), whereas 40% intend to work in Latvia. The trend of young people emigrating is continuing. The respondents are planning to study in various countries, depending on their interests and language skills. We saw different results in a German school – 90% of those questioned intend to work in Germany, and only 10% would like to work abroad. These results imply that senior secondary students in Latvia have relatively little interest in the occurrences in public life. Their priorities are personal well-being and their professional career. This is because the economic situation in Latvia is less favourable than in wealthier European countries. In Germany, the top priorities for senior secondary school students are good education, high salaries and a professional choice.

The Study of Inter-Cultural Identity

The attitude to the diversity of the cultures of Latvia and the European Union as a value is considered as the basis of inter-cultural identity. The study was conducted using the testing method (test “Your life priorities”). The test results show that secondary school students demonstrate a high level of desire to be well-educated, cultural and respected individuals; they also want to occupy a significant position in society and be competitive in the labour market not only in Latvia, but also in the whole European Union. The analysis of the results also indicates that the students display a high level of interest in the diverse cultures of the European Union. This is especially true for the students of Riga Classical Gymnasium. This is due to the fact that the gymnasium provides the possibility of studying various languages, including Latvian, Russian, English, French, German, Spanish and Latin. Consequently, senior secondary school students are aware of the styles of social behaviour, and they know that inter-cultural dialogue is a natural and effective way of cultural interaction that enriches everyone.

The Study of Tolerance

The attitude to the other as a value constitutes the basis for the development of tolerance in secondary school students. The authors analysed the concept of tolerance based on the Declaration of the Principles on Tolerance adopted by the UNESCO General Conference in 1995. The study was conducted by means of the questionnaire “Attitude to the other as a value”. The students were asked a question concerning their relations with their peers representing other nationalities.

Table 2 Students answers to the question concerning relationships with their peers of other nationalities

Relationship	Riga Classical Gymnasium (%)	Zolitude Gymnasium (%)	State Technical School (%)	Teterov Gymnasium (Germany) (%)
Excellent	60	33	37	40
Friendly	20	29	21	28
Good	9	23	33	22
No friends of another nationality	11	15	9	10

The results of the survey (see Table 2) indicate that in Latvia the representatives of different nationalities mainly collaborate in various sports sections and interest groups. In this collaboration process, 90% of the

representatives of different nationalities have friendly, excellent or good relationships, whereas 10% of those surveyed admit that they communicate only with the peers of their nationality because of poor knowledge of another language (Latvian/Russian). In the German gymnasium, the students watch films, sports programmes and educational programmes in English. It is worth noting that a lot of surveyed Latvian students lived in German families during their exchange programme, and now German and Russian students actively communicate online in the German Language.

The Final Analysis of the Obtained Results

The analysis of the results of the ascertaining experiment showed that the development of the civic self-consciousness of contemporary secondary school students is insufficient and requires further improvement. This is due to a number of objective reasons: the difficult economic situation in Latvia, a relatively high rate of unemployment (6%), lack of jobs in the chosen specialty and fee-charging higher education. Subjective factors also play a significant role: insufficient development of readiness for social self-determination and decreased interest in social and political events; interest in one's professional career depending on material benefits prevails. The public orientation of choosing a profession for the benefit of society was low.

Conclusions

1. The humanitarian model of education is the basis for the development of civic self-consciousness of a senior secondary school student as it clearly expresses the humanistic idea of educating a moral person, a citizen of Latvia and a citizen of the European Union.
2. In the humanitarian model of education, the purpose of education is changing. The main goal is the development of personality, individuality, not only the formation of professional suitability, i.e., the acquisition of knowledge and skills.
3. In the humanitarian model of education, the cultural component – the system of universal human values - becomes part of its content.
4. The essence and structure of civic self-consciousness has been determined: civic self-consciousness is an integrative property of a person. Its components are civic responsibility, tolerance and cultural identity.
5. The development of tolerance and European identity as the components of civic self-consciousness is at an optimal and high level.
6. The development of civic responsibility needs to be advanced.

7. Methodological conclusions:

- The natural essence of pedagogy as a humanitarian discipline has been revealed;
- Further development of the humanitarian paradigm of education as the methodological basis for the study of pedagogical phenomena and processes is needed;
- The elaborated humanitarian model of education represents a meta-structure on whose basis various pedagogical phenomena and processes can be structured, including the development of the civic self-consciousness of contemporary secondary school students.

References

- Alijevs, R. (2005). *Izglītības filosofija 21. gadsimts* [Philosophy of education in the 21st century]. Rīga: Retorika A.
- Čehlova, Z. (1995). *Skolēnu personības attīstība mācību procesā* [The development of students' personality in the process of learning]. Rīga: Latvijas Universitāte.
- Čehlovs, M. (2011). *Vidusskolēnu pašnoteikšanās attīstības humanitārie aspekti* [The humanitarian aspects of the self-determination of secondary school students]. Rīga: RAKA.
- Cehlov, M., & Čehlova, Z. (2015). The development of the professional self-determination of senior secondary school students in the process of specialized education. *Society, Integration, Education*. Rēzekne: Rēzeknes Augstskola.
- Čehlova, Z. (2006). The Development of Citizenship for Senior Form Students in the Schools of National Minorities. *Citizenship Education: Europe and the World*. London: CiCe.
- Čehlova, Z., Čehlov, M., & Gode, I. (2019). Pedagogical Conflict - the Contemporary Technology of the Competency-Based Approach. *Society, Integration, Education*. DOI: <http://dx.doi.org/10.17770/sie2019vol2.3722>
- Čehlova, Z., Kevisha, I., & Čehlov, M. (2013). Pedagogical conditions for the development of citizenship for senior secondary school students in Latvia. *Identities and citizenship education: Controversy, crisis and challenges*. Lisbon: CiCea.
- Gilbuh, J. (1995). *Test-oprosnik lichnostnoi zrelosti* [Personal maturity questionnaire]. Kiiv.
- Ginzburg, M. (1994). Psihologicheskoe sodержanie lichnostnogo samoopredelenija [The psychological content of personal self-determination]. *Voprosy psihologii* [Issues in psychology], 3. Moskva: Prosveschenie.
- Golovaha, E. (1988). *Zhiznennie perspektivy i professionalnoe samoopredelenie molodezhi* [The life prospects and professional self-determination of young people]. Kiiv: Pedagogika.
- Krxywosz-Rynkiewicz, B. (2012). Responsibility as a personal, local and global phenomenon. *Creating Communities: Local, National and Global*. York: CiCea.
- Matsumoto, D. (2007). *Culture and Psychology*. Wadsworth Publishing Company.
- Neimatov, Y. (2002). *Obrazovanie v XXI veke: tendencii i prognozy* [Education in the 21st century: the trends and predictions]. Moskva: Algoritm.
- Ross, A. (2006). Introduction: Constructing Citizenship through Teaching. *Citizenship Education: Europe and the World*. London: CiCe.

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Ross, A. (2013). *Intersecting identities: young people's constructions of identity in south-east Europe. Identities and citizenship education: Controversy, crisis and challenges*. Lisbon: CiCea.

Spinthourakis, J., Acar, E.A., & Korhonen, R. (2010). *Primary and early childhood teacher education and multicultural efficacy. Lifelong Learning and Active Citizenship*. Bratislava: CiCea.

UNESCO. (1995). *Declaration of principles on tolerance*. Retrieved from http://portal.unesco.org/en/ev.php-URL_ID=13175&URL_DO=DO_TOPIC&URL_SECTION=201.html

DAUDZVEIDĪGU LASĪŠANAS STRATĒGIJU APGUVE KĀ MĀCĪŠANĀS PRASMJU PAMATS

Learning Different Reading Strategies as a Basis for Learning Skills

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Abstract. *Based on the latest OECD International Studies (The Organisation for Economic Co-operation and Development [OECD], 2019) on reading literacy of Latvian primary school pupils, the overall reading literacy has fallen.*

The ability to read and understand text is one of the first skills students need at school. Based on observations during practice, primary school learners are technically well literate, that is, they can clearly read what has been written, acknowledge sentence boundaries, and read with appropriate intonation. However, the task of the school is not to teach students to read technically, but to read thoughtfully, so that the information could be understood and used in further learning activities. Literacy is not just about drawing letters and stringing them together; it is about developing an interest in reading, as well as the quality of cognitive processes. Learning diverse reading strategies in the primary school curriculum is a way of stimulating students' interest and thinking ability, and their ability to learn in a self-directed way.

The aim of the study is to analyse the experience of a school teachers' team, encouraging pupils' reading proficiencies in order to develop the pupil as a skilled reader during the learning process.

Research methods: literature and source analysis, survey method - questionnaire, obtained data processing and analysis, performance analysis. The results of the study show that mastering diverse reading strategies in the primary school curriculum is a way to enhance students' thinking and self-directed learning capabilities.

Keywords: *learning, literacy, reading comprehension, reading literacy, reading strategies.*

Ievads

Introduction

Pamatojoties uz jaunākajiem OECD pētījumiem starptautiskajā skolēnu novērtēšanas programmā PISA 2018, secināms, ka apmēram par 40-50 punktiem sasniegumi ir augstāki visiem tiem 9. klašu skolēniem, kas vispār lasa grāmatas, salīdzinot ar tiem, kas nelasa. Vēl ir tāds rādītājs kā lasīšana sava prieka pēc. Diemžēl, salīdzinot ar 2009. gadu, kad arī lasīšana bija galvenā OECD pētījumu satura joma, Latvijā šo skolēnu skaits, kas lasa sava priekā pēc, ir samazinājies (Izglītības un zinātnes ministrija [IZM], 2019).

Viens no rādītājiem, kas liecina par Latvijas pamatskolas skolēnu lasīšanas kompetenci valsts mērogā, ir valsts centralizēto eksāmenu rezultāti. Analizējot latviešu valodas 9. klases eksāmena lasīšanas un valodas sistēmas daļu rezultātus secināms, ka Latvijā kopumā tie pasliktinās, taču X skolas rezultāti ir vismaz par 8% augstāki kā vidēji valstī. Tāpēc šajā pētījumā tiks analizēta X skolas pieredze skolēnu lasītprasmes veicināšanā.

Analizējot visu centralizēto eksāmenu rezultātus trīs gadu skatījumā, secināms, ka viena no svarīgākajām tendencēm arī citu mācību prasmju apgūvē ir skolēnu nepietiekama lasīšanas kompetence, kas saistīta ar lasītā teksta uztveri un izpratni.

Pētījuma mērķis - analizēt daudzveidīgu lasīšanas stratēģiju apguvi kā mācīšanās prasmju pamatu.

Pētījuma metodes:

- literatūras un avotu analīze
- aptaujas metode- anketēšana
- iegūto datu apstrāde un analīze

Pētījuma metodes tika izmantotas, lai apzinātu pētījuma problēmu. Literatūras un avotu analīze sniedz pētījuma problēmas teorētisko pamatojumu. Aptaujas metode- anketēšana izvēlēta, lai iegūtu kvantitatīvus datus, kas datu apstrādē un analīzē nodrošina standartizācijas iespējas un validitāti.

Pētījuma bāze- viena no Rīgas vidusskolām, 203 skolēni vecumā no 14 līdz 19 gadiem, skolotāji.

Daudzveidīgu lasīšanas stratēģiju apguves teorētiskais pamatojums *Theoretical basis of acquisition of diverse reading strategies*

XXI gadsimta kontekstā mainījušās lasīšanas tradīcijas un attieksme pret grāmatu un lasīšanu, īpaši tas vērojams pusaudžu vecumā, kad interese par lasīšanu kā vērtība zūd. Lai sekmētu lasītā teksta izpratni, tiek ieteikts izmantot un kombinēt lasīšanas stratēģijas, piemēram, spriedumu veidošanu vai lasītā teksta izpratnes uzraudzību u.c. Mācīšanās sadarbojoties un diskutējot par lasīto var sekmēt teksta izpratni un skolēnus, kuru lasīšanas prasmes ir vājākas (Clarke, Truelove, Hulme, & Snowling, 2013).

Lasīšana ir duāls process – no vienas puses, tā ir tehniskā burtu pazīšana un to savienošana vārdos, tad teikumos utt., no otras puses, tā ir jēgas vai nozīmes konstruēšana, tātad izlasītā saprašana jeb lasāmsapratne (*reading comprehension*). Dekodēšana ir pamatprasmē, bez kuras lasītā izprašana ir grūti iedomājama (Ozola, 2012), savukārt lasītprasme (*reading literacy*) definējama kā spēja uztvert, izprast, analizēt un novērtēt rakstītu tekstu (Geske, & Ozola, 2007).

Starptautisko lasītprasmes pētījumu RLS (Reading Literacy Study), *lasītmacēšana* skaidrota kā spēja reflektēt par izlasīto un izmantot to individuālu un sociālu mērķu sasniegšanai (Mullis, Kennedy, Martin, & Sainsbury, 2006). Visi iepriekšminētie lasīšanas termini ir savstarpēji saistīti un lasīšanas stratēģiju apguvē mijiedarbojas.

Lasīšanas sniegums saistāms ar lasīšanas kompetences jēdzienu. Mūsdienās kompetences jēdziens ir iekļauts vispārējās izglītības reformu plānos visā pasaulē, kur kompetenci skaidro kā sniegumu, kas saistīts ar produktivitāti, efektivitāti un profesionalitāti (Moore, Cheng, & Dainty, 2002).

Jaunās izglītības pieejas kontekstā arvien biežāk tiek aktualizēts *kompetences* jēdziens saistībā ar mācīšanos. Kompetences jēdziens paplašina mācīšanās mērķi – no konkrētu zināšanu apgušanas uz mācīšanos un domāšanu par to, kā šīs zināšanas tiek iegūtas, kas ir ļoti svarīgs priekšnoteikums mācīšanās prasmju apguvei (Kegan, 2002). Savukārt, lai skolēns apgūtu konkrētas zināšanas, kas to rosina domāt un mācīties, priekšnoteikums ir skolēna lasīšanas kompetence.

Lasīšanas kompetence tiek skaidrota kā rakstisku tekstu izpratne, izmantošana un izvērtēšana, lai sasniegtu savus mērķus, pilnveidotu zināšanas un potenciālu un piedalītos sabiedrības dzīvē (Geske, 2010).

Lasīšanas kompetence ietver plašu kognitīvo prasmju loku – sākot ar rakstīta teksta atpazīšanu, zināšanām par vārdiem, gramatiku, valodas un teksta uzbūvi, līdz zināšanām par pasauli kopumā. Tā iever arī metakognitīvās prasmes – darbā ar tekstu izmantot dažādas atbilstošas lasīšanas stratēģijas. Lasīšanas kompetence tiek raksturota kā aktīvu, mērķtiecīgu un funkcionālu lasīšanas izmantošanu dažādās situācijās un dažādiem mērķiem (IZM, 2019).

Plašākā interpretācijā lasīšanas kompetence jeb tekstpratība ir spēja identificēt, saprast, interpretēt, radīt, digitāli pielietot un komunicēt, izmantojot vizuālos, skaņas un digitālos materiālus (Clarke et al., 2013). Līdz ar to lasīšanas kompetence saistīta ar lasītā uztveri, izpratni un citiem domāšanas procesiem, kas atkarīga no psihes procesu attīstības.

Viens no priekšnoteikumiem skolēnu lasīšanas kompetences attīstīšanai ir skolēnu literāro interešu apzināšana un mērķtiecīga virzīšana, popularizējot lasīšanu. Literārās intereses skaidrojamas kā specifiska attieksme pret daiļdarbu un ir viens no garīgo interešu veidiem, kas cieši saistīts ar personības domāšanu, iztēli un atmiņu (Gudakovska, 1997). Laiks, ko skolēni pavada, lasot savam priekam, raksturo viņu interesi un attieksmi pret lasīšanu un ietekmē lasīšanas kompetenci.

Kaut arī lasīšana cieši saistīta ar zināšanām, tā nav reducējama tikai uz zināšanu apguvi, īpaši mūsdienās, jo informācijas apjoms ir tik liels, ka nav iespējams zināt, kādas zināšanas būs nepieciešamas pat pēc pieciem vai desmit gadiem, kur nu vēl cilvēka mūža garumā (Hoskins & Fredriksson, 2008). Līdz ar

to lasīšanas kompetence saistīta ar mācīšanos iedziļinoties – procesu, kura laikā skolēns attīsta spēju vispārināt, pārnest jaunās zināšanas un prasmes uz nezināmām situācijām (tostarp dzīves situācijām), priekšplānā izvirzot procesus, ar kuru palīdzību mēs iegūstam zināšanas, ne tikai uzkrātu noteiktu satura apjomu. Īstenojot metodisku pieeju, kas virza mācīšanos iedziļinoties, skolotājs dod iespēju skolēnam attīstīt augsta līmeņa domāšanas prasmes, kā analizēt, sintezēt, izvērtēt, risināt problēmas. Tas attīsta skolēnu metakognitīvās prasmes, lai skolēns spētu konstruēt apgūtā jēgu un izmantot pieredzi jaunās situācijās un kontekstā.

Lasīšanas kompetence jeb tekstpratība kā mācīšanās pamatprasmē cieši saistīta ar tradicionālajiem mācību priekšmetiem un mācību jomām (core learning areas), piemēram, valodas, māksla, matemātika, dabaszinātnes (Amadio, 2013). Lasīšanas kompetences attīstīšanai un sekmēšanai ir svarīga nozīme, jo prasme lasīt un saprast dažādus teksta veidus (literāru, shēmas, tabulas u.c.), atrast tajos būtisku informāciju, atbildot uz jautājumiem par tekstu, vērtēt dažādus teksta aspektus ir viens no fundamentiem, uz kuriem pamatojas skolēnu izglītība un turpmākā dzīve.

Lai uzlabotu lasītā teksta izpratni, pētnieki iesaka kombinēt vairākas lasīšanas stratēģijas, piemēram, spriedumu veidošanu (resp. skolēni tiek mudināti izvirzīt hipotēzes par izlasīto) vai lasītā teksta izpratnes uzraudzību (Bazens, 2008).

Apkopojot iepriekš analizēto, secināms, ka teksta tehniska izlasīšana skaidrojama kā lasītprasmes zemākā pakāpe, no kuras izriet izpratne par tekstā pausto, kritiska informācijas apstrāde, līdz lasītāja spējai novērtēt izlasītā ticamību un nozīmīgumu. Tā ir teksta interpretēšana, kurā parādās lasītāja analītiskā un kritiskā attieksme.

No teorētiskās literatūras analīzes izriet - skolēnu lasīšanas kompetencē vairāk tiek apzināta lasīšanas tehnikas apguve un lasītprasmē, kad lasīšana skolēniem sagādā grūtības un nepieciešams sniegt atbalstu tās sekmēšanā, ieverot lasīšanas iespējas attīstības psiholoģijas teoriju skaidrojumā un to praktisko lietojumu (Clarke et al., 2013; Danielle, 2007), mazāk apzinot lasītinteresi un lasītpraksi, kas ir viens no lasīšanas kompetences un mācīšanās priekšnosacījumiem.

Pētījuma organizācijas posmi un metodoloģija *Research organization stages and methodology*

Pētījums tika veikts no 2017. gada septembra līdz 2019. gada decembrim Rīgas skolā. Skolā kopumā mācās 1143 skolēni, strādā 102 skolotāji.

Lai īstenotu iecerēto, svarīga ir pedagogu sadarbība skolēnu lasīšanas kompetences veicināšanā, tas ir, pieredze, plānošana, realizēšana, analizēšana.

Skolotāju sadarbībā tika realizēti vairāki pētījuma posmi:

1. Savstarpējās sarunās un diskusijās tika noskaidrota skolotāju pieredze par skolēnu lasīšanas kompetences sekmēšanu.
2. Organizēts seminārs skolotājiem par skolēnu lasītprasmi:

Tika organizēta skolotāju savstarpējā mācīšanās, atkārtotas un nostiprinātas dažādas lasīšanas stratēģijas: pārskatīšana, caurskatīšana, izskatīšana un atkārtošana. Apgūtās stratēģijas tika izmantotas mācību stundās.

Skolā tika organizēts seminārs par vienaudžu mācīšanos lasītprasmes veicināšanai. Sākumskolas posmā, pamatskolas posmā latviešu valodas stundās šī metodika jau tika izmantota iepriekš. Šajā posmā skolotāji tika aicināti izmantot metodiku citu mācību priekšmetu apgūvē (piemēram, svešvalodā, vēsturē).

3. Resursu apzināšana un lasītprasmes- tekstpratības kritēriju izvirzīšana.

Pētījuma pirmajā gadā mācību priekšmetu skolotāji, pamatojoties uz analizētajiem pētījumiem (Frajs, 2001), centralizēto eksāmenu rezultātiem un novērojumiem mācību stundās, vienojās un kopīgi izvirzīja 5 svarīgākos tekstpratības kritērijus 7.klasē (saprot uzdevuma nosacījumus, izprot vārdu nozīmi, modelē situācijas pēc izlasītā teksta, veic teksta vizualizāciju) un 10.klasē (izprot jēdzienus, skaidro terminus, saista tekstā faktus, jautā un atbild par teksta saturu).

4. Lasīšanas stratēģiju un izvirzīto tekstpratības kritēriju apguves sekmēšana visos mācību priekšmetos, ievērojot mācību priekšmetu specifiku. (Piemēram, lasot tekstu matemātikā, tehnoloģijās, vēsturē, literatūrā ir atšķirības.) Teksts ar daudz skaitļiem, izlasīt tehnisko zīmējumu adīšanas rakstam, teksts ar daudz faktiem, teksts ar zemtekstu un simboliem utt.)

Pētījuma otrajā gadā, pamatojoties uz centralizēto eksāmenu rezultātiem par lasīšanas un valodas sistēmas izpratni, mācību stundās tika nostiprinātas lasīšanas stratēģijas un izvirzīto tekstpratības kritēriju apguves sekmēšana.

5. Tika formulēti kritēriji, kas raksturo, ka mācību procesā skolēns veido savas mācīšanās prasmes kā prasmīgs lasītājs:
 - lasa dažādos mācību priekšmetos piedāvātos tekstus, apliecinot kritiskās un padziļinātās lasīšanas prasmi;
 - atkarībā no teksta apstrādes mērķa izvēlas dažādas lasīšanas stratēģijas;
 - sadarbojoties, izmantojot lasīšanas stratēģijas, veicina savas un grupas biedru domāšanas prasmes;
 - izprot un analītiski vērtē jebkuru tekstu izteiktu ar vārdiem, attēliem, shēmām, tabulām, grafikiem u.tml. drukātā un digitālā formātā;

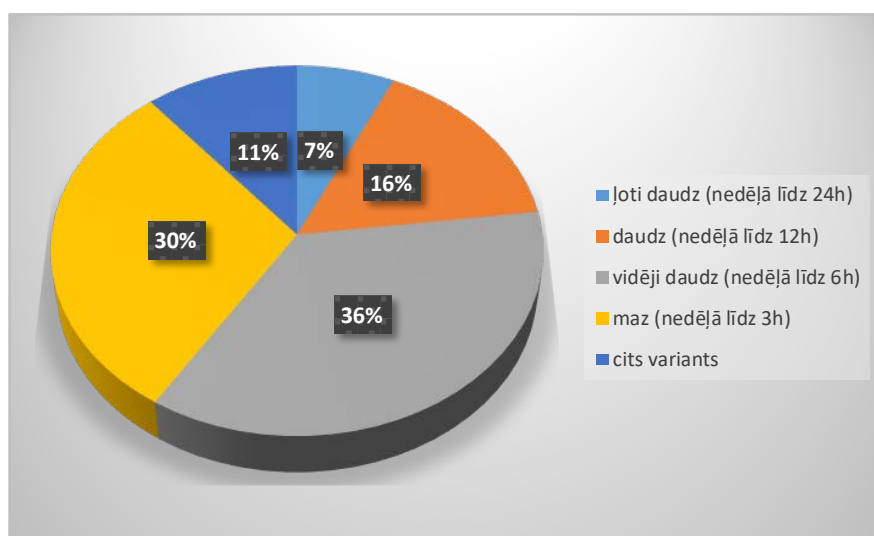
- saprot teksta mērķi, nosaka tā atslēgas vārdus un galvenās idejas; iegūto informāciju, izmanto noteiktiem mērķiem.
6. Skolēnu anketēšana par lasīšanas kompetenci un iegūto rezultātu analīze.

Pētījuma trešajā gadā tika izstrādāta pilotaptauja par skolēnu lasīšanas kompetenci. Pamatojoties uz piltoaptaujas rezultātiem, tā uzlabota un izstrādāta aptauja.

Iegūto rezultātu un darbības analīze *Analysis of results and activities*

Lai noskaidrotu pētījuma rezultātus par tekstpratības procesu un rezultātu, skolēnu anketēšanā piedalījās respondenti vecumā no 14 līdz 19 gadiem, no kuriem 122 pamatskolas skolēni un 81 – vidusskolēns, 124 meitenes un 79 zēni.

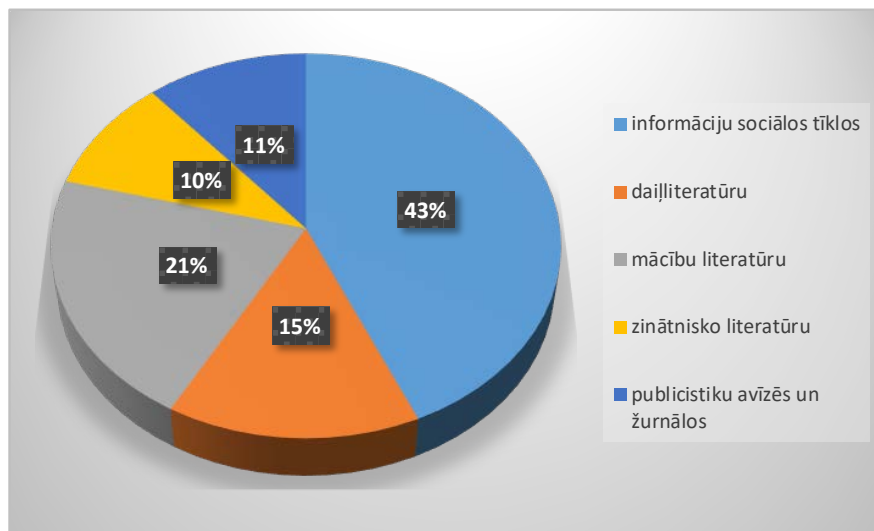
1. attēlā redzams, ka pārsvarā skolēni lasa no 3h līdz 6 h nedēļā, tikai 16% skolēnu lasa līdz 12 h nedēļā, kas norāda, ka skolēni salīdzinājumā ar citām ikdienas aktivitātēm lasa maz.



1. attēls. *Lasīšanas ilgums nedēļā*
Figure 1 *Reading time per week*

2. attēlā redzams, ka visvairāk skolēni lasa informāciju sociālajos tīklos, tas ir, 43%, uz pusi mazāk skolēni lasa mācību literatūru. Vēl mazāk (15%) lasa daiļliteratūru, publicistiku avīzēs un žurnālos tika 11%, savukārt zinātnisko literatūru 10%. Līdzīga tendence apstiprinās OECD pētījumā par Latvijas skolēnu lasīšanas kompetenci. Tāpat kā OECD pētījumā salīdzinoši daudz skolēnu informāciju iegūst sociālajos tīklos, kas aktualizē noskaidrot skolēnu kritiskās domāšanas prasmes un prasmi analizēt informāciju. Pamatojoties uz OECD

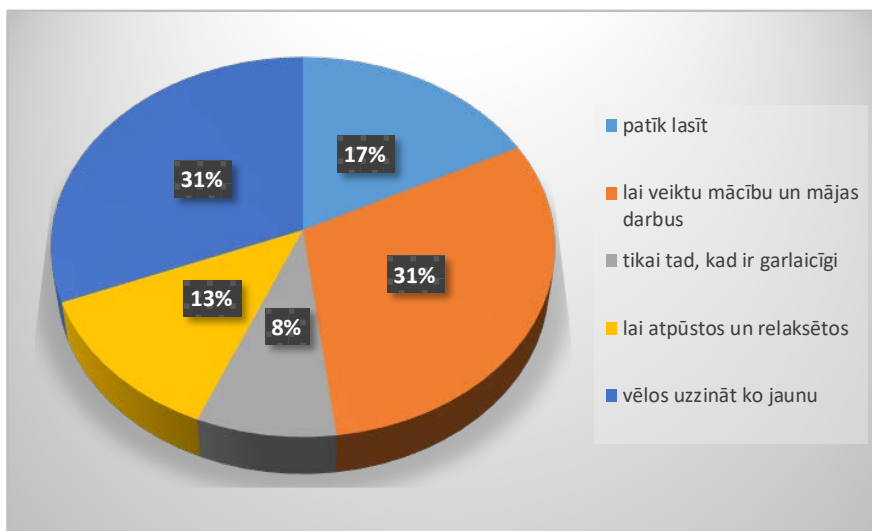
pētījumu 2018. gadā, skolēni sociālajos tīklos lasa ziņas, tiešsaistē meklē informāciju, lai mācītos noteiktu tēmu, piedalās grupu diskusijās vai forumos un meklē praktisku informāciju tiešsaistē (IZM, 2019).



2. attēls. Lasāmā teksta izvēle

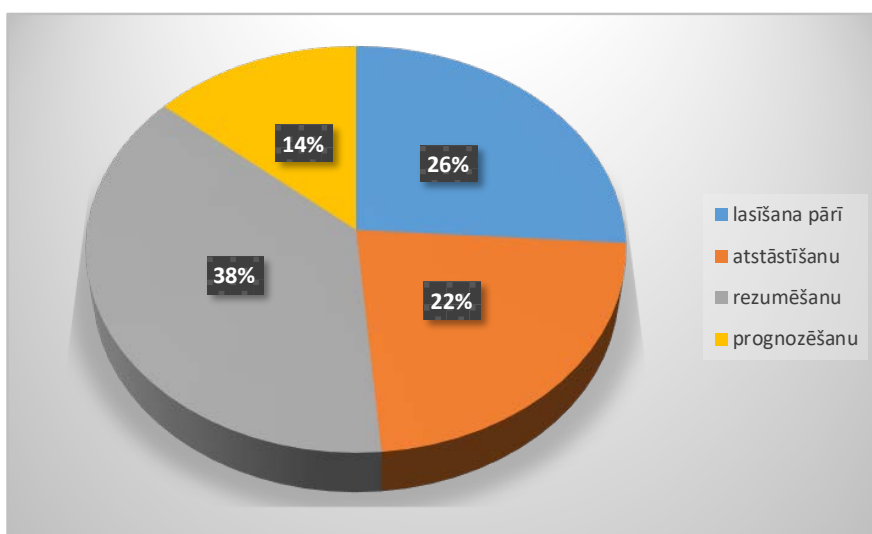
Figure 2 Text selection for reading

3. attēlā redzams, ka lielākā daļa skolēnu lasa, jo vēlas uzzināt ko jaunu. Tas liecina, ka 31% skolēnu lasa ar interesi. Tas ir pretrunā ar OECD pētījumu par skolēnu skaitu samazināšanos, kas lasa ar interesi Latvijā. Tikpat daudz skolēnu (31%) lasa, lai veiktu mācību un mājas darbus. Tikai 17% skolēnu lasa, jo viņiem patīk lasīt, kas sakrīt ar OECD pētījumu par skolēnu lasīšanas kompetenci Latvijā (IZM, 2019). Salīdzinoši maz skolēnu (13%) lasa, lai atpūstos un relaksētos. Tas liecina, ka lasītais skolēnu rosina domāt- salīdzināt, analizēt, vispārināt- un tas prasa piepūli. 8% skolēnu lasīšanu izmanto tad, kad ir garlaicīgi. Pozitīvi, ka lielākā daļa skolēnu lasa ar interesi, diemžēl salīdzinoši maza daļa skolēnu lasot atpūšas. Tas nosaka vairāk sekmēt skolēnu izpratni par tekstu, kas liecina par lasīšanas kā kultūras aktivitātes samazināšanos. Lasīšana tiek izmantota vairāk kā racionāls izziņas avots.



3. attēls. *Lasīšanas kā procesa pamatojums*
Figure 3 *Justification of reading as a process*

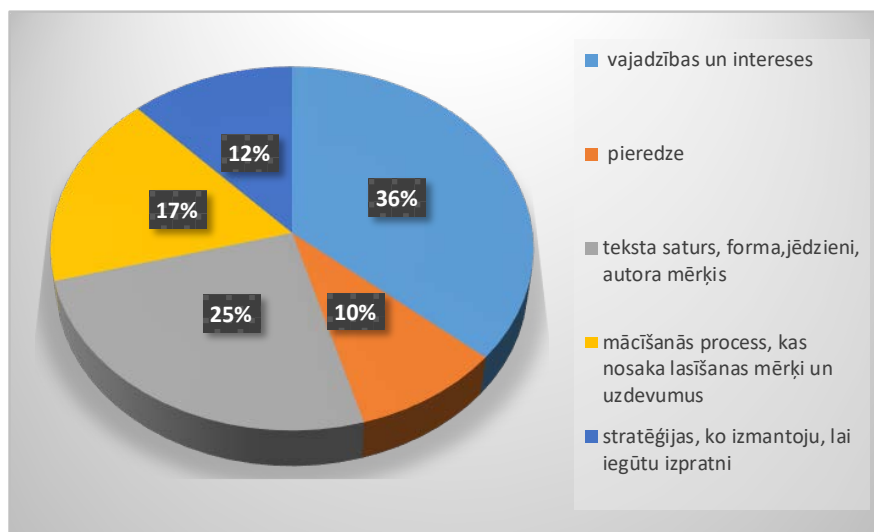
Lai noskaidrotu skolēnu viedokli par mācību procesā biežāk izmantotajām lasīšanas stratēģijām, skolēniem tika uzdots jautājums - kuras no lasīšanas stratēģijām visbiežāk izmanto skolā (4. attēls).



4. attēls. *Lasīšanas paņēmienu izvēle*
Figure 4 *Choice of reading techniques*

Skolēni norāda, ka visbiežāk izmanto rezumēšanu (38%). Šāds apgalvojums ir saprotams, jo citi pētījumi apliecina, ka galvenās domas noformulēšana un teksta apspriešana ar klases biedriem palielināja viņu tekstu izpratni. To skolotāji arī izmanto mācību procesa organizēšanā. Šie dati arī apliecina, ka 26% skolēnu ir pamanījuši un skolotāji izmanto vienaudžu mācīšanos lasītprasmes

veicināšanai, mācību procesā izmanto lasīšanu pārī, skaļo lasīšanu, kā arī citas lasīšanas stratēģijas – izlasītā teksta atstāstīšana un prognozēšana. Lai sekmētu skolēnu mācīšanās prasmju attīstību un skolēnu pašvadītu mācīšanos, izmantojot lasīšanu, ir svarīgi apzināties, kas ietekmē lasīšanas procesu (5. attēls).

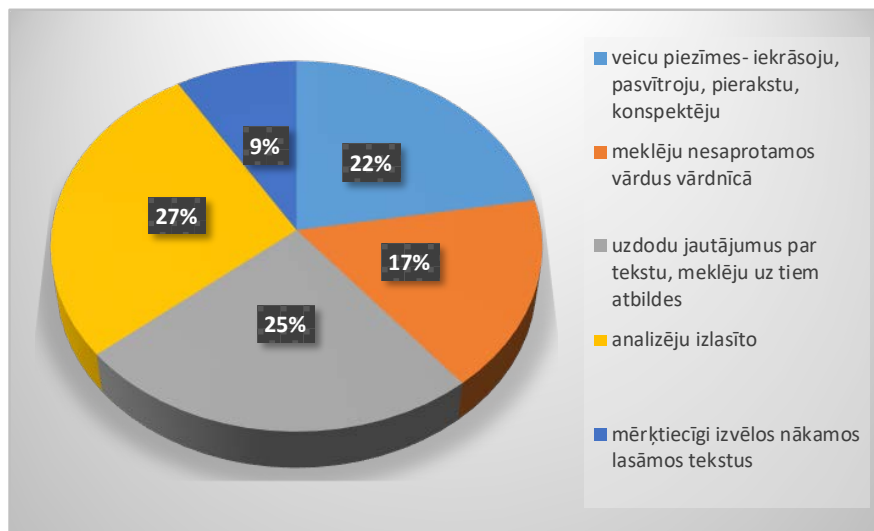


5. attēls. *Lasīšanas procesa ietekme*
Figure 5 *Impact of the reading process*

5. attēlā redzams, ka visvairāk (36%) skolēnu lasīšanas procesu ietekmē vajadzības un intereses. Tas, protams, apliecina, ka skolēns lasīšanas procesā iesaistīsies, izvēlēto vai norādīto tekstu lasīs, ja tas būs skolēnam nozīmīgs. 25% skolēnu norāda, ka lasīšanu ietekmē teksta saturs, formāts, jēdzieni un autora mērķis. Secināms, ka skolēniem ir svarīgs teksta veids, tāpēc mācību procesā skolēnu iepazīstināmi ar dažādiem tekstiem – pēc satura, formas, izteiksmes līdzekļiem, lai skolēns, saskaroties ar tiem, lasīšanas procesā būtu jau pazīstams, tādējādi palīdzēt viņam tekstu atkodēt, uztvert.

17% skolēnu lasīšanas procesu ietekmē mācīšanās process, kas nosaka lasīšanas mērķi un uzdevumus. Tikai 12% norāda, ka, lai iegūtu izpratni, lasīšanas procesu ietekmē izmantotās lasīšanas stratēģijas. Šajās skolēnu atbildēs mēs varam saskatīt potenciālu lasītprasmes veicināšanai – vēl vairāk veidot skolēnu izpratni par lasīšanas procesu, stratēģijām, lai skolēnam būtu vieglāk izvēlēties, kuru lasīšanas stratēģiju izvēlēties konkrētajā situācijā. 10% skolēnu lasīšanas procesu ietekmē pieredze. Tas saistīts gan ar to, ka skolēns novērtē savu lasīšanas procesa pieredzes nozīmi, gan pieredzi saistībā ar teksta saturu, kas to var pozitīvi ietekmēt, ja skolēns ar to bijis saistīts, pieredzējis. No iepriekš teiktā izriet, ka skolotājiem turpināt veidot skolēniem izpratni par lasīšanas procesu un stratēģijām.

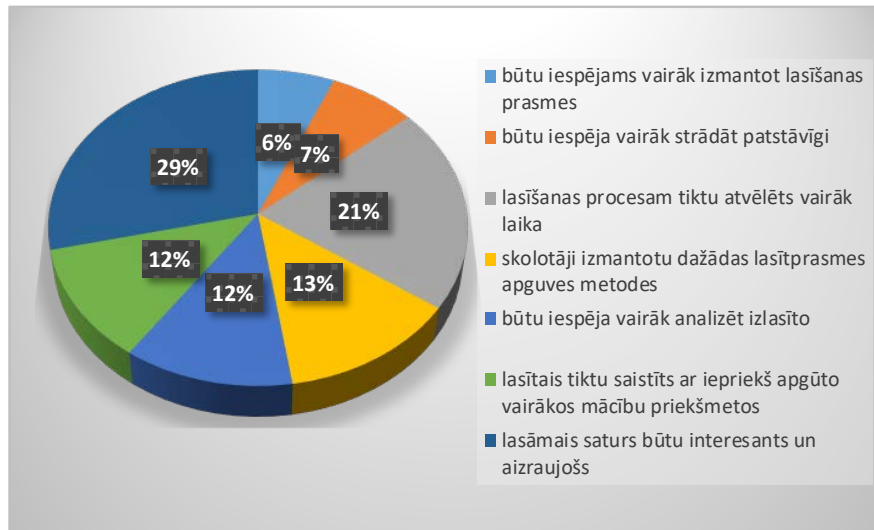
Atbildes uz nākamo anketas jautājumu atklāj skolēnu stratēģijas, saskaroties ar sarežģītu tekstu. Tas zināmā mērā arī apliecina skolēna mācīšanās prasmes un stilu (6. attēls).



6. attēls. *Sarežģīta teksta lasīšana*
Figure 6 *Complicated text reading*

Skolēni norāda, ka, lasot sarežģītu tekstu, 27% analizē izlasīto un saista ar iepriekš zināmo. Tas atklāj mācīšanās procesa būtību, reizē arī apliecina, ka skolēni virzās uz mācīšanos iedziļinoties, analizē savu pieredzi, jaunās zināšanas sasaista ar iepriekš apgūto, pieredzēto izmanto procesā. 25% skolēnu uzdod jautājumus par tekstu, 22% veic tekstā piezīmes. Arī šīs aktivitātes norāda uz jau apgūtām mācīšanās prasmēm. Salīdzinoši mazāk skolēnu, tas ir, 17%, meklē nesaprotamos vārdus vārdnīcā. No vienas puses šādu darbību var vērtēt pozitīvi, ka skolēns no konteksta cenšas izprast konkrētā vārda nozīmi, no otras puses – būtu skolēniem jābūtu, kāpēc nezināmu terminu skaidrojums meklējams vārdnīcās. Atkarībā no savas pieredzes, lasot sarežģītus tekstus, skolēni izmanto dažādas lasīšanas stratēģijas.

Mācību procesa uzlabošanai svarīgi izzināt skolēnu viedokli, kas varētu veicināt lasīšanas kompetenci (7. attēls).



7. attēls *Lasīšanas kompetences uzlabojums*
 Figure 7 *Improvement of reading competence*

29% skolēnu norāda, ka viņu lasīšanas kompetence uzlabosies, ja lasīšanas process būtu interesants un aizraujošs. Lasītprasmes sekmēšanas procesā šī ir būtiska problēma – kā izvēlēties piemērotu tekstu skolēnu, vecumam, interesēm, reizē aptverot arī obligāto mācību saturu. 21% – ja lasīšanas procesam tiktu atvēlēts vairāk laika. Salīdzinoši līdzīgam skolēnu skaitam (13% un 12%) svarīgi, lai skolotāji izmantotu dažādas lasītprasmes apguves metodes, būtu iespēja vairāk analizēt izlasīto un lasītais tiktu saistīts ar iepriekš apgūto ne tikai vienā mācību priekšmetā, bet vairākos. Neliels skaits skolēnu (7%) atzīst, ka lasīšanas kompetences uzlabosies, ja būtu iespēja vairāk strādāt patstāvīgi, kas sasaucas ar skolēnu viedokli par lasīšanas paņēmienu izvēli (4. attēlā) un apstiprina pausto, tas ir, skolēnu lasīšanas kompetence uzlabojas, strādājot pāri, nevis patstāvīgi. Svarīgi ir visi faktori, kas varētu uzlabot skolēnu lasīšanas kompetenci.

Secinājumi Conclusions

1. Lasīšanas kā kultūras aktivitātes samazināšanās, tā tiek izmantota vairāk kā racionāls izziņas avots.
2. Pamatojoties uz pētījuma rezultātiem un sekmējot daudzveidīgu lasīšanas stratēģiju apguvi kā mācīšanās prasmju pamatu mācību procesā pamatskolā, skolotājam galvenokārt uzmanība pievēršama lasīšanas apguves metodikai:
 - lasīšanas procesu radot skolēniem interesantu un aizraujošu;
 - lasīšanas procesam paredzot vairāk laika;
 - lasīšanas procesu īstenot, skolēniem vairāk sadarbojoties pāri un analizējot lasīto;

- lasīto saistot ar iepriekš apgūto arī citos mācību priekšmetos.
- 3. Mācību procesā ir svarīgi lasīt ar izpratni, lai lasīto var saprast un izmantot tālākās mācīšanās darbībās.
- 4. Daudzveidīgu lasīšanas stratēģiju apguve mācību procesā pamatskolā ir veids, kā sekmēt skolēnu domāšanas attīstību un skolēna prasmi mācīties pašvadīti.
- 5. Lasīšanas stratēģijas apgūstamas katrā mācību priekšmetā, skolotājiem savstarpēji sadarbojoties un skolai organizējot un nodrošinot skolotāju mērķtiecīgu sadarbību.

Summary

In the context of the 21st century, reading traditions and attitudes towards books and reading have changed, especially with teenagers, when the interest in reading as a value is diminishing. To enhance reading comprehension, different reading strategies can be employed in varying combinations. It is important to stimulate students' reading interest and reading pleasure, which is a prerequisite for reading competence. These objectives can be achieved in different ways. Based on the analysis of the article, it can be concluded that reading literacy for students should be promoted by identifying the quality of reading literacy, the purpose of reading and applying appropriate methodological techniques. As part of the study, the students learned different reading strategies. According to the results of the study, students' reading competence could be promoted if the interests and needs of the students are observed, the purpose of reading is clarified, diverse reading material is offered and the students are able to cooperate with each other.

Literatūra References

- Amadio, M. (2013). *A rapid assessment of curricula for general education focusing on cross-curricular themes and generic competences or skills*. Background paper for EFA Global Monitoring Report, 14.
- Bazens, T. (2008). *Efektīvas mācīšanās rokasgrāmata*. Rīga: Jāņa Rozes apgāds.
- Clarke, P., Truelove, E., Hulme, C., & Snowling, M. (2013). *Developing Reading Comprehension*. Wiley-Blackwell.
- Danielle, M. (2007). *Reading comprehension strategies: theories, interventions, and technologies*. New York: Lawrence Erlbaum Associates.
- Frajs, R. (2001). *Radošas personības rokasgrāmata*. Rīga: Jāņa Rozes apgāds.
- Geske, A., & Ozola, A. (2007). *Skolēnu sniegumi lasītprasmē Latvijā un pasaulē*. Rīga: LU Akadēmiskais apgāds.
- Gudakovska, I. (1997). *Mūsdienu pusaudžu lasīšanas intereses kā personības attīstību rosinošs factors*. Pieejams <https://dspace.lu.lv/dspace/handle/7/189>
- Hoskins, B., & Fredriksson, U. (2008). *Learning to Learn: What is it and how can it be measured?* European Commission JRC Scientific and Technical Reports EUR 23432 EN 2008. Retrieved from <http://www.jtlearning.com/wp-content/uploads/Learning-to-Learn-what-is-it-and-can-it-be-measured1.pdf>

- Izglītības un zinātnes ministrija. (2019). *Latvija OECD Starptautiskajā skolēnu novērtēšanas programmā PISA 2018- pirmie rezultāti un secinājumi*. Pieejams https://www.izm.gov.lv/images/aktualitates/2019/OECD_PISA_2018.pdf
- Kegan, R. (2002). *Mental demands of modern life: Implications for defining competencies*. Keynote address DeSeCo Symposium, Geneva, February 11–13, 2002. Retrieved from http://www.portal-stat.admin.ch/deseco/deseco_int02.htm
- Moore, D.R., Cheng, M.I., & Dainty, A.R. (2002). Competence, competency and competencies: performance assessment in organisation. *Work study*, 51(6), 314–319.
- Mullis, I.V.S., Kennedy, A.M., Martin, M.O., & Sainsbury, M. (2006). *PIRLS 2006 Assessment Framework and Specifications*.– USA, Massachusetts, Chestnut Hill: TIMSS & PIRLS International Study Center, Lynch School of Education, Boston College.
- Ozola, A. (2012). *Zēnu tekstizpratības uzlabošanas iespējas izglītības vadības kontekstā*. Pieejams https://dspace.lu.lv/dspace/bitstream/handle/7/5188/32996-Antra_Ozola_2012.pdf?sequence
- The Organization for Economic Co-operation and Development. (2019). *First results and conclusions of the OECD International Program for Student Assessment PISA 2018*. Retrieved from <http://www.oecd.org/pisa/data/>

THE USE OF BOOKS IN CONTENT AND LANGUAGE INTEGRATED LEARNING (CLIL)

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Abstract. *Connection between language and content in school environment is important, especially when we teach our students to be independent language users. The present paper investigates the connection between language and content goals. Research sample consisted of 10 and 11 years old primary school students (N = 12, M=1, F=11). The research was focused on the book *Your Body*, where vocabulary connected to body was being taught. New vocabulary was presented in the context, afterwards, new vocabulary and phrases were being thought through the mind maps. The case study approach was used to get an in-depth analysis of the research problem. The main aim of the research was to connect language and content, where the main emphasis was put on the content. The paper answers the research question focused on the role of the books in language and content integrated learning. The results of the research show that books are a great connection between language and content goals and can be used in content and language integrated learning.*

Keywords: *book, content, language, your body.*

Introduction

Nowadays more and more educational facilities are trying to modernise teaching process which is supported by Z. Lukáčová's (2017, p. 29) claim that "over the past decade, there has been an increasing interest in the incorporation of technology in foreign teaching and learning"; however, there is another way how schools try to modernise teaching of foreign languages, by usage of CLIL (content and language integrated learning) methodology. In general, CLIL is described as "using a language that is not a student's native language as a medium of instruction and learning for primary, secondary and/or vocational-level subject such as maths, science, art or business" Mehisto et al., 2008 which is in agreement with Z. Straková's (2013, p. 9) statement of the main purpose of CLIL, which is to integrate "other school subjects or areas into teaching English." Books are one of the most widely known sources of information. Books are used for different purposes, books can be read for entertainment or as a source of knowledge and they can also help to develop language skills, regardless of learner's age. Therefore, books represent an excellent connection between language and content. There are two ways how can CLIL be integrated into the learning and

teaching process. Z. Straková (2011, p. 5) claims “it can weave into the content subject with the focus on learning and language skills or vice versa through the foreign language lessons focusing on the content areas as well as learning skills.”

The present study aims to investigate the usage of books in CLIL and its connection between language and content goals. The main aim of the case study is to analyse the influence of the books in CLIL and how they support development of language skills. The case study was applied to get an in-depth analysis of the given phenomenon and answers the research question focused on the role and importance of books in content and language integrated learning. Main research method was observation and the research study was based on ethnographic approach, as the researcher was not only observing, but also interacting with the students. The study focuses on books as they provide both content and language; therefore, they represent a valuable tool for connection of content and foreign language.

Literature review

The current research offers different ways of how can CLIL be applied and used in schools. Urmeneta (2019) claims that the term CLIL is an umbrella term and it covers educational programmes for non-native speakers, who are being taught disciplinary content through the second language. Urmeneta (2019, p.9) claims that "Content and Language Integrated Learning (CLIL) is a plurilingual approach to learning and teaching in formal contexts. Researchers as Coyle, Hood & Marsch (2010), and Dalton-Puffer (2011) agree with Urmeneta' (ibid) definition of CLIL. Urmeneta (ibid) also focuses on the classroom interaction in CLIL educational environment, the results of the research show that there is an increase of contact time with the second language, but also in the quality of interaction, when compared to the standard foreign language classroom. Pavelová (2016, p. 94) adds that "communication is the glue that holds people together; it makes connection and interaction between people possible." Communication in the classroom, especially in CLIL classroom, is important as it brings real-life situations to teaching and students can use gained vocabulary.

Authors (Urmeneta, 2019; Coyle, Hood, & Marsh, 2010; Dalton-Puffer, 2011; Craen, Mondt, Allain, & Gao, 2007) agree that there are dual aims in CLIL, which promote language learning and linguistic diversity. Danica Gondová (2013) points out that CLIL has two different aims: language goals and content goals, which is also supported by Marsh (2002, p. 65) who defines CLIL as “dual-focused methodological approach that embraces both language and non-language content”. Authors, who focus on CLIL define this phenomenon differently; therefore, there are also different ways how can be CLIL applied in the educational environment. Throughout the world, different subjects are being

taught through the foreign language and it depends on the school's conditions, mainly on the teachers. There is also a difference between the number of schools devote to foreign language - it varies from a few lessons a day to a few lessons a week (Gondová, 2013).

Straková (2011) focuses her research on the integration of art into foreign language teaching. The results of the research show that CLIL oriented activities supported students' performance; moreover, the results show that language proficiency of students does not limit their performance. Suwannoppharat and Chinokul (2015) add that successful CLIL lessons depend on both, enthusiastic teachers and students; therefore, CLIL classes should be carefully planned. Xanthou (2011) realised two small-scale experiments, which focused on the development of L2 vocabulary when supported by CLIL. The results demonstrated a significant difference between experimental groups and control groups, where experimental groups significantly outperformed control groups.

The research, primarily focused on teachers, of M. Sepešiová (2015) aims to raise the awareness of the importance of materials in planning CLIL lessons. The research shows that education of teachers within CLIL is very important, the author claims that "a teacher who is unfamiliar with CLIL methodology has problems using already prepared materials with activities and tasks correctly" (Sepešiová 2015, p. 1). M. Sepešiová (ibid) also claims that there are several problematic areas as language competencies or statement of content objective concerning the preparation of CLIL lesson. I. Cimermanová (2017, p.12) adds that "No sufficient teacher with training in CLIL methodology in one of the cardinal problems but it is not insoluble".

Even though there are some problematic areas within the preparation of CLIL lesson, the available research serves as evidence that well prepared and designed CLIL classes are effective when planned with regards to students' needs. However, there are is only small research focused on the books as a unifying element for content and language integrated learning; therefore, the following research focuses on the usage books in CLIL.

Methodology

The research was realized at private language school and research participants were eleven and twelve years' old students (N = 12, M = 1, F = 11). For this research case study approach was applied. The main focus of the research was at the books and their usage in CLIL. English lessons were managed and taught by the researcher. The main research tools were tests, observation, and group interviews.

The research tries to answer following research questions: What is the role of books in CLIL? Following assumption emerged from the research questions:

Books are a great connection between the content and language, and they proved to be a valuable teaching tool in CLIL.

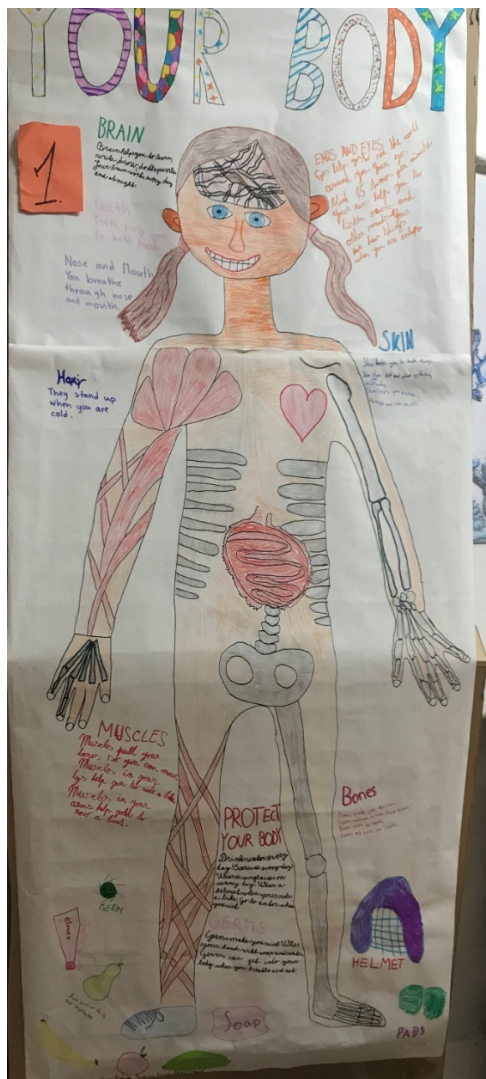


Figure 1 Project – Your Body, group 1

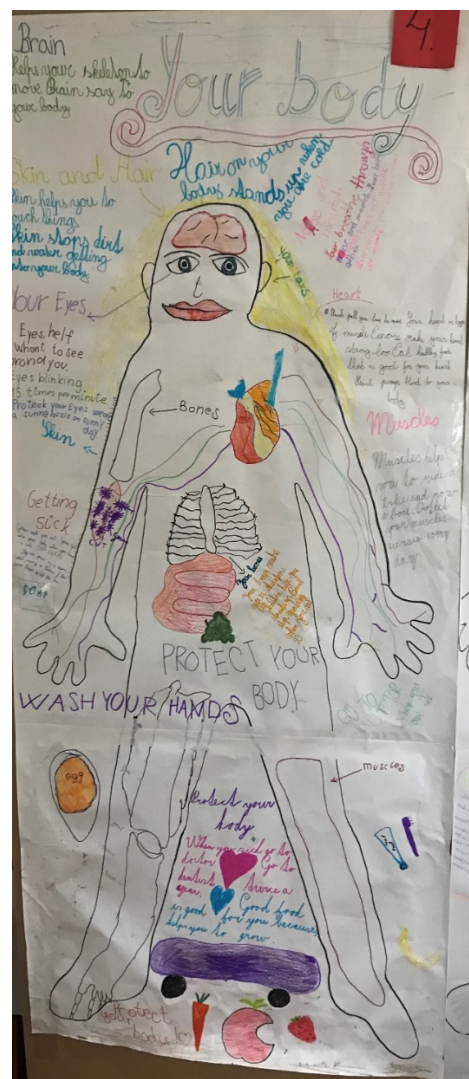


Figure 2 Project – Your Body, group 2

The following case study aims to investigate the role of the books in CLIL. It describes an example of the usage of how biology books can be used in foreign language classes. The case study lasted 12 weeks (60 minutes per week).

The main aim of every lesson was to get more familiar with not only target vocabulary, but also the content which was drawn from the biology. The book was not an authentic material, the book that matched students' level of proficiency was used. Every week, students read about a different part of the human body; afterwards, the topic was discussed and researcher together with the students chose the most important information from the topic and made the mind map. The following lesson was focused on the revision of the previous topic, different types

of revision were used. The revision was administered through retelling the mind maps, rewriting the mind map, or completion of the mind map.

There was a test after every two topics were discussed and summarized. The tests were focused on the vocabulary, as well as, students' ability to use gained vocabulary in a meaningful context. The procedure of eleven lessons was the same, the twelfth week was dedicated to the poster making. Students were making a poster under the one condition, they were not allowed to use any book or notes. Students made the poster only with the knowledge they gained during the eleven weeks. There were five groups (the same age) of children who made the posters, but only two of them (see figure 1 and figure 2) were taught by the researcher. Language classes focused on the topic *Your Body* ended with a big competition, where all language school students took the vote.

Research results

The analysis of the projects and observation notes showed that that books provide students with the content, which enable them to see the vocabulary in its natural environment. The observation showed that students were engaged throughout the reading and mind-map making, as they debated the main of mind maps and they were also focused during the reading. It was also observed that talking about the content and subsequent mind-map making supported the development of critical thinking of students, because with every next mind-map they were able to choose the most relevant information.

After the poster making, students supported the fact that books are helpful learning tool and they expressed that it was easier for them to learn new vocabulary when they saw them in sentences. One of the students also expressed that the pictures that were provided in the books helped him a lot when he was learning new vocabulary. The results of the research show that books play an important role in CLIL and therefore the assumption about the case study can be confirmed. It was also observed that students enjoyed project creation and it also supported their ability to work together as one group. The students also expressed that they would like to read another book in the same way *Your Body* was read.

The research question was focused on the role of the books in CLIL. As it is already mentioned, books provide students with both content and pictures, both of which are helpful throughout the learning process. Books provide teachers with the perfect connection of both language and content; moreover, the teacher can choose books according to his/her students' language proficiency.

Conclusions

This paper investigated the role of the books in the Content and Language Integrated Learning and it has given an example of how teacher can use books in CLIL and overcome the stereotype. Throughout the realization of the case study, the researcher tried to monitor students' motivation engagement in foreign language classes. Integration of biology and English language broaden not only the vocabulary, but it also awakened students' motivation to learn new words in the English language. Students expressed that English language classes were meaningful, as they were learning words, phrases and sentences which they can use in real-life situations.

This case study also supports above-mentioned authors and their claim that CLIL is a powerful tool, and its support not only teaching but also learning process. It is not enough to teach students of foreign language new words; therefore, content is important and the connection between language and content are books. Research also supports the benefits of the integration of language and content which results in books.

It is recommended for the future research to compare two groups, experimental and control group, where one group will be using books on CLIL lessons and the second will be taught without books. The results will demonstrate whether it is enough to prepare well planned CLIL lessons, and what the contribution of books to CLIL is.

Acknowledgement

This study derived from a governmentally-funded research project financed by the Slovak Ministry of Education, Science, Research and Sport (research grant number KEGA project No. 032PU-4/2019, project: Vytvorenie učebných materiálov pre učiteľov základných škôl pre integrovanie jazykového a obsahového vyučovania).

References

- Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and Language Integrated Learning*. Cambridge University Press
- Craen, P., Mondt, K., Allain, L., & Gao, Y. (2007). Why and How CLIL Works. An Outline for a CLIL Theory. *CLIL Special Issue*, 16(3), 70-78.
- Dalton-Puffer, C. (2011). Content and Language Integrated Learning: From Practice to Principles? *Annual Review of Applied Linguistics*, 31, 182-204.
- Gondová, D. (2013). *CLIL – integrované vyučovanie obsahu a jazyka*. Žilina: EDIS – vydavateľstvo Žilinskej univerzity.

- Lukáčová, Z. (2017). On the nature of the implementation steps towards blended learning in teacher training programmes. *CLEaR2017 conference proceedings*, 23-38.
- Marsh, D. (2002). *CLIL/EMILE: The European dimension: actions, trends and foresight potential*. Jyväskylä: UniCOM.
- Mehisto, P., Marsh, D., & Frigols, M.J. (2008). *Uncovering CLIL: Content and Language Integrated Learning in Bilingual and Multilingual Education*. Macmillan
- Pavelová, B. (2016). On communication, social roles, register and teaching. *English Matters*, 7, 93-103.
- Sepešiová, M. (2015). Materials in CLIL classes. *CLE2015 conference proceedings*. Retrieved from <https://www.slovakedu.com/publications/Ilce2015-conference-proceedings/a20/>
- Straková, Z. (2011). Integrating Art into Teaching English at a Primary Level: A Case Study. In A. Kačmárová (Ed.), *English Matters II*, (pp. 75-81). Prešov: Prešovská univerzita v Prešove.
- Straková, Z. (2013). *Introduction to Teaching English as a Foreign Language*. Prešov: Vydavateľstvo Prešovskej Univerzity.
- Suwannoppharat, K., & Chinokul, S. (2015). Applying CLIL to English Language Teaching in Thailand: Issues and Challenges. *LACLIL*, 8(2), 237-254.
- Urmeneta, C.E. (2019). An Introduction to Content and Language Integrated Learning (CLIL) for Teachers and Teacher Educators. *CLIL Journal of innovation and research in Plurilingual and Pluricultural Education*, 2(1), 7-9. Retrieved from <https://doi.org/10.5565/rev/clil.21>
- Xanthou, M. (2011). The impact of CLIL on L2 vocabulary development and content knowledge. *English Teaching: Practice and Critique*, 10(4), 116-126.
- Cimermanová, I. (2017). CLIL – a Dialogue between the Language and Subject Teacher. *Scientia Et Eruditio*, 1, 1-14.

FORMATION OF YOUNGER PUPILS' SUSTAINABLE INTEREST TO TAKE PHYSICAL CULTURE IN OUTDOOR EDUCATION INSTITUTIONS

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Abstract. *The results of the study and the data of Ukrainian and foreign scientists showed that children are passively involved in physical activity. School lessons of physical culture lose their priority among the preferences of students. The interests of younger students in physical education contradict with the curriculum. Physical development has a declarative and situational nature, since only about 20% of children engage in motor activity in the morning. In view of this, the author developed a method of forming a sustainable interest in physical education and sports during the extracurricular institution, which has been introduced from 2017 to the present at the University of Gifted Child (UGC), which operates at the Vasyl Stefanyk Precarpathian National University (Ukraine). Here, they have created a special educational, development and leisure environment of health-conscious content. The study confirmed the hypothesis that the effectiveness of this process is provided by a number of conditions: students have knowledge of physical culture and sports, health, well-known fellow countrymen; practical activity of children; valuable attitude of younger students to physical education, motivation for healthy lifestyle, emotional satisfaction from exercise, physical activity, sports, active rest; highly professional teaching staff who are well-known athletes, creative students; innovative methods and forms of learning, etc. It is proved that if significant attention is paid to the cognitive and value components, then it is possible to generate more intense interest in physical culture in children.*

Keywords: *health care environment, junior high school students, physical activity, physical education lessons, sports, sustained interest in physical culture, University of Gifted Child.*

Introduction

It is known that physical education and sports have a positive impact on the development of the child, they are especially needed for the modern pupil who spends most of the day sitting at his desk at school and doing homework at home. Children spend a lot of time in front of the TV, a computer that does not promote either physical, moral or spiritual health. According to educators, scientists (Babiuk, 2015; Bezverkhnia, 2003; Vilchkovskiy & Kurok, 2008; Kravchuk & Voinarovska, 2017; Krutsevych, Vorobiov, & Bezverkhnia, 2011), as well as our observations, junior high school students are mostly not interested in sports and physical education, they are not interested in physical activity. In recent years, the volume of educational load of pupils in secondary schools has grown to such a degree that immobility caused by this, the limitations of muscular effort are causing diseases of various body systems (Bergier, Bergier, & Tsos, 2016; Bezverkhnia, 2003; Iedynak, Galamandjuk, Kyselytsia, Nakonechnyi, Hakman, & Chopik, 2017).

Let us emphasize: this problem is at the center of attention and the global community. Scientists, educators, the public abroad are alarmed: children and adolescents are increasingly distancing themselves from physical education, and their physical activity is reduced to catastrophic norms. According to UK Sports Secretary Mims Davis, "every third child in England is not physically active enough: children receive less than 30 minutes of exercise per day - half the amount recommended by government recommendations," according to the British Broadcasting Company (BBC). The UK faces serious challenges to increase interest in youth sports - according to an annual report (2017-2018) from a departmental government body at the Department of Digital Culture, Media and Sports, Sport England (The challenge of growing youth participation in sport, 2018). These and other sources summarize: "the situation must be changed." Among the reasons for the loss of interest in physical education and sports - the decline of sustained interest in physical education, the loss of educational orientation of physical education, the lack of innovative methods and forms of working with children, the lack of motivation for physical education, etc. The importance of physical training of younger students is discussed in the research by T. Krutsevych, M. Vorobyov, G. Bezverkhnia (Krutsevych, Vorobiov, & Bezverkhnia, 2011). Works of S. Babiuk (Babiuk, 2015), G. Bezverkhnia (Bezverkhnia, 2003), Ya. Kravchuk, N. Voinarovska (Kravchuk & Voinarovska, 2017) are devoted to the study of motivation of physical education of pupils of separate classes. However, the problem of formation of younger pupils' sustainable interest has not got much attention from scientists.

The works of Chen A. & Darst P.W. (Chen & Darst, 2001; Chen, Darst, & Pangrazi, 1999), are devoted to the issue of Situational interest, validating a construct in physical education. The authors state that situational interest is the appealing effect of unique characteristics students recognize in a learning task during interaction with the task.

The purpose of the article is to analyze the use of unconventional technologies in the formation of a strong interest in physical education and sports in out-of-school educational institutions among younger students.

Methodology

Analysis of scientific and methodological literature, questionnaires, pedagogical experiment were used the following methods to achieve this goal. The study was conducted during 2017–2019 years.

It was preceded by the development of scientific and methodological literature, the development of a complex of theoretical methodological material on the formation of a sustainable interest in the younger students to exercise in physical culture and sports. During the main pedagogical experiment, the effectiveness of the proposed method was determined.

The analysis of literary sources made it possible to determine the state of study of the problem under study in pedagogy, the theory of physical education.

The observation method was used to determine the state of interest of students in physical education and sports, their motor activity. Comparing the observation data with the survey data, reliable information was obtained on the degree of manifestation of their interest in physical education and sports, motor activity.

The questioning process involved the development of a questionnaire for students in 4th grade. Eighty four people took part in it: forty two boys and forty two girls from Ivano-Frankivsk city. The questionnaire included a number of questions, including: “How do you spend your free time?”, “Do you do exercise in the morning?”, “Do you do sports in the afternoons?”, “How do you feel about physical education as a subject?”, “Are you satisfied with the physical education lessons at your school?”, “Which sections of the physical education curriculum are interesting to you?”.

Statistical data were used to process and analyze the results of the survey. The above scientific methods have been able to identify the factors that influence the formation of motivation for physical education and sports, to identify incentives that promote its development, to develop a method of forming a strong interest in physical education and sports in extracurricular

institutions through the creation of appropriate environment within the Vasyl Stefanyk Precarpathian National University, outline specific recommendations for physical education teachers.

Research results

The results of the research of scientists, as well as our observations on the educational process in the schools of Ivano-Frankivsk city and the Vasyl Stefanyk Precarpathian National University (Ukraine) confirm the thesis that, unfortunately, the level of interest of children / students in physical education and sports decreases. In the upper grades of the school, and therefore in the university, it is almost extinct. And only some persons like physical education and sports. The results of a survey of 4th grade students in Ivano-Frankivsk city (84 people, 42 boys and 42 girls) showed that almost 80% of younger students are passive about their own physical activity, physical education, leisure is usually spent on computer games, watching cartoons, communicating on social networks, “in front of the TV”; only 20% of boys participate in sports sections in the afternoons, 22% of girls engage in dancing. More than 90% of children do not do physical exercises in the morning, 75% of the respondents admitted that they exercise “inactivity” because it is “uninteresting”, “monotonous”; only 26% of students indicated that they systematically play outdoors, run, play football and other games after school. Only 62% of boys and 33% of girls said that physical education is “one of their favorite subjects” for them.

Almost 94% of boys and 55% of girls answered yes to the question “Would you like more physical education lessons at school?”. 30% of girls and 6% of boys did not think about it. At the same time, 82% of boys said they were satisfied, 15% said “not very good”, 3% did not answer the question: “Are you satisfied with the physical education lessons at your school?” girls' survey data are slightly different: 75% are satisfied, 10% of respondents said they were “not satisfied with the lessons”, 10% were “not very happy”, 5% did not answer. Interestingly, 10% of girls said that “physical education is not needed at all as a subject”. We also found interest in fourth grade students in the physical education curriculum: swimming - 80%, athletics - 42%, gymnastics - 20%, winter sports - 35%, sports games - 88% and more.

These data make us think about the problem of health care for younger students, because physical education and sports, active motor activity - a condition for the full development of the child, the key to a healthy lifestyle. The updated results show that a large percentage of fourth-graders are passive in motor activity, they have no stable interest in physical education and sports. Physical education lessons in 4th grade (compared to grades 1-2) lose their

priority among the preferences of children, the value attitude to physical education and sports differs from boys (boys have a more positive attitude to physical education and sports) and girls (girls manifest less interest in physical education lessons, not all are satisfied with school lessons, there are respondents who believe that physical education lessons are not needed). Usually, among the 4th grade students, the most motivated are those students who do sports outside of school. These surveys have confirmed the research of scientists that children are willing to play sports, in the process of playing they have positive emotions, formed an interest in physical education. We have noted that the interests of students in physical education begin to conflict with the current program, this is clearly seen in the example of the decline of interest in, say, gymnastics and increased interest in games and sports.

The issue of motives for physical education for students of different ages has been sufficiently studied in the scientific literature: the motives are dominated by the development of physical qualities (46% in boys, 21% in girls), posture improvement (respectively 7% and 10%), desire to move (29% and 30%), communicate with friends (2% and 13%), get grades (4% and 13%), avoid teacher troubles (12% and 15%) (Fizychnye vykhovannia, 2014).

We trace some contradiction regarding, on the one hand, the understanding of the students of the 4th class of the importance of physical education and sports for physical development of the individual, health saving, physical activity, on the other hand, such interest is not, first, sustainable, second, it is declarative and situational in nature, since after physical education at school only about 20% of children are engaged in physical activities activity in the afternoons. In addition, students' interest in physical education and sports largely depends on the content, personality of the teacher, in particular the level of his professional skill, due attention from teachers of the school to the formation of interest in the physical activity of students, facilities, equipment and more.

These and other aspects were taken into account by developing the author's method of forming a strong interest in physical education and sports in the course of extracurricular activities. Today's physical education lessons at school are not an effective means of generating young students' interest in physical education. Therefore, it was considered appropriate to create an out-of-school health environment that would maximally meet the pedagogical conditions that would provide the child with motor activity, interest in young students sports, and develop health-saving skills.

Forming a child's interest in physical education is a long process. It covers a complex structure made up of a number of interconnected components. These are the student's knowledge of physical culture and sports, health (cognitive);

practical activity of the child in this field (activity); Valuable attitude of the student to physical training, his yearning to lead a healthy life, emotional pleasure from performing physical exercises, physical activity, sports, active recreation (value), etc. The school does not pay much attention to the cognitive and value components as our observations have shown. In our opinion, taking into account these components provides for the formation of sustainable interest of younger students. Therefore, in our program of formation of sustainable interest in physical culture these components are actualized.

The program has been implemented since 2017 at the University of the Gifted Child [UGC] (Universytet obdarovanoi dytyny [UOD], 2019), where was a favorable environment for creating a strong interest in physical education and sports has been created: for the third year in a row, Ivano-Frankivsk students participate in this project. Well-proven Olympic Reserve School (Judo, Football, etc.), Table Tennis School, School of Sports Entertainment, School of Sports Dance, School of Yourself Doctor, attended by more than 1,200 junior students during 2017-2019 (UOD, 2019). As children are actively involved in the UGC project, we will not characterize these quantitative indicators, indicating that children do not lose interest in physical education and sports, and focus more on the specific forms and educational technologies that we use in working with younger schoolchildren. First of all, let's analyze the cognitive and value components of our program of generating sustained interest in children in their physical development.

Regarding the knowledge (cognitive) component, here they sought to give children the knowledge that would encourage them to exercise in physical culture and sports. To do this in an unobtrusive way without harming motor activity, the theoretical material was organically combined with the content of the practical activity. Here are some methodical techniques. For example, during a class at the Self-Doctorate School (UOD, 2019), not only interesting things (3-5 minutes) were taught to teach children how to make bandages when injured with a knee while playing football or other sports games; the students were told not only about interesting events in the field of football, about famous sportsmen - immigrants from the Carpathian region, but also about how physical activity affects the mental development of the individual, the role of physical exercises in the development of forms and functions of the body, the influence of certain physical exercises that are advisable to perform daily in the morning for good functioning of the body and the like.

At the lessons of Olympic Reserve School (Judo School) talked about the traditions of physical education development in different historical epochs, informed the children about the high physical abilities of Ukrainian cossacks, scouts, their role in the fight against enemies, caring attitude to their health,

healthy nutrition, glory, which Ukrainian cossacks have earned for their physical excellence, fitness, endurance in Europe, etc. (UOD, 2019). The children were shown fragments of the films “Cossacks” and “Ivan Syla”, which starred Vasyl Virastyuk, a native of Ivano-Frankivsk city, an idol and a role model for tens of thousands of boys in Ukraine. The screening of movie fragments was accompanied by a story about V. Virastyuk - the most titled strongman of Ukraine, the holder of the titles “The Strongest Man of Ukraine” (2000, 2001, 2002, 2003, 2005), “The Strongest Man of the World” (2004), a member of the national team of Ukraine, which won the title “The Strongest Nation in the World “ in 2003 and 2004. After the story, the children shared their thoughts on what it takes to become such a famous athlete as V. Virastyuk. In their evaluative judgments, younger students were unanimous: traits such as strength, agility, endurance, the desire to work on themselves, to improve their physical development, and so forth, should take a significant place. Possession of such abilities was considered as a way to self-assertion in a group of peers, class. Therefore, teachers should more often use this as an incentive for physical improvement, focusing students on the positive example of famous athletes, fellow countrymen, to emphasize that exercise is the way to the goal.

Classes were played in a play form, used an integrated approach to their conduct, maximally stimulated the motor activity of children in classes at other schools of UGC (School of Maker and Entertainment, School of Vocal, Dance School, School “Skillful Pens”, School of entertainment, School of detectives, School language ecologists, eco-schools, etc.), organized outdoor activities (in the courtyard of the university, in the city park (the university is located in a park area), organized trips, quests, sports entertainment, etc. In the process of this activity sought That children under emotional satisfaction of physical training and sports, helping them find the answer to the question “What does engage in some form of sport, to perform a particular exercise?

The formation of students' understanding of the cause and effect of the influence of exercise, sports on the body, health generally contributed to the development of a sustainable interest in motor activity. This is clearly reflected in the participation of boys in the School of Dance, because usually choreography is a favorite activity for girls (UOD, 2019). Sports dance based on the elements of the hopak, the use of elements of Cossack fun, games, a story about the physical qualities of Cossacks, demonstration of individual elements of Ukrainian folk dances, etc. - all this served to interest the motor activity, the desire to improve their posture, develop not only their body, but also to form mental health (UOD, 2019). Therefore, the children studied the dance on the stage of the university during the celebrations on the occasion of the opening of

the project “Interesting vacations”. As we have seen, sports dance is an effective way of increasing the interest of younger students in motor activity. The value of choreography and music was that they became a good basis for aesthetic, moral education, generally comprehensively influenced the personality, contributed to the formation of physical, spiritual, social, moral healing of students. So, we actualized the wellness motive for physical education and sports by means of sports dance.

The wellness goal was also taken into account when competing in badminton, darts, “Funny start” games, “Cheerful choreography” in the open air, moving games, outdoor relay races (in the park, in the university courtyard), at the university stadium and so on.

Every year, starting in 2017, at the end of the Interesting Vacations project, we conducted a survey of parents and participants of the UGC, whether they were satisfied with their participation in the UGC, whether they liked physical culture and sports at the UGC, and why some of the activities offered, workshops, schools, which they liked most, what classes (schools) they would like to attend in the future, which encourages them to engage in physical culture and sports. The results of the 2019 survey are presented in the tables below. 34 girls and 30 boys participated in the survey. It should be noted that both parents and children were extremely emotionally and enthusiastically responsible for their impressions of this form of extracurricular physical education not only to us but also to numerous journalists (newspaper reporters, radio and television journalists) (UOD, 2019). All survey participants unanimously replied that they were satisfied with their participation in the UGC. Almost all the boys indicated that they enjoyed physical education and sports, four girls in the questionnaires wrote that they “never loved physical culture and sports”.

The children noticed that UGC was attractive to them because they “traveled a lot”, “played many sports and games”, “danced sports dances”, “engaged in judo”, “saw their successes on the UGC page”, “us we filmed, we showed in TV shows, we gave interviews”, “it was very interesting to study at a real university”, “we were taught by teachers and students”, “we performed on a real stage”, “it was a lot of fun”, “we played on a board tennis”, “they staged a fairy tale with the help of movements”, “they learned about famous sportsmen”, “work did the famous athletes come with us”, “were fun starts and relay races”, “prizes we got at fun starts”, “often danced and played outside”, “very nice and young teachers”, “fun students”, “fun” play badminton”, “green-coated stadium”, “good gymnasiums”, etc.; one of the boys wrote “how sorry it is not in our school”. Thus, innovative methods of training and education, their diversity, good material and technical base, highly professional teaching staff

and other factors have provided the formation of a strong interest in the younger students to exercise in physical culture and sports, physical activity.

Among the favorite schools and workshops, the children named “Table Tennis School”, “Judo School”, School of Educational Entertainment, School of Dance, School of Acting, Eco-School and others. All survey participants indicated that they would (again for the fourth time) visit the UGC next year. Interesting were the young UGC students' answers to questions about the motivations for physical education and sports (Table 1).

Table 1 Responses of young UGC participants to the question “What motivates you to engage in physical culture and sport”? (%)

Motives	Girls	Boys
Desire to move, travel, actively rest	92	100
Get Positive Emotions	80	67
Formation of a Healthy Organism, Health Conservation	78	86
Discover something new about the physical development, physical culture and sports of famous athletes-countrymen	32	45
Exercise with Famous Athletes	34	56
Development of physical qualities	25	36
Improving physique	28	20
Talking with your friends	22	38

As you can see, the motives for physical education and sports in children who have been attending UGC for three years are different from their peers (information is given at the beginning of the article). Dominant are such as “desire to move, travel, take a rest” (92% in girls and 100% in boys), “formation of a healthy personality, health” (78% and 86%), “to receive positive emotions” (80% and 67%) (wellness motives), which testifies to the effectiveness of our methodology, which was based on the actualization of wellness (health saving motive) as an important factor in the formation of sustainable interest of younger students in physical education and sports. Body shape enhancement motif and sports motive are also present in the participants of the UGC. It is practically no different from the information we provided at the beginning of the article. Girls start paying attention to their figure earlier (take care of excess weight, etc.) than boys. Recreational motives (“communication with friends”) are common to both boys and girls. We note the emergence of such motives in children as “learning something new about physical development, physical culture and sports” (32% and 45%), which we regard as a consequence of updating the cognitive component in our methodology. As we can see, the fact

that when we involved in the training of masters of sports, well-known athletes, it was the head of the school / master class who was able to interest children in sports (34% and 56%). Introducing the author's technique, they focused on the child's natural need for physical activity, in the game, new impressions, positive emotions, new information, knowledge of something new, the need for physical improvement, active-positive attitude to physical culture, famous athletes, countrymen, who have succeeded in sports and more. And it gave a good result.

Conclusions and recommendations

Forming a strong interest of younger students in physical education and sports is a difficult pedagogical problem. The results of our study and the data of scientists showed that a large percentage of children are passive in motor activity, school physical education lessons lose their priority among the preferences of children, in general, among the students of the 4th grade, the most motivated to exercise are those students who exercise school, the interests of younger students in physical education come into conflict with the current school curriculum. Under the conditions of the school, young people's interest in physical development is declarative and situational in nature, since only about 20% of children engage in physical activity after school hours after physical education.

In view of this, they created the author's method of forming a sustainable interest in physical education and sports in the process of extracurricular institution, which is implemented from 2017 until today at the University of Gifted Child (UGC), which operates at the Vasyl Stefanyk Precarpathian National University. The study confirmed the hypothesis that the effectiveness of this process provides a number of conditions: the acquisition of students knowledge of physical culture and sports, health, well-known local athletes; practical activity of children; value attitudes of younger students to physical education, motivation for healthy lifestyle, emotional satisfaction from exercise, physical activity, sports, active rest; highly professional teaching staff who are well-known athletes, creative students; integrated lessons, application of innovative educational technologies, game teaching methods and more. It is proved that if the cognitive and value components are given considerable attention (which is not done in school practice), then it is possible to form a more intensive and lasting interest in children for physical culture. Health saving factor, need for active rest, physical activity, emotional value motive have become priority among motives for physical culture and sports. Quantitative data confirmed the effectiveness of the introduction of the author's method, in particular, there were no children who do not show physical and sports activity.

The experimental work carried out over three years was effective, as evidenced by the significant changes in the results of the growth of motivation of the younger students-participants of the UGC to exercise in the physical and health activity. We believe that our pedagogical findings (practical experience of forming a strong interest among younger students in physical education and sports at the Gifted Child's University at Vasyl Stefanyk Precarpathian National University) can be fully used in any higher education institution, not only in Ukraine its boundaries, individual innovations, fruitful ideas and approaches to the organization of physical education it is expedient to apply in school practice, their creative application will serve to increase the efficiency of physical education.

References

- Chen, A., & Darst, P.W. (2001). Situational Interest in Physical Education: A Function of Learning Task Design. *Research Quarterly for Exercise and Sport*, 72(2), 283-289. DOI: <https://doi.org/10.1080/23267224.1921.10650510>
- Chen, A., Darst, P.W., & Pangrazi, R.P. (1999). What constitutes situational interest? Validating a construct in physical education. *Measurement in Physical Education and Exercise Science*, 3, 157-180.
- Babiuk, S. (2015). Formuvannia interesu do fizychnoi kultury u molodshykh shkoliariv shliakhom vykorystannia netradytsiinykh tekhnolohii. Visnyk Kamianets-Podilskoho natsionalnoho universytetu imeni Ivana Ohienka. *Fizychno vykhovannia, sport i zdorovia liudyny*, 8, 62–68. Retrieved from http://nbuv.gov.ua/UJRN/Vkpnu_fv_2015_8_10
- Bergier, J., Bergier, B., & Tsos, A. (2016). Variations in physical activity of male and female students from different countries. *Iranian Journal of Public Health*, 45(5), 705-707.
- Bezverkhnia, H. (2003). *Formuvannia motyvatsii do samovdoskonalennia uchniv zahalnoosvitnikh shkil zasobamy fizychnoi kultury i sportu: Metodychni rekomendatsii dlia vchyteliv fizychnoi kultury*. Uman.
- Iedynak, G., Galamandjuk, L., Kyselytsia, O., Nakonechnyi, I., Hakman, A., & Chopik, O. (2017). Special aspects of changes in physical readiness indicators of young men with different somatotypes between 15 and 17 years of age. *J of Physical Education and Sport*, 17(4), 2690-2696. DOI: 10.7752/jpes.2017.04311
- Ivashkovskiy, V., Ostapenko, O., & Tymchyk, M. (2014). *Fizychno vykhovannia uchniv pochatkovykh klasiv u pozaklasnii roboti zahalnoosvitnikh navchalnykh zakladiv: navch.-metod. posib*. Kirovohrad: Imeks–LTD.
- Kravchuk, Ya., & Voinarovska, N. (2017). Stan ta shliakhy formuvannia u shkoliariv interesu do fizychnoho vykhovannia ta sportu. *Physical Education, Sports and Health Culture in Modern Society*, 2, 151–155. Retrieved from <https://sport.eenu.edu.ua/index.php/sport/article/view/1408>
- Krutsevych, T., Vorobiov, M., & Bezverkhnia H. (2011). *Kontrol u fizychnomu vykhovanni ditei, pidlitkiv i molodi: navch. posib*. Kyiv: Olimp. 1-ra.

Bilavych et al., 2020. Formation of Younger Pupils' Sustainable Interest to Take Physical Culture in Outdoor Education Institutions

The challenge of growing youth participation in sport. Retrieved from <https://www.sportengland.org/media/10113/youth-insight-pack.pdf>

Universytet obdarovanoi dytyny. Retrieved from <https://kidsuniver.blogspot.com/>.

Vilchkovskyi, E., & Kurok O. (2008). *Teoriia i metodyka fizychnoho vykhovannia ditei doshkilnoho viku: Navch. posib.* Sumy: VTD. «Universytetska knyha».

RESOURCE CLASSROOM AS A MODEL FOR ORGANIZING INCLUSIVE EDUCATION IN THE RUSSIAN FEDERATION

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Abstract. *On the basis of inclusive education importance for children with disabilities and special educational needs, which contributes to the development of communication and socialization skills, as well as the development of tolerance among typically developing children, the aim of this work was to describe a resource classroom as a model for the effective organization of inclusive education in mainstream schools of the Russian Federation. The article defines a resource classroom in Russian educational system. The authors determine legal and regulatory frameworks to establish such classrooms. This study presents the main methodological base of resource classrooms, the organization for the educational process and space according to the students needs. Based on the generalization for the experience of the resource classrooms in the regions of the Russian Federation, the interaction for all elements of this model is shown. The study confirms that positive learning outcomes, involvement and inclusion of children with disabilities and special educational needs in a mainstream school and society are the evidence for the effectiveness of resource classrooms. The described model makes inclusion in education comfortable and effective not only for students of the resource classroom, but also for typically developing children, parents and the teaching staff of a school.*
Keywords: *children with disabilities and special educational needs, effective model, inclusive education, mainstream schools, resource classroom, special educational conditions, space organization.*

Introduction

Changes in the perception about the rights and needs of children with disabilities have led to the recognition for the right of such children to receive education and define inclusive education as the most humane and effective means of education in many countries such as the USA, Canada, the UK, Germany, Finland, Russia, etc. In the conditions of social economic progress of the society the problem of inclusive education in mainstream schools becomes urgent. M. Farrell considers inclusive education having a great social impact not only on

children with disabilities and special educational needs, but on their typically developing peers as well, since, inclusion can be a tool for tolerant attitude development, communication and socialization (Farrell, 2003). Therefore, inclusive education is one of the main objectives facing Russian education policy and social protection. Federal Law of December 29, 2012 No. 273-FZ “On Education in the Russian Federation” and the letter of the Ministry of education of the Russian Federation of July 7, 2017 No.TC-267/07 “About information direction” allow organizing teaching and learning of children with disabilities and children with special educational needs in regular educational institutions, which should create special conditions to improve the system of education, develop effective strategies, methods, tools, technologies and models in accordance with the needs and characteristic features of students.

A resource classroom can be an effective model to provide students with disabilities and special educational needs with their right to study at mainstream schools in Russia. The aim of these classrooms is to help students with disabilities or students with special educational needs to adapt to mainstream schools requirements and conditions, get additional help in studying a curriculum, be taught individually or in a small group according to adapted curriculum which meets their learning needs, get help from specialists (psychologists, speech pathologist etc.) and relax.

Theoretical ground

In Russia the idea of inclusion originates in the 20-30s of the twentieth century from the understanding of integration appeared in pedology. It made a significant contribution to the development of the integration approach in pedagogy. Among the most famous Russian researchers-pedologists are M. Basov (2007), P. Blonsky (1929), V. Kashchenko (2010), A. Lazursky (1910), A. Luria (1973), L. Vygotsky (1936), etc. An outstanding Russian scientist L. Vygotsky indicated the necessity to create a system of education and learning in which a child with disabilities would not be excluded from the society of typically developing children, and he also suggested that the task of raising children with disabilities was their integration into the society (Vygotskiy, 2012). Therefore, he was one of the first Russian researchers who proved the idea of integration which then led to understanding of inclusion.

Today among modern Russian researchers dealing with the problem of inclusion and inclusive education we can name S. Alekhina (2013, 2016), N. Ivanova (2011), A. Liferov (1997), E. Yarskaya-Smirnova and I. Loshakova (2003), N. Malofeev (2009), E. Kutepova (2015), E.A. Yekzhanova (2011), etc.

They consider inclusion to be the central idea in the development of modern education, it affects the value changes of the society. Inclusion is based on the

idea of the inclusive society. It means that any person (despite their race, religion, culture, abilities) can be included into social relations.

Inclusive education is defined by I. Loshakova and E. Yarskaya-Smirnova as education of children with disabilities and special educational needs together with typically developing peers in mainstream schools (Loshakova & Yarskaya-Smirnova, 2002). They point out that the idea of this education is to receive not only education and psychological adaptation in society, but to interact actively with typically developing children. Such communication is also of great importance for children who have no any deviations in their development and health. Thus, this fact significantly increases the role of inclusive education, which allows expanding the opportunities for socialization of children with disabilities and special educational needs.

The law of the Russian Federation “On education” allows educating children with disabilities and special educational needs. According to the law parents or legal guardians have the right to choose the form of education and the educational institution (Federal law, 2012).

There are currently three approaches to the problem of education for children with disabilities and special educational needs in the Russian Federation: the first is education in special (remedial) institutions; the second is integrated education in mainstream schools where children with disabilities and special educational needs attend mainstream schools but study in special classes; the third is inclusive education.

Inclusive approach to education in modern Russia is fundamentally possible, but practically difficult to implement. S. Alekhina states that inclusion of children with disabilities and special educational needs into mainstream schools causes difficulties and problems not only for these children but for the mainstream school teachers as well (Alekhina, 2013). Mainstream teachers need help from special education teachers to organize the process of education effectively taking into account all special features and peculiarities of the excepted children. They should learn how to work and communicate with students with disabilities and special educational needs. S. Alekhina stresses that in educational practice there is a necessity in different educational models for inclusive education which combine collaboration and interaction between mainstream teachers and special education ones (Alekhina, 20016).

A resource classroom can be one of the educational models for organizing inclusive education which comprises the experience and knowledge of special education teachers and mainstream teachers to make this process easier and to solve the problems arising in the learning and teaching processes.

As Russian pedagogy lacks for technologies and methods in the system of inclusive education this model is based on the experience of resource rooms in the USA and Great Britain. In Britain and in the USA a resource room is understood

as a specially organized space for students learning development and the regulation of their psycho-emotional state (Inclusion of Students with Special Educational Needs, 2007). In this room they can also get any additional help in case they have difficulties with curriculum, they can have a rest there and just relax. Resource rooms are organized for both typically developing children and children with disabilities and special educational needs included in mainstream education. This experience was transferred and adapted taking into account the conditions and specificity of inclusion in the Russian Federation.

In Russia a resource classroom is defined as a room in a mainstream school for special lessons where students with disabilities and special educational needs can study according to a specially adapted curriculum meeting their individual educational needs (Kozorez et al., 2016). The resource classroom model ensures the right to educate any child and allows organizing the learning process corresponding to the needs of each student in the least restrictive environment. This model helps a student to combine inclusive learning and individual one in mainstream education.

The resource classroom model implementation started about six years ago in Moscow with the project of Center of Autism problems and school № 1465 with the parents initiative, then the educational project «Inclusive molecule» (resource classrooms) was organized, it included 9 schools.

Today we can observe the resource classroom model in many Russian cities and regions: Moscow and Moscow region, Saint Petersburg, Voronezh and Voronezh region, Pyategoroks region, Nizhniy Novgorod, Novosibirsk and Novosibirsk region, Smolensk, Lipetsk, Belgorod region, etc.

Methodology

The objective of the study was to generalize the experience of resource classrooms in the Russian Federation and describe the structure of the resource classroom model for inclusive education implementation. The study used theoretical research method and comparative analysis taking into account the following factors: the aim of the resource classroom model establishment, the determination of the elements for the model and their interaction, the methodological assistance, the place of this model in a mainstream school for organizing inclusive education. The documentation for Russian resource classrooms (lists with information about students with disabilities and special educational needs (their characteristics, behavior description, communication, etc.; communication lists for parents and teachers (teachers and parents can keep in touch due to such lists writing and reading the necessary information about a child, leaving massages, etc.); the examples of adapted curriculum, individual plans, timetables, etc.; job descriptions for the resource classrooms teams),

publications dealing with the problem of inclusive education and resource classroom in the system of mainstream schools inclusion were compared and analyzed. Materials of international conferences and webinars with the representatives of the teachers, specialists and parents implementing the resource classroom model, documents of Russian inclusive education legal and regulatory frameworks were also studied to describe the base for the establishment of such classrooms in the Russian Federation.

In particular, the authors generalized the experience of resource classrooms model as inclusive education implementation in Moscow (schools № 1321, 1540, 1367, 285, 2009, 1574, and 1206), Saint Petersburg (school № 232), Voronezh (school № 92), Saratov (schools № 57, 84) and Smolensk (school № 25), overall 12 resource classrooms were taken for experience study.

The analyzed experience allows generalizing the organization of educational process and space, specifying the elements of the model and interaction between all the elements of the model, describe its advantages which show the effectiveness of this model.

It should be noted, that during the conducted research it was found out, that there is no proper universal structure for resource classrooms and the communication between regions is low. But due to some disability non-governmental organizations such as «Perspectiva», «Contact» and «Inclusive Schools Association» this process is highly developing now.

Research Results

Inclusion should be a well-organized, reason out process in which each participant realizes and understands his/her role and responsibilities perfectly well.

Thus, for organizing a resource classroom in a mainstream school it is necessary to define this procedure and specify the legal and regulatory frameworks for its establishment. Based on the experience in the above mentioned schools and studied documentation it is possible to name four main steps when organizing a resource classroom: the first is a request from families raising children with disabilities or special educational needs, the second is mainstream school readiness to create special educational conditions for such children, the third is availability of a resource classroom team and the fourth is finance.

The practice of organizing for all the resource classrooms that work now suggests that at the beginning of the process there is a parents initiative. When providing the research the importance of this step was also proved by the coordinator of a resource classroom, a deputy director of the mainstream secondary school № 25 in Smolensk V. Dudareva, and the parents, being also specialists, Ye. Bagarnikova (the director of the Russian organization «Contact»),

A. Stepanenko (a specialist of applied behavior analysis), P. Bagaradnikova (a speech pathologist), O. Pogonina. They also mentioned that parents usually unite in groups to form their request for the creation of special educational conditions at school reflected by the resource classroom model and this model allows them to realize the form of education they have chosen according to the Federal Law of December 29, 2012 No. 273-FZ “On Education in the Russian Federation”. When parents are united they become the part of the inclusive process and it is a very essential action.

Practical experience shows that in most cases this request is accepted by schools and a mainstream school should follow the legal and regulatory frameworks to establish a resource classroom. From the studied documentation it is possible to name the documents necessary for the resource classroom establishment. They include:

- a warrant to establish a resource classroom;
- a resource classroom regulation;
- an agreement between the school and the parents (or legal guardians) of a child;
- an agreement between the school and the academic institution that will provide scientific and methodological support for this model;
- job description for resource classroom team;
- a resource classroom card (i.e., a description of the school staff, wage rates, facilities, equipment, etc.).

When all regulations are fulfilled, a room for a resource classroom is chosen. It is in the same building with the mainstream school. During the carried out study four basic zones were observed for work in such classrooms: a zone for individual education, a zone for group education, a working zone for a resource teacher and a zone for relaxation. Thus, the room is big enough to divide the space into these zones. The division of the resource classroom into the zones helps to organize space for students with disabilities and special educational needs appropriately.

From the compared experience of the preparation for the resource classroom work it should be noted, that at the beginning of the school year the team of the resource classroom meets with the mainstream school staff to describe the students going to be taught there and discuss the features of the resource classroom, methods and technologies which will be used during the educational process. They also give careful consideration to resource classroom students’ inclusion into regular classes and think over how children with disabilities and or special educational needs will be introduced to their typically developing classmates and their parents (e.g. in schools under study teachers conduct lessons on kindness with students, place information tables and organize meetings with parents).

Therefore, before the resource classroom starts its work, brief instructions are given to all school personnel on how to behave with students attending the resource classroom.

The purpose of the resource classroom model is to organize the inclusive education for children of disabilities and special educational needs and to provide their gradual without stress inclusion into regular classes. Therefore, having analyzed and compared the work of the resource classrooms five basic conditions can be specified for good education, social adaptation in the mainstream school environment and effective inclusion into regular classes.

The first condition is to determine a child personal adaptation period taking into consideration his/her special characteristics. It is important to indicate the features of this period organization: learning load, changing in the regime of lessons attendance, flexible timetable, etc. From the compared documentation we conclude that lessons in resource classrooms can start at 8.30 or at 9.00 and finish at 13.00 or at 13.30. They are for 20 or 25 minutes during this period. Proper organization of the adaptation period gives an opportunity for a student with disabilities and/or special educational needs to get used to requirements, becoming more complex gradually, and the teaching team can conduct a high-quality diagnostics, assess all the basic needs and capabilities of a child at a given period.

The second condition is space organization, the zones are mentioned above.

The third condition is the organization of the student educational activities. Timetable was found to be the most common example meeting this condition.

The forms of the studied timetables are different, they depend on children need, ages and characteristics (there are various forms: with photographs, pictures, symbols indicating lessons, signs, inscriptions, etc.). Such timetables help to streamline students' activities, reduce anxiety and provide a clear sequence of activity changes.

The fourth condition is teaching aids and materials adaptation. Despite there is a considerable number of aids and materials adapted for children with various educational needs (copybooks for left-handed children, copybooks for children with motor skills difficulties, etc.), the conducted study discovered that it is not possible to use them completely since a child with disability or special educational needs is included into a regular class. Therefore, for the full assimilation of the curriculum material, teachers modify and adapt the existing aids and materials, and create cards with tasks, worksheets and workbooks for students.

The fifth condition is students' progress assessment and testing. During the assessment the conditions under which the potential of each particular child is maximally revealed are organized. In this case the changes of forms for the intermediate and final assessment are provided. When choosing the form of assessment, all special educational needs and abilities of a student are considered.

For example, children with motor skills difficulties and writing problems are provided with the opportunity for oral answers or they answer using a pad instead of doing written work. If needed, the time for the task completion is increased.

Each change in the conditions occurs due to the difficulties of a student which he/she has at present period, and they are also changed dynamically with the growth of his/ her abilities, so this process can be considered to be flexible

The experience of the schools with the resource classrooms confirms that classroom space organization and educational conditions provided in such classrooms help students with disabilities and special educational needs maintain a good state for positive learning, easier and successful inclusion into regular classes.

As in Russian schools the process of inclusive education is not easy and meets a lot of problems dealing with methodological support and absence or lack of technologies and methods for inclusion, the resource classroom can be considered the basis of the methodological assistance which is necessary for teachers of mainstream classes. It allows making the inclusion process flexible, non-traumatic and comfortable for all participants in the educational process. All resource classrooms have teams and these teams are teachers' assistants and support in working with all children.

In this team each person understands and accurately performs their professional tasks and objectives. The study of the job instructions for the resource classrooms teams made it possible to detect the participants of the educational process in the resource classroom and their responsibilities.

A well working team of a resource classroom contains a resource teacher, a tutor, a mainstream teacher, a junior supervisor (a curator) and a coordinator.

A resource teacher is responsible for organizing educational process for children receiving assistance in a resource classroom.

A tutor accompanies a student during a school day, supports him/her in the interaction with teachers and students from regular classes, conducts individual lessons, corrects students' behavior, monitors the dynamics of the student development and makes an analysis of the adaptive material, organizes joint activities with students from regular classes.

A mainstream teacher is also a member of the team. The role of mainstream teachers is very important. A mainstream teacher is responsible for students with disabilities or/and special educational needs who were accepted in the regular class, though they spend a lot of time in the resource classroom. This teacher works in close connection with tutors and resource teachers, interact with a junior supervisor (a curator), consults the resource teacher about the curriculum and plan, helps to adapt them, creates friendly environment at the lessons, gives reports about students educated in the resource classrooms. It is very important to mention, that mainstream teachers receive methodological help and support

from the specialist. They work in close connection in the process of organizing inclusive education.

A junior supervisor (a curator) of the resource classroom can supervise some resource classrooms in different schools as his/her constant presence is not necessary. The curator's main task in the resource classroom is to provide methodological assistance to teachers working in this class.

A coordinator is a deputy director of a mainstream school implementing inclusive education. He/she is responsible for organization of interaction of resource and mainstream teachers; development of regulatory documentation governing this interaction; making up and approving the timetable according to which each student attends a resource classroom and a regular classroom; monitoring the activities of the resource classroom team, mainstream teachers and non-teaching staff (specialists such as a psychologist, a speech pathologist, a speech therapist etc.) in accordance with the approved adapted student's curriculum.

Organization of a well-arranged system for interaction between resource classroom teachers, specialists and mainstream teachers is the key for successful inclusion. All members of the team develop their professional skills and obtain specific knowledge about children they educate to make their work well done.

Basing on the generalization and comparison of the practice of the resource classroom model in schools mentioned above the optimal number of students to be educated at the resource classroom at the same time is eight. This is primarily due to the requirements for the organization of educational space. In a resource classroom there can be more than 10-12 people or even more at the same time, as the number of tutors corresponds to the number of students, and there is also a resource teacher, a mainstream teacher and, if it is necessary, other specialists are added to them.

Children, depending on their needs, study most of their time in a regular class and come to the resource classroom only for a few hours, in individual cases the resource classroom is chosen as a basic place for education (of course in accordance with their characteristics and needs). It is possible due to the fact that the structure of the resource classroom allows individualization of teaching for each student. The curriculum, materials, teaching methods, workplace and timetable are developed taking into account individual needs of each student.

Students with disabilities and special educational needs attend some lessons at the resource classroom studying individually or in a small group and they also attend other lessons together with their typically developing classmates, as it was already mentioned above. Lessons in the resource classroom take place as «one to one» (individual lessons) with a tutor or in small groups. Group lessons are conducted by a resource teacher or a mainstream teacher.

The main feature of a resource classroom is that the students of this classroom are consistently included in the educational activities of regular classes; they can study subjects with their typically developing peers with the support of a tutor. Studying at the resource classroom helps children adapt to the mainstream school environment and learn how to behave and study together with the typically developing classmates. The percentage of joint education time for each student is different, it cannot be unified as it depends on special education needs and the process of inclusion means individual approach for every child. In practice it is possible for a student to leave a regular classroom during the lessons and go to the resource classroom if he or she has behavior that may interfere with the educational process in the regular classroom (it concerns especially children with autism spectrum disorders), as well as in the case a student requires sensory discharge.

It was found out that the main advantage of individual lessons is that a teacher gets the most control over the environment and the learning process, and it is possible to create conditions for successful learning. The most part of the lesson is conducted by a tutor. But students are also taught by other specialists (a resource teacher, mainstream teachers or specialists such as a psychologist, a speech pathologist, a speech therapist, etc.) of a resource classroom if necessary. An individual plan is created for each student. In all resource classrooms an individual lesson is shorter in time than a regular lesson, for example 20-25 minutes depending on the student's abilities.

In the studied schools group lessons are mostly conducted by any teacher (a resource teacher, a mainstream teacher) or a specialist (for example a psychologist) as well as a tutor. A plan for all groups of students is also created taking into account their characteristic features.

Group lessons in the resource classrooms are considered to give a good opportunity to simulate a lesson in a regular class. At such lessons not only students are taught, but tutors skills to escort children are also developed.

Conclusions

The conducted study makes it possible to state the advantages of the resource classroom model, namely:

- the right for education of children with disabilities and special educational needs in mainstream schools is realized through this model;
- resource classrooms are organized by the parents initiative, so parents become the active participants in the inclusive education;
- children with disabilities and special educational needs interact with mainstream teachers and their typically developing peers which contributes to their socialization and adaptation;

- proper environment, space and conditions organization of the resource classrooms make the process of inclusive education comfortable;
- individual approach to the education of children with disabilities and special educational needs, their personal development do not allow lowering the level of education for typically developing students;
- the resource classroom team and mainstream teachers have to improve their qualification constantly that contributes to professional development;
- due to the resource classroom model the teaching staff of a mainstream school has a permanent methodological support in organizing inclusive education.

Summarizing the above mentioned advantages, it can be concluded that the resource classroom model makes inclusion in education comfortable and effective for all members of the educational process: children with disabilities and special educational needs, typically developing children, parents and the teaching staff of schools.

References

- Alekhina, S. (2013). Inclusive education for children with special educational needs. In N. Laletin (Ed.), *Modern educational technologies to work with children having disabilities* (pp. 71-95). Krasnoyarsk: Federal University of Siberia.
- Alekhina, S. (2016). To the question of teacher's psychological readiness to inclusive education. *Inclusive education: theory and practice. International conference proceedings, June 9-10*, 16-20. ISBN 978-5-87471-162-7
- Basov, M. (2007). *General pedology grounds*. St. Petersburg: Aleteya.
- Blonsky, P. (1929). *Difficult schoolchildren*. Moscow: Education worker.
- Farrell, M. (2003). Educational inclusion and raising standards. *British journal of special education*, 27(1), 35-38.
- Federal Law of December 29, 2012 No. 273-FZ on Education in the Russian Federation. Retrieved from <http://base.garant.ru/70291362/>
- Ivanova, N. (2011). To the question of inclusive educational program realization. *Bulletin of Udmurt University*, 1, 96-99.
- Inclusion of Children with Special Educational Needs (2007). Dublin: Department of education and science.
- Kashchenko, V. (2010). *Pedagogical correction: changing of character deficiency for children and adolescents*. Moscow: Academia.
- Kozorez, A. et al. (2016). *Resource classroom: Experience in organizing teaching and extracurricular activities of children with autism spectrum disorders in mainstream schools*. Moscow: ANO "Resource class".
- Kutepova, E. (2015). In M. Betyanova (Ed.). The conditions for education of a child with disabilities. *Inclusive education* (pp. 21-33). Moscow: Supervising teachers and pupils upbringing.
- Lazursky, A., & Nechaev, A. (1910). *The emotional life of children: Essays on educational psychology*. Moscow: Polza.

- Liferov, A. (1997). *Global education- the way to integration of the world educational space*. Moscow: Pedagogical search.
- Loshakova, I., & Yarskaya-Smirnova, E. (2002). Integration in the conditions of differentiation: the problems of inclusive education for children with disabilities. Socio-psychological problems of education of non-typical children. Sarotov: Saratov Pedagogical Institute.
- Luria, A. (1973). *Principles for selecting children for special schools*. Moscow: Prosvescheniye.
- Malofeev, N. (2009). *Special education in the changing world. Europe*. Moscow: Prosvescheniye.
- The letter of the Ministry of education of the Russian Federation of July 7, 2017 No.TC-267/07 About information direction. Retrieved from <https://www.garant.ru/products/ipo/prime/doc/71660690/>
- Vygotsky, L. (2012). *Pedagogical psychology*. Moscow: Astrel.
- Vygotsky, L. (1936). *Diagnostics of development and pedological clinic of difficult childhood*. Moscow: Experiment.
- Yarskaya-Smirnova, E., & Loshakova, I. (2003). Inclusive education for children with disabilities. *Social studies*.5, 100-106.
- Yekzhanova, E. (2011). Two-component inclusive model for ensuring the rights for education of children with different levels of psychophysical development. *Inclusive education, methodology, practice, technology. International conference proceedings, June 20-22, 23-24*.

PEDAGOGICAL POTENTIAL OF THE ARTS COMPLEX IN THE PROCESS OF THE FORMATION OF AESTHETIC PERCEPTION OF JUNIOR PUPILS

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Abstract. *In the research are illuminated the following subjects: the topical issue of the aesthetic development of junior pupil's personality, search for new approaches to children's education and development and their implementation to the educational process of the modern school, maximal use of pupil's creative potential in the elementary school, the formation and development of the aesthetic sense of reality, the aesthetic attitude to the surrounding world, to the nature, to the arts and applying the principle of different art forms correlation.*

The use of the art at the lessons of the art cycle at establishments of primary education and approaches, which have been proposed by us, analysis of findings of experimental data allows to assume that the development of aesthetic feelings, tastes, ideals, artistic skills, competences in the sphere of art, should be an undetectable condition of the educational subjects of primary school, especially of the art cycle.

We detected the growth of the level of aesthetic perception which is connected with the development of emotional and sensitive sphere and artistic potential of junior school children, that is determined by results of applying of the proposed approach to activation of aesthetic perception of junior school-age children through the art at the lessons of the art cycle. It also determines positive changes in the tendency of humanization and the aestheticization of the educational process.

Keywords: *Aesthetic sense, arts complex, artistic creativity, artistic activity, creative potential.*

Introduction

The problem of the research is to find solutions to nowadays pedagogical problems of the aesthetic upbringing of the younger pupils, new approaches to the education and upbringing of children and their introduction into the educational process of modern school, maximizing the creative potential of students in

elementary school, formation and development of aesthetics students one of the basic components of aesthetic education; aesthetic attitude to the environment, nature, art; application of the principle of correlation of different types of art and innovative artistic and integrative technologies.

The formation of the aesthetic perception of children in elementary school is of primary importance, it provides the basis for the spiritual, intellectual and physical development of the individual. At the stage of teaching a child in an elementary school is being formed an interest in art, artistic and creative activity. In junior school-age, children form a holistic outlook, the development of aesthetic tastes and ideals, personal attitude to the cultural achievements of society.

The pedagogical potential of art is the subject of study of many pedagogical scientists. The results of the analysis of the relevant literary sources, acquaintance with the practice of the work of primary schools show that the issue of the aesthetic development of junior pupils according to modern concepts has not yet been adequately solved, and technology, mastery of the subjects of the artistic cycle do not meet the growing demands of the present. (Zhao & Ko, 2018).

Each type of aesthetic activity is accompanied by aesthetic perception, which has different interpretations in the scientific literature. This is the ability of the child to distinguish in the phenomena of reality and the art of processes, properties, qualities that give rise to aesthetic experiences. Aesthetic perception is a way of a special creative and cognitive activity, the skills of which are formed in the process of pedagogical influence (Holinska, 2002).

Contemporary art has a great accumulated theoretical and practical experience in improving the processes of teaching and education, based on scientific knowledge of pedagogy, psychology and music studies. The mastery of art involves three inextricable moments: technical, artistic, and analytical.

It is important to note that the educational process of using the art complex to form the aesthetic perception of junior pupils has an innovative value, it also stimulates the development of cognitive and creative abilities of pupils, the ability for creative expression, the need for artistic and creative self-realization. In the process of perceiving works of art, its essence is not limited to obtaining information but includes a spiritual and practical character. The psychological interaction of the perception of works of art and its character, aimed at enriching the spiritual world of the child and determined by two factors: first, the quality of works of art; and secondly, the child's ability to fully perceive these works. Of course, if the work of art is perceived by the child only as a sign of interest, then, as in the process of perception it will only cause boredom, its impact on the pupil will be zero. Therefore, talking about the development of aesthetic perception, it is meant that a junior pupil will get acquainted with works of art through internal

need. This acquaintance with art will make the child spiritually richer (Starovoit, 2016).

A significant number of national and foreign scientists and educators' studies are devoted to the results of the development of ways of forming an aesthetic perception of junior pupils. At the same time, the results of the study of the relevant literary sources, as well as the generalization of the practice of the comprehensive education establishments show that this problem is not yet sufficiently solved in the light of modern educational concepts. The content of disciplines in the educational arts industry, in our opinion, has no clear methodological basis. The subject of the aesthetic cycle is often underestimated. As a consequence – every year the aesthetic literacy of pupils deteriorates; there is an inhibition of the ability to create bright representations, imaginations, and skills to operate them freely. The ability of aesthetic perception of the environment, a sense of beauty reduces, aggressiveness increases, there is a decline in spirituality. Therefore, there is a need to discover the pedagogical potential of the arts complex in the process of forming an aesthetic perception of junior pupils.

The purpose of the study is to isolate and theoretically substantiate the pedagogical conditions for the formation of aesthetic perception of younger students using the arts complex: strengthening the creative motivational basis of the process of aesthetic perception of children, taking into account psychophysiological, age and individual characteristics; creation of aesthetic environment; implementation of a systematic integrated approach to the organization of children's artistic and evaluation activities; enriching the creative potential of young pupils in the process of engaging them in artistic activities; reliance on the aesthetic experience of children; co-creation of teachers and students.

Accordingly, the following tasks have been defined: the development of aesthetic perception of reality and works of art in the junior school-age children, the expansion of both artistic and aesthetic experience and the analysis of the formation of aesthetic values, tastes, interests of the junior school-age children, the formation of aesthetic assessment of junior pupils, and interest in artistic and creative activity during the lessons of the artistic cycle.

Research methods

The experimental research was conducted during the 2018-2019. In the experimental research took part 345 junior pupils and 61 teachers, who study and work at schools of Vinnytsia city and Vinnytsia region, Ukraine.

The planning and design of the study were as follows: a defined criterion-level approach to the diagnosis of aesthetic perception in elementary students,

identified components, substantiated criteria, indicators, and levels of aesthetic perception in younger schoolchildren and analyzed the state of researched quality. The pedagogical conditions and the method of their realization concerning the formation of aesthetic perception in the younger schoolchildren using the arts complex were determined, which was realized in three stages: preparatory-motivational; artistic-evaluation; creative activity.

To obtain objective results of the experimental research was selected, developed and tested a set of methods and techniques for the formation and activation of aesthetic perception of children of junior school age, as well as an empirical determination of the formation of aesthetic values, the formation of artistic and aesthetic evaluation, the development of creative activity of pupils. Namely: empirical –questionnaires, surveys, observations, testing, analysis of the results of children's creative activity, pedagogical experiment to determine the state of development of aesthetic perception of junior schoolchildren, conduct a control experiment; statistical – mathematical processing of the results of research, reflection and generalization of the results of measurements and verification of their reliability.

Research results and their discussion

Analysis of the achievements of psychological and pedagogical science to the problem that are being investigated, namely the formation of aesthetic perception of junior pupils at the lessons of the artistic cycle, allowed to determine the system of criteria for diagnostics: appraisal, activity and creativity and indicators of the level of formation of aesthetic perception of children of junior school age. It is based on the main tasks of aesthetic development: the development of artistic perception, the mastery of the amount of certain aesthetic knowledge, the formation of skills and abilities, the development of creative abilities of children (Likhitska, 2017). In the course of the research is determined the feasibility of a three-level assessment of the aesthetic perception of junior pupils, which includes conventionally named by us: elementary-fragmentary (low), emotional-formal (average), elementary-aesthetic (high) levels.

While questionnaires and tests were conducted for children, was found the true state of the formation of aesthetic perception of works of art (music, painting, poetry, and literature). The results of the study indicate that 61% of children receive musical aesthetic impressions through the media. Among children's preference prevail impressions, that either in content or form, can not be regarded as facts of art. A small part of the respondents (24%) prefer folklore (song creativity, painting, etc.). A very small percentage of the respondents (14%) preferred classical works of art, the choice was made by children who study in music, art schools, and studios. As regard to the artistic preferences of junior

schoolchildren, 29% of respondents preferred children`s compositions and pop songs, folk writing and artistic creativity – 19% of respondents, fairytales – 8%, classical works – 6%, operas – 4%, authors` compositions – 1%, spiritual works – 1%, other kinds – 3%.

In determining the level of development of aesthetic perception of works of art the following criteria were relied on: the presence of a systematic representation of different types of art and their characteristic expressions; understanding the child of the nature of images, the logic of their development, the vitality of the content; emotional attitude towards art, active emotional and aesthetic feedback on the work; the need to preserve has been formed, to continue and to increase the traditions of artistic creativity; the desire to replenish their own aesthetic experience through the perception of works of art; presence of psycho-physiological comfort of the child in the process of communicating with works of art; the presence of motivated aesthetic assessment of works of art and its reflection in reality.

As a result of the experimental research were identified some features that characterize each level of aesthetic perception of junior pupils: the low – the process of creating the visual image of the subject and its image proceeds without the necessary support to analyze the characteristic features; there is no specification of the individual features of the subject; the generalization process is not related to observation; schematic, stereotyped mapping prevails; lack of a holistic decorative image; personality assessment position is completely absent; failure to reproduce even the finished samples; the average – the analysis of the characteristic features of the artistic product proceeds not sufficiently active; the main individual characteristics are not always distinguished; imperfect analysis of the selected properties; generalization does not always take place in the process of observing the surrounding reality; insufficient level of abstraction leads to stereotyped image; there is no holistic decorative image, there are signs of schematism; partial attraction to imitation, reproduction; not personally evaluated position is rather pronounced; high – the process of creating an artistic image proceeds with active analysis and synthesis of characteristic features; the pupil is able to distinguish the spatial properties of the artistic work; in the process of processing a real form into aesthetic there is a novelty of associations, inherent holistic decorative image; highly enough constructive thinking; expressive emotional and personal evaluation position.

The verification of the effectiveness of certain pedagogical conditions was carried out at the formative stage of the experiment, which took place in the establishments of primary education of Vinnytsia city in two groups of children at the same time: in the experimental group (EG) – based on the method of realization of pedagogical conditions for the formation of aesthetic perception of children at the lessons of the artistic cycle, and in the control (KG) – according to

the traditional, established scheme, and the standard curriculum. The method of implementing pedagogical conditions for the formation of aesthetic perception of children of junior school age involves three interrelated stages: value-motivational, activity-developing and creative.

Valuing-motivational (preparatory) stage was aimed at creating the foundation for further development of interest in aesthetic values, works of fine art, musical treasures of Ukrainian and world classical composers, contemporary works for children, children's musical folklore, folk-song creativity, artistic play activities (Brovchak, 2017).

The main tasks at this stage were: the formation of a motivational component; activation of interest in the aesthetic activity in the process of studying art; familiarizing children with the best examples of the world art treasury. The solution to these tasks was to use our methods aimed at gradually forming an interest in the artistic creative activity of children (conversations, narration, listening to music, learning songs), as well as creating a situation of success; study of advanced pedagogical experience on this subject, methods of artistic education, namely artistic and creative (practical) methods of activating aesthetic activities, etc. Aesthetic education at this stage of the study presents forms and methods that have specifics due to the peculiarities of artistic and cognitive activity: the lessons of the artistic cycle, educational events, aesthetic conversation, narrative, method of perception and evaluation of works of art, the method of drawing music, rehearsal lessons, musical game, art project, and others.

Activity-developmental (evaluation) stage was aimed at the formation of artistic and creative competence for the implementation of the process of aesthetic education of children of junior school age. The main tasks at this stage were: assimilating a certain amount of knowledge on art; mastering some of the skills of artistic activity; formation of skills of artistic and creative activity; the ability to perceive, evaluate works of art; raising the level of aesthetic experience and erudition. Consequently, in the experimental work, we substantiated the feasibility of using the following forms of aesthetic work: of the artistic cycle; artistic educational events (holidays, performances, concerts, contests, and musical tales); individual work; creative workshops.

In the process of forming aesthetic perception of children, it is expedient to use the following methods, techniques, and exercises: conversations, stories; learning songs, role-playing and their staging; vocal exercises, vocal improvisation, singing, fun; children's musical folklore, children's opera, and musical fairy tale, artistic play; game activity; artistic creativity. Also, it is preferred to play games, namely, musical and didactic games, travel games, dramatizing games, games of entertainment, moving games with songs and dances in the process of forming the aesthetic perception of junior pupils. The purpose of the artistic and creative stage (creative activity) was to provide

conditions for the maximum realization of children's creative potential. The main tasks at this stage of the experiment were: creative use of skills and abilities acquired by children in the process of using our artistic and pedagogical technologies; activation and development of the artistic creative activity. The realization of these tasks took place in the process of musical lessons, fine arts lessons, artistic work, educational artistic events, musical mornings, holidays, children's operas, musical tales, improvisation, dramatization and dramatization of songs, concerts, song contests, master classes, and excursions (Todosiyenko, 2013).

During the activation of the aesthetic-educational process at the lessons of the artistic cycle the following methods, techniques, and forms of work: aesthetic conversation, works of reflection, artistic exercises, interactive methods, artistic games, artistic projects, holidays, children's folklore, products of children's creativity: drawings, works-descriptions, musical improvisations, drawing of music, etc. The main means of research were the use of design artistic and pedagogical technologies at the lessons of the artistic cycle: artistic presentations, creative projects, creative exercises, and tasks: "Draw music", "I and art", "Colours of music", "Artistic portrait", "Our artistic achievements", "Mic", method of drawing of music, method of game, method of "staging and role-playing" of musical compositions, theatrical musical tales that promote the development of creative abilities and the most complete disclosure of the potential opportunities of elementary school students.

Our experimental study involved the use of a sample of school-singing games for learning with primary school-age children, which was implemented in the work with the children of the experimental group. The growth of the level of aesthetic development for children was provided by our use of repertoire of games and songs, choreographic exercises of Ukrainian classical composers, namely the collection of V. Verhovyntsia "Vesnianochka" (Spring song): songs-games "Vesna ide" (Spring is coming), "Vyidy, vyidy sonechko" (Sun, come to us), "Oj khodyt Ivanko" (Ivanko is walking around), "A vzhe vesna" (Spring is already here), "Oj letila zozulenka" (Cuckoo was flying), "Podolianochka", "Khodyt harbuz" (Pumpkin is walking around), "Oj u vyshnevomy sadochku" (In the cherry garden), "Perepilka" (Quail), "Vyshni-chereshni" (Cherries), "I shumyt i hude" (Noising and buzzing), etc.; the song-game "Oj unadyvsia zhuravel" (Crane came again) in the record of S. Drimtsov. The level of the formation of aesthetic perception (as compared to the results of the summative experiment) gave us a positive dynamic: before the experiment – know more than one musical composition – 21%, after – 40%, more than four works – 54%, after – 60%, do not know at all musical works – before the experiment - 25%, after – no such pupils.

To sum up the results of the control section, it is clear that the implementation of the methodology for implementing the pedagogical conditions for activating the aesthetic perception of children of junior school-age at the lessons of the artistic cycle contributes to raising the level of aesthetic experience to the specified activity. Thus, there was an increase in the number of children with a high level of aesthetic development – from 34% to 39%. Instead, the number of pupils with a low level dropped significantly from 21% to 6% of pupils. 52% of schoolchildren identified the average level of this activity, 49% after the experiment. Therefore, the qualitative and quantitative results obtained in the course of the research reveal the effectiveness of the proposed methodology for forming the aesthetic perception of junior pupils at the lessons of the artistic cycle.

The dynamics of the formation of aesthetic perception of children of junior school age in the process of engagement in artistic creative activity is reflected in Fig.1.

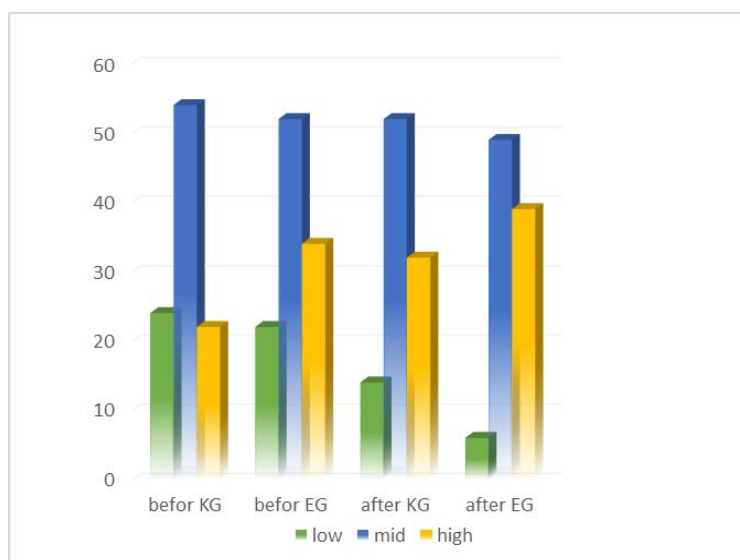


Figure 1 Dynamics of the formation of aesthetic perception of children of junior school age in the process of engagement in artistic creative activity

In the course of the experimental study, the following data were identified: significant positive changes in the structural components of the formation of aesthetic perception in younger schoolchildren using the arts complex in extracurricular educational work of EG, compared with KG.

Based on qualitative indicators of the sensual and emotional component of the formation of aesthetic perception in the arts complex of and quantitative data, a high level of EG was found by 28% and a low level by 16%, which testifies to the correction of the emotional and value attitudes of the younger schoolchildren with artistic images, enrichment of the empathy of the experience of the children

of art; the presence of increasing interest in communication with works of art; positive motivational attitudes to the process of aesthetic artistic and creative activity; getting acquainted with different ways of representing the aesthetic qualities of objects and phenomena

The analysis of the dynamic pattern in the evaluation component leads to an increase of the high level of aesthetic perception formation in younger schoolchildren as one of the most important in determining the effectiveness of the evaluation component, which was manifested in the formation of a system of skills for children to assess the emotional content of a work of art; development of the emotional-value sphere of younger schoolchildren with increased internal activity of perception of works of art; the possibility of using synesthesia, namely the method of drawing music; involving children in play arts, where the tasks in the game are presented in a hidden form, which helps to reduce the fatigue of students, increases their performance. A high-level increase of 37.7% was found, a low-level decrease was observed by 12.2%.

The highest level of formation of aesthetic perception in younger schoolchildren was demonstrated by quantitative indicators of artistic and creative component as a necessary factor of creative self-improvement, which determines the level of readiness of elementary school children to participate actively in artistic and creative activity, forming the ability to actively use artistic images of the field to deepen emotional and sensory impressions and aesthetically valuable attitude to the world, reality; stimulating students' creative activity, improving their skills and ability to reproduce the author's artistic images and encouraging them to create their own. The study of the level of aesthetic perception formation in younger schoolchildren in the process of forming aesthetic perception in younger schoolchildren through the integrated use of art showed an increase of medium and high levels from 26.5% to 30.6% in the EG and the presence of minor changes in CG - within 6%.

The highest level of formation of aesthetic perception in younger schoolchildren was demonstrated by quantitative indicators of artistic and creative component as a necessary factor of creative self-improvement, which determines the level of readiness of elementary school children to participate actively in artistic and creative activity, forming the ability to actively use artistic images of the field to deepen emotional and sensory impressions and aesthetically valuable attitude to the world, reality; stimulating students' creative activity, improving their skills and ability to reproduce the author's artistic images and encouraging them to create their own. The study of the aesthetic perception level formation in younger schoolchildren in the process of forming the aesthetic perception in younger schoolchildren through the integrated use of art showed an increase of medium and high levels from 26.5% to 30.6% in the EG and the presence of minor changes in CG - within 6%.

Thus, the introduction of the proposed method of realization of the pedagogical potential of development and activation of aesthetic perception of children of junior school age in the process of creative artistic activity will contribute to a significant improvement of interest in art objects, activation of artistic thinking, the formation of practical skills at the lesson of the artistic cycle and extracurricular aesthetic and educational work, development and realization of creative abilities of children.

After using the methods of the development stimulating of aesthetic perception of junior pupils significantly increased aesthetic and value indicators, which indicates the level of aesthetic culture of children, as well as indicators of indifference, lack of understanding of works of art, indicators of interest in low-quality types of art.

As a result of the work, according to the method proposed by us, pupils of experimental groups demonstrated positive dynamics and development of aesthetic perception, the growth of aesthetic-creative abilities. The results of the control section in groups without stimulation and activation show that aesthetic perception and interest of subjects of research in works of art grows, but is formed slowly.

The pedagogical potential of using the arts complex in shaping aesthetic perception of junior pupils intend to develop the aesthetic, musical and artistic perception of children; formation of aesthetic orientation of children: stories about art, aesthetic conversations, discussion of artistic creativity, writing descriptive works; stimulating the motivation of learning activities, namely creating a situation for success; the priority of artistic and creative activity - drawing of music, artistic game, purposeful stimulation and activation of artistic and creative activity of children.

Consequently, these are the theoretical perspectives of using the arts complex in the process of forming the aesthetic perception of younger students: the innovativeness of its value, stimulation, and development of cognitive and creative abilities of students, the ability to creative expression, the need for artistic and creative self-realization. While perceiving works of art, its essence is not limited only by receiving information but contains a spiritual and practical character. Psychological interaction of perception of works of art and its character is aimed at enriching the spiritual world of the child. Therefore, it is meant that younger schoolchildren will get acquainted with works of art due to an internal need. The acquaintance with the arts will make the child spiritually richer.

Conclusions

According to the results of the research, the process of forming aesthetic perception of junior pupils based on integration and integrated use of arts involves

the consideration of a system of certain didactic principles: the integrity of studying arts based on the unity of genetic, morphological, functional connections, taking into account the specificity of the arts, the optimal combination, and interconnection of sensory and logical, development of creative activity of pupils through their direct inclusion in the system of artistic and aesthetic relations. Creating conditions for the gradual transition of the pupil from reproductive to the creative level of development occurs through communication and activity, artistic perception of various types of art, the acquisition of artistic and aesthetic knowledge and experience, and their creative activities. Fundamental influence on the child's ability to perceive the environment, the sensation of beauty, the formation of the spiritual sphere, and aesthetic perception of the world rely on the subjects of the artistic cycle itself, while the integrative artistic and pedagogical technologies provide an increase in the level of cognitive activity and the development of creative potential of junior pupils.

The results of the experiment indicate the effectiveness of the introduced method of formation of aesthetic perception in the younger schoolchildren using the arts complex, which was revealed by employing pedagogical sections according to the developed criteria and statistical methods. The results of the study showed that the quality of formation of aesthetic perception of the elementary school students using the arts complex increases under the following pedagogical conditions: motivational basis strengthening in the process of forming the aesthetic perception of young school-age children based on dialogic interaction between teachers and students; implementation of an integrated approach and integrated application of different types of art; enriching the aesthetic experience of younger students by engaging them in creative artistic activity.

Therefore, the result of the research work was the implementation of experimental verification of the method effectiveness of realization of pedagogical conditions for the formation of the aesthetic perception of younger students using the arts complex. The technique was developed and its performance was experimentally tested. The study analyzed the methodical peculiarities of inclusion of younger schoolchildren in artistic creative activity, forms and methods of work on the formation of aesthetic perception of younger schoolchildren using the arts complex. Based on the analysis of theoretical and methodical material, the study concludes with the determined priority of the integrative methodology of the aesthetic and educational process over artistic mono-activity.

Thus, the study does not cover all aspects of the affected problem, it gives grounds for further study of the process of aesthetic education of junior pupils at the lessons of both the humanitarian and aesthetic cycle, through all educational disciplines.

References

- Brovchak, L.S., Starovoit, L.V., & Likhitska, L.M. (2018). Pedagogical Conditions for Creative and Artistic Development of Children of Senior Preschool Age through Art. *New Educational Review*, 52(2), 206-217.
- Brovchak, L.S. (2017). The issue of creative activity in musical pedagogy and psychology. *Science, research, development. Pedagogy*, 105-113.
- Golins'ka, T. (2002). Polihudozhnij rozvitok molodshih shkoljariv zasobami integracii mistectv. *Pedagogika i psihologija formuvannja tvorchoi osobistosti: problemi i poshuki*, 26, 415-419.
- Havigerova, J., Smetanova, V., & Kroustkova-Moravcova, I. (2016). Talent and creativity in preschool age children: a pilot study. *Studia paedagogica*, 21(4), 77-98.
- Simonova, J. (2015). Parents'attitudes to the selection of a primary school. *Studia paedagogica*, 20(3), 69-88.
- Likhitska, L.M. (2017). Readiness of future teachers of music to modern approaches to teaching of artistic innovation activity. *Science, research, development. Pedagogy*, 126-132.
- Masol, L.M. (2006). *Metodika navchannja mistectva u pochatkovij shkoli*. Xarkiv: Ranok.
- Starovoit, L.V. (2016). Artistic-creative development of junior schoolchildren in the process of labor training. *Scientific Journal «ScienceRise». Pedagogical Education*, 3/5(20), 58-63
- Todosiyenko, N.L. (2013). Formation of aesthetic perception of junior pupils through the multicultural activity. *Naukowe prace, praktyka, opracowania, innowacje 2013 roku*, 232-236.
- Zhao, Ya., & Ko, J. (2018). Workplace learning in professional development to vocational education teachers. *Studia pedagogical*, 23(2), 43-58.

TEACHERS' SELF-ASSESSMENT OF THE COMPETENCIES OF LEARNING TO LEARN AND REFLECTION IN THE CONTEXT OF SCHOOL AS A LEARNING ORGANIZATION

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Abstract. *This article analyses teachers' self-assessment of the competencies of learning to learn and reflection in the context of school as a learning organization. The survey in the form of a written questionnaire was performed and 141 teachers of the city of Vilnius have participated in it. The research reveals the self-assessment results of the skills in the field of time evaluation, planning and management; information search, perception, systematization and adaptation; communication and cooperation in group; and reflection. Teachers highlight the sufficiency of the time distribution for tasks and deadlines skills; awareness and lower level skills of systematization of the information; skills of reception of comments from the members of the group, their consideration or the listening and understanding of the views of the members; skills of abstract conceptualization, which are related to drawing conclusions and anticipating ideas for the future.*

Keywords: *competence, teacher, learning to learn, reflection.*

Introduction

At school as a learning organization, there is a constant improvement clause, fostered and supported by a learning process, a positive microclimate, and new ideas are generated and innovations are being implemented. A good school is a constantly learning organization whose community is reflective: pondering and discussing its activities and events of shared life, appreciates the ability to learn from experience and reasonably plan (Geros mokyklos koncepcija, 2013). For teachers, the implementation of the Education in the Europe 2020 strategy is becoming more significant, increasing demands and qualifications of the teacher in order to achieve the essential goals: making lifelong learning a reality; improving the quality and efficiency of education and training; strengthening

social justice and active citizenship; promoting creativity, innovation and entrepreneurship (Education in the Europe 2020 Strategy, 2010). Educators inevitably face changes that lead to expanding their horizons, acquiring new knowledge and improving existing knowledge. Each task is seen as an opportunity to learn from successes and failures, and allows experimentation and analysis of its practices. Positive changes in school, as a learning organization, take place when the entire school community is enrolled in planning, reflection, and training in order to improve its operational practices. The learning school is dominated by a culture of reflective learning – all members of the organization respect, encourage, support and learn from each other. Reflection on professional activity identifies and modifies the personal assumptions that are based on practice. It allows finding alternative answers to questions and possible solutions to problems, thus better understanding the subtlety of professional activities. Openness to the world means that members of the school community are interested in a changing environment and responsive to change.

In recent years, the problem of reflection in the context of professional activity is becoming more pressing. A global and fast-changing social space raises new challenges to have critical thinking, decision-making and continuous learning skills. The perception of reflection begins with understanding about what you are doing and ends with a critical assessment of your ideology and beliefs influenced by thinking and feelings during activity. It is important to create conditions for learning to learn and to cultivate a reflection, including essential elements – personality experiences, thinking, emotions, actions and values in the social and political context in which the learner lives. Professional reflection can be characterised as a process of reviewing know-how to describe, analyse, evaluate and thus learn from your experience (Boud, Keogh, & Walker, 2005; Bradbury, 2010).

A teacher's reflective practice involves considering a careful “vision” and “action” to enhance the learning experience. By studying their practice and reflecting meaningful experiences, teachers are more easily expressing their thoughts (Fook & Gardner, 2007), and this reflection enhances teaching and learning (Rushton & Suter, 2012). Reflection promotes teachers' professional learning as an effective development of metacognitive skills (Hegarty, 2011) in order to achieve individual, community and organizational solutions for activities, learning, objectives, urgent or future changes in practice (Tikkamaki & Hilden, 2014). On the other hand, reflective practices are perceived as thinking about teaching. It is like a form of travel, where it is encouraged to reflect on various forms of training. All this enables to think about what is being done (Roffey-Barentsen & Malthouse, 2013). The nature of teachers' learning needs is unstable, requires a continuous renewal of the structure of professional development, focusing not on static knowledge creation, but on the construction of meaningful

in a common environment. Such an update promotes the inner process of cognitive development leading to the improvement of teachers (Pitsoe & Maila, 2013). This creates practical opportunities to draw attention to the results of professional development by encouraging teachers to create, disseminate and reflect their experiences. By thinking about their thoughts, feelings, behaviors, and assessments, they justify the reflective practices as means to achieve their goals (Finlay, 2008). In order to achieve the objectives, the reflective practice manifests itself as an innovative, continuous process that requires an understanding of the skills or knowledge creation slots, which is characterised by effectiveness (Wagner, 2006).

By learning and pondering their practice, teachers create self-knowledge and develop a reflective intelligence (Hilden & Tikkamaki, 2013). This development of mind together leads to personal growth and development based on deep understanding (Raelin, 2002), which is manifested through bold self-listening, based on insights (Bolton, 2010). The reflective practice of the teacher promotes dialogue with himself and appeals to experience emotions into personal development, perceived by his feelings (Bishop & Blake, 2007; Roffey-Barentsen & Malthouse, 2013), identity formation (Finlay, 2008; Hall, 2010). Personal questions about their practice help to perceive the role of teacher (Laker, 2001; Wagner, 2006), which leads to awareness and understanding, which determines the initiative, supports the change of practice leading to behavioural change (York-Barr, Sommers, Ghere, & Montie 2001). Based on the insights and assumptions provided, the *problematic question* of study is formulated: What are the teachers' self-evaluations of the competency of learning to learn and reflection in the context of school as a learning organization.

Research object – trends in the teachers' self-assessment of the competency of learning to learn and reflection

The aim of the research is to analyse the trends in the teachers' self-assessment of the competency of learning to learn and reflection in the context of school as a learning organization.

Material and Methods

Sample. The research sample was formed using targeted and convenient selection methods. The research involved 141 (100%) teachers working in Vilnius city general education schools, of which 97.9% women and 2.1% men. The average age is 48 years. The majority (74.1%) teachers who have participated in the research have a degree of university education.

Research methods. Data collection method: written survey using closed type questionnaire. The questionnaire was prepared after the operationalisation of the phenomenon, distinguishing four main diagnostic areas:

- 1) Self-assessment of time evaluation, planning and management competence;
- 2) Self-assessment of information search, perception, systematization and adaptation competence;
- 3) Self-assessment of communication and cooperation in group competence;
- 4) Self-assessment of reflection competence. The questionnaire was completed by the teachers by evaluating each statement submitted which reflects their personal skills. They had to choose one of the three response levels: „Sufficient”, „Average”, „Weak”. Data processing methods: descriptive statistics using SPSS for Windows 23.0 software.

Research Results

Tables 1-3 summarises the competences of learning to learn and in table 4 the results of the self-assessment of teachers' competence of reflection are shown. Table 1 presents the results of the self-assessment of teachers' time evaluation, planning and management competence.

Table 1 Self-assessment of time evaluation, planning and management competence

No.	Skills	Sufficient	Average	Weak
1.	Allocate time for demanding tasks	89.3	10.7	-
2.	Comply with the deadlines for tasks	84.1	15.9	-
3.	Ask for help and use all resources to accomplish tasks in a timely manner	79.3	20.0	0.7
4.	To analyse the reasons for not complying with the deadlines and to determine whether they were deliberate or unconscious	74.1	25.2	0.7
5.	Assess the time needed for the task or activity to be successfully completed	73.4	26.6	-
6.	Terminate an activity and reschedule it when the goal is not visible or the planned tasks are not fulfilled	69.3	26.4	4.3
7.	Predict the likelihood of surprises and plan the time to complete the task even if surprises occur	58.9	31.9	9.2
8.	Time schedule and lead a blog to remember, organize and plan your activities	58.6	22.9	18.6
9.	Develop strategies to overcome obstacles that hinder compliance with deadlines	57.2	42.8	-
10.	Depending on the deadlines set for the task, to set the start and end times for each task	55.0	39.3	5.7

The results obtained suggest that the teachers in the context of time evaluation, planning and management competence have assessed their existing skills for time distribution for tasks and deadlines as sufficient. This could be coupled with an effective time-planning and management process. However, it is noted that more complex skills for the development of time-planning, time use monitoring and management strategies are not assessed as well. We would assume that it is precisely the possession of these abilities to ensure the effectiveness of the time management process.

The knowledge society determines a work scenario in which it is essential to manage time efficiently (Alvarez Sainz, Ferrero, & Ugidos, 2019). According to the authors, the decisive factor is not the amount of time available but the management that is made of it. S. Zafarullah and V. Perti (2017) mark that time management skills are associated with the allocation of time across the job tasks and higher measures of job performance. Time allocation is critical for managing instruction and improving performance.

Table 2 presents the results of self-assessment of teachers' competence of the information search, perception, systematization and adaptation.

Table 2 Self-assessment of information search, perception, systematization and adaptation competence

No.	Skills	Sufficient	Average	Weak
1.	Understand the basic idea of a conversation	95.0	5.0	-
2.	Organize information based on criteria	89.9	10.1	-
3.	Follow and explain the consistency of instructions in writing or visually	88.5	11.5	-
4.	Identify available resources for information	87.9	12.1	-
5.	Understand the basic words and the main idea of the text or the author's preferences	87.2	12.8	-
6.	Categorize information items by category when you need to select	85.7	11.4	2.9
7.	Use simple memorization strategies to keep your daily life in note	85.0	15.0	-
8.	To systematize the information so that I can easily find	78.6	20.7	0.7
9.	Reproduce text structure and content using plan and mind map	78.6	20.7	0.7
10.	Access to information resources	77.3	15.6	7.1

The awareness and lower level skills of systematization of the information is observed to be the highest, but the ability to search and adapt information is perceived as weaker. One of the reasons for this can be a very large flow of information around the teacher, in the context of which it is difficult to select the

necessary and useful information, secondly, the adaptation of information in the future perspective is directly linked to the successful systematization.

The role of information in supporting processes has become increasingly important. In today's competitive world, information management has become a “prerequisite” for process management. The role of information management as the driver of process management and its impact on performance is very relevant (Projogo, Joy, Bhattacharya, Oke, & Cheng, 2018).

Table 3 presents the results of the self-assessment of teachers' communication and cooperation in group competence.

Table 3 Self-assessment of communication and cooperation in group competence

No.	Skills	Sufficient	Average	Weak
1.	Accept comments from group members, consider their usefulness and correct errors	94.2	5.1	0.7
2.	Listening and understanding of other people's attitudes – when it coincides with me and when it differs	91.3	8.7	-
3.	Adopt the group's rules of work and comply with these rules	91.3	8.7	-
4.	Positively negotiate with the group members in search of solutions for problems	90.6	9.4	-
5.	Recognise and assess any contribution of a group member to the joint work	89.1	10.9	-
6.	Actively participate in the work of the group	82.7	17.3	-
7.	Receive assistance from group members	82.6	17.4	-
8.	Encourage group members to engage in activities	78.3	21.7	-
9.	Accept team decisions even when I disagree with them	68.8	27.5	3.6
10.	To express own view to the group even when it differs from the opinion of others	66.7	31.2	2.2

The results show that the teachers better assessed the skills of their communication in a group related to the reception of comments from the members of the group, their consideration or the listening and understanding of the views of the members. The skills of the team's decision-making or encouraging others to participate in the activities were clearly assessed as weaker. It is likely that it is easier for teachers to share information, feelings, thinking on the contents of a conversation, what until then, before communicating, was not common, but it is more difficult to work together, focusing on intellectual forces, helping to each other, uniting or acting together.

Previous studies have indicated that when teachers are effective classroom managers, their students achieve at a higher level (Omoteso & Samudara, 2011; Stronge, Ward, & Grant, 2011; Stronge, Ward, Tucker, & Hindman, 2008) and display more interest in the class subject matter.

Table 4 presents the results of the self-assessment of teachers' reflection competence.

Table 4 Self-assessment of reflection competence

No.	Skills	Sufficient	Average	Weak
1.	Identify what lessons can be learnt from the experience now or in the future	94.3	5.7	-
2.	Assess whether the objectives of learning activities have been achieved	93.6	6.4	-
3.	Assess what was good in the previous experience and what is changeable	91.4	7.9	0.7
4.	To identify experience from the previous activities	87.9	11.4	0.7
5.	Predict in what activities, how and in what way I will apply the previous experience	84.9	15.1	-
6.	Determine what previous learning activities were effective	84.8	15.2	-
7.	Identify what was important in previous learning activities	82.1	17.1	0.7
8.	Find a theoretical justification for previous experience	81.4	17.1	1.4
9.	Describe the circumstances in which the previous learning experience was acquired	74.8	22.3	2.9
10.	Reveal feelings that I have experienced in learning activities	67.4	28.3	4.3

It can be noted that different skills of reflection competence were assessed unevenly by the teachers. The subjects had very well assessed their skills of abstract conceptualization, which are related to drawing conclusions and anticipating ideas for the future. The skills of disclosure of a specific experience and reflective observation were assessed as weaker. These skills are related to the perception and reception of experience. The skills of active experimentation (anticipating and conducting future actions) is to be seen in the same way as very good.

Teachers' ability to critically reflect classroom situations in relation to their own actions constitutes an important prerequisite to improve teaching performance and professional behavior (Rominger, Reiting, Seyfried, Schneckenleitner, & Fink, 2017). Many scientific sources (Soleil, 2000; Osterman & Kottkamp, 2004; Pollard, 2006; Correia & Bleicher, 2008) are

emphasising that it is important to become a researcher of our activities and experience, anticipating prospects for more efficient solutions to future problems, discovering new ways, verifying assumptions and applying ideas in specific practical situations. The results of the study show that teachers highly appreciate these abilities, but the analysis of their feelings and the reflection of the circumstances of previous experience, as evidenced by other studies (Felten, Gilchrist, & Darby, 2006; Shapiro, 2009; Guvenc & Celik, 2012; Zembylas, 2014) are considered as insufficient. Emotions and feelings are a significant source of learning to learn and the motivator of reflection, but often they become an obstacle to successfully learning from the experience. Depending on the circumstances and intentions, it is important to analyze our emotional experiences, find ways to avoid them or – maintain and strengthen them if the latter are positive.

Conclusions

In the context of learning to learn competence teachers assessed their skills of understanding the basic idea of a conversation, accepting comments from group members, considering their usefulness and correcting errors, listening and understanding of other people's attitudes as the most sufficient. The research results showed that teachers' time evaluation, planning and management competence is assessed weaker than information search, perception, systematization and adaptation or communication and cooperation in group competencies.

Research results on assessing teachers' reflection competence demonstrate that abstract conceptualization skills such as drawing conclusions and anticipating ideas for the future are the most sufficient. The skills of active experimentation (anticipating and conducting future actions) were assessed as sufficient too. Teachers emphasized that the skills of revealing feelings experienced in learning activities are more weaker than the other ones.

References

- Alvarez Sainz, M., Ferrero, A., & Ugidos, A. (2019). Time management: skills to learn and put into practice. *Education and Training*, 60, 1. Retrieved from https://www.researchgate.net/publication/330977996_Time_management_skills_to_learn_and_put_into_practice
- Bishop, G., & Blake, J. (2007). *Reflective Practice: A Guide to Reflective Practice with Workbook: For Post Graduate and Post Experience Learners*. UK: University of Huddersfield.
- Bolton, G. (2010). *Reflective practice: writing and professional development*. London: Sage
- Boud, D., Keogh, R., & Walker, D. (2005). *Reflection: Turning Experience into Learning*. London and New York: RoutledgeFalmer.
- Bradbury, H. (2010). *Beyond Reflective Practice: New Approaches to Professional Lifelong Learning*. London: Routledge.

- Correia, M.G., & Bleicher, R. (2008). Making Connections to Teach Reflection. *Michigan Journal of Community Service Learning*, 14(2), 41-49. Retrieved from <http://hdl.handle.net/2027/spo.3239521.0014.204>
- Felten, P., Gilchrist, L.Z., & Darby, A. (2006). Emotion and Learning: Feeling our Way toward a New Theory of Reflection in Service-Learning. *Michigan Journal of Community Service Learning*, 12(2), 38-46.
- Finlay, L. (2008). Reflecting on Reflective Practice. *PBPL paper*, 52, 1-27. Retrieved from <https://www.semanticscholar.org/paper/Reflecting-on-%E2%80%98-Reflective-practice-%E2%80%99-Finlay/2988c18f4f2735108553f46f628fe285a2287226>
- Fook, J., & Gardner, F. (2007). *Practising Critical Reflection: A Resource Handbook*. Maidenhead: McGraw-Hill Education: Open University Press.
- Geros mokyklos koncepcija. (2015). Patvirtinta Lietuvos Respublikos švietimo ir mokslo ministro 2015 m. gruodžio 21 d. įsakymu Nr. V-1308. Retrieved from <https://www.smm.lt/uploads/documents/Pedagogams/Geros%20mokyklos%20konceptija.pdf>
- Guvenc, Z., & Celik, K. (2012). The Relationship between the Reflective Thinking Skills and Emotional Intelligences of Class Teachers. *International Journal of Humanities and Social Science*, 2(16), 223-234. Retrieved from https://www.academia.edu/3430678/The_Relationship_between_the_Reflective_Thinking_Skills_and_Emotional_Intelligences_of_Class_Teachers
- Hall, J. (2010). Making Art, Teaching Art, Learning Art: Exploring the Concept of the Artist Teacher. *International Journal Of Art. Design education*, 29(2), 103-110. DOI: <http://dx.doi.org/10.1111/j.1476-8070.2010.01636.x>
- Hegarty, B. (2011). Is Reflective Writing an Enigma? Can Preparing Evidence for an Electronic Portfolio Develop Skills for Reflective Practice? In G. Williams, P. Statham, N. Brown, B. Cleland (Eds.), *Changing Demands, Changing Directions Proceedings Ascilite* (pp. 580-593).
- Hilden, S., & Tikkamaki, K. (2013). Reflective Practice as a Fuel for Organizational Learning. *Administrative Sciences*, 3(3), 76–95. DOI:10.3390/admsci3030076
- Laker, A. (2001). *Developing Personal, Social, Moral Education through Physical Education—A Practical Guide for Teachers*. USA and Canada: Routledge/Falmer.
- Omoteso, B., & Samudara, A. (2011). The Relationship between Teachers' Effectiveness and Management of Classroom Misbehaviors in Secondary Schools. *Psychology*, 2, 902-908. DOI: 10.4236/psych.2011.29136
- Osterman, K.F., & Kottkamp, R.B. (2004). *Reflective Practice for Educators. Professional Development to Improve Student Learning*. California: Corwin Press.
- Pitsoe, V., & Maila, M. (2013). Re-thinking Teacher Professional Development through Schon's Reflective Practice and Situated Learning Lenses. *Mediterranean Journal of Social Sciences*, 4(3), 211-218. DOI: 10.5901/mjss.2013.v4n3p211
- Pollard, A. (2006). *Refleksyvusis mokymas. Veiksminga ir duomenimis paremta profesinė praktika*. Vilnius: Garnelis.
- Prajogo, D., Toy, J., Bhattacharya, A., Oke, A., & Cheng, T.C.E. (2018). The relationships between information management, process management and operational performance: Internal and external contexts. *International Journal of Production Economics*, 199, 95-103.
- Raelin, J.A. (2002). "I Don't Have Time to Think!" Versus the Art of Reflective Practice. *Reflections*, 4(1), 66-79. DOI: 10.1162/152417302320467571

- Roffey-Barentsen, J., & Malthouse, R. (2013). *Reflective Practice in Education and Training*. London: Sage.
- Rominger, C., Reitingger, J., Seyfried, C., Schneckenleitner, E., & Fink, A. (2018). The Reflecting Brain: Reflection Competence in an Educational Setting Is Associated With Increased Electroencephalogram Activity in the Alpha Band. *Mind, Brain, and Education*, 11(2), 54-63.
- Rushton, I., & Suter, M. (2012). *Reflective Practice for Teaching in Lifelong Learning*. McGraw-Hill: Open University press.
- Shapiro, S. (2009). Revisiting the Teachers' Lounge: Reflections on Emotional Experience and Teacher Identity. *Teaching and Teacher Education*, 4, 1-6. DOI: 10.1016/j.tate.2009.09.009
- Soleil, N. (2000). Toward a Pedagogy of Reflective Learning: Lived Experience in Research and Practice. *New Directions for Teaching and Learning*, 31(1), 73-83. DOI: 10.1080/10790195.2000.10850103
- Stronge, J.H., Ward, T.J., & Grant, L.W. (2011). What Makes Good Teachers Good? A Cross-Case Analysis of the Connection between Teacher Effectiveness and Student Achievement. *Journal of Teacher Education*, 62(4), 339-355. DOI: 10.1177/0022487111404241
- Stronge, J.H., Ward, T.J., Tucker, P.D., & Hindman, J.L. (2008). What is the relationship between teacher quality and student achievement? *An exploratory study. Journal of Personnel Evaluation in Education*, 20(3-4), 165-184. DOI: 10.1007/s11092-008-9053-z
- Tikkamaki, K., & Hilden, S. (2014). Making Work and Learning More Visible by Reflective Practice. *Research in Post-Compulsory Education*, 19(3), 287-301. DOI: 10.1080/13596748.2014.920577
- Wagner, K. (2006). Benefits of Reflective Practice. *Leadership*, 36(2), 30-32. Retrieved from <https://eric.ed.gov/?id=EJ771713>
- York-Barr, J., Sommers, W.A., Ghere, G.S., & Montie, J. (2001). Reflective Practice and Continuous Learning. *In Reflective Practice to Improve Schools: An Action Guide for Educators*. California: Corwin Press.
- Zembylas, M. (2014). The Place of Emotion in Teacher Reflection: Elias, Foucault and 'Critical Emotional Reflexivity'. *Power and Education*, 6(2), 210-222. DOI: 10.2304/power.2014.6.2.210
- Zafarullah, S., & Pertti, V. (2017). Effect of Time Management on the Job Satisfaction and Motivation of Teacher Educators: A Narrative Analysis. *International Journal of Higher Education*, 2, 213-224.

TEACHING APPROACHES WHEN WORKING WITH STUDENTS WITH LOW SOCIO-ECONOMIC STATUS: DO TEACHERS GIVE STUDENTS AUTONOMY TO LEARN?

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Abstract. As PISA 2018 results show (OECD, 2018, 2019), students with high SES achieve better results in all countries than their peers with low SES. The impact of personal background circumstances on student performance is partly mediated by other factors, e.g. students' access to educational resources, differences in the opportunity to learn, and grade repetition and tracking. Meanwhile, Jensen (2009) claims that the major factor affecting the achievement of students living in unfavourable conditions is not their living environment, but rather the school and the teachers. Jensen (2013) notes that the best strategy to help students with low SES achieve success in learning is to provide such conditions that they are involved in the learning process. Therefore, the present article explores how teachers employ self-determination theory when working with students with low SES. The participants in the quantitative survey were selected from five schools of one District Municipality in Lithuania characterized by low SES. The sample consisted of 95 teachers and 183 students. The results concerning the teachers demonstrate that the teachers working with low-SES status students have the moderately autonomy-supportive style, yet they tend to employ the controlling motivating style alongside the autonomy-supportive one. In the students' opinion, they have a fairly close relationship with their teachers and feel understood by them. The students also maintain that the teachers give them choices, encourage them to ask questions and express confidence in their abilities. However, it can be determined that the teachers rarely seek to empower children to learn independently.

Keywords: self-determination theory; socio-economic status; student; teacher; teachers' motivating style.

Introduction

International studies on students' achievement confirm the indisputable influence of socio-economic status (SES) on students' academic performance. In Lithuania, as in other countries (e.g. Israel, Luxembourg, Germany, Hungary, etc.), we can see that students with high SES achieve better results than their peers with low SES (OECD, 2018, 2019). An overview of works that examine the relationship between student achievement and their social status reveals several trends. Certainly, individual, family, and environmental contextual factors have a significant impact on a child's educational achievement (The Institute for Public Policy & Economic Development, 2016). The latest research (Hair, Hanson, Wolfe, & Pollak, 2015) reveals that we can already see systemic structural differences in some brain parts (caudal and incisal cortex, and hippocampus) of 4-year-old children with low SES, which can explain about 20 percent of the low achievement of these children. Meanwhile, Jensen (2009) claims that the major factor affecting the achievement of students living in unfavourable conditions is not their living environment, but rather the school and the teacher. Namely, Jensen (2013) notes that the best strategy to help students with low SES achieve success in learning is to provide such conditions that they are involved in the learning process. He identifies seven factors related to students' participation in the teaching/learning process and closely associated with their socio-economic status. They include the children's (1) health and food; (2) vocabulary; (3) effort and energy; (4) mindset; (5) cognitive capacity; (6) relationships; and (7) stress level. Hence, having responded to a child's primary needs (health, food, comfort, and rest), the school community (and the teacher) can help these students by creating a positive atmosphere in educational institutions; emotionally supporting the children, encouraging them to put in greater effort, developing their cognitive capacity, as well as actualizing their effort and energy to learn.

According to researchers (Hornstra, Mansfield, Van der Veen, Peetsma, & Volman, 2015), teachers are key actors whose main task is to motivate students to learn. Teachers can differ in the way they try to motivate students to learn, and their motivational strategies can vary from 'controlling' to 'autonomy-supportive'. Therefore, the object of this research is the teachers' style of teaching as defined by the self-determination theory. The purpose of the research is to explore how teachers employ self-determination theory when working with students with low SES. The used research methods were theoretical analysis and interpretation of scientific literature, anonymous questionnaire survey. In this survey two measuring instruments are used: Problems in Schools Questionnaire (PIS) for teachers (Deci, Schwartz, Sheinman, & Ryan, 1981) and Learning Climate Questionnaire (LCQ) for students (Black & Deci, 2000).

Literature Review

Self-determination theory (SDT) assumes that healthy motivation needs to be intrinsic in nature and that the basic psychological needs (competence, autonomy and relatedness) are prerequisites for intrinsically motivated behaviour (Van Nuland, Taris, Boekaerts, & Martens, 2012). According to researchers (Reeve, 2012; Reeve, Ryan, & Deci, 2018), all students, irrespective of their socio-economic status or cultural background, possess inherent growth tendencies (e.g. intrinsic motivation, curiosity, psychological needs) that provide a motivational foundation for high-quality classroom engagement and positive school functioning. Satisfaction of the three basic needs – to feel related to others, to feel competent, and to feel autonomous – enables students to be curious, active, strive for excellence, and connect to the social environment. Obviously, the learning environment must support and facilitate rather than shape, change or control the inner resources of the student's motivation. How can this be achieved?

According to Gagne and Deci (2005), central to SDT is the distinction between autonomous motivation and controlled motivation. Autonomy involves acting with a sense of volition and having the experience of choice. In contrast, being controlled involves acting with a sense of pressure and a sense of having to engage in actions. Research shows that teachers' motivating style is closely related to children's involvement in the teaching/learning process (Appleton, Christenson, & Furlong, 2008; Reeve, 2012). Encouraging children to learn, teachers usually use a motivational style, which can be autonomy-supportive or controlling (Deci et al., 1981). Certainly, teachers with an autonomy-supportive style rely on different instructional behaviours to motivate their students than do teachers with a controlling style (Reeve & Jang, 2006). Researchers (Deci, Vallerand, Pelletier, & Ryan, 1991) note that autonomy support occurs when somebody with power (e.g. a teacher) accepts another's (e.g. a student's) perspective, recognizes his/her feelings, and provides him/her with appropriate information and possibilities of choice, thus reducing the use of demands and pressure. For instance, an autonomy-supportive teacher provides students with essential information and encourages them to use it independently when solving a problem.

According to Reeve and Jang (2006), teachers' instructional behaviours (listening, creating time for independent work, giving the student opportunities to talk, praising signs of improvement and mastery, encouraging the student's effort, offering progress-enabling hints when the student seems stuck, being responsive to the student's questions and comments, and acknowledging the student's perspective and experiences) correlate positively with students' experiences of autonomy. A controlling teacher, on the contrary, pressurises the student to behave in a particular way, as well as employing certain awards and punishments.

In this case, the teacher tells students how to solve a problem in a particular way, utters directives/commands, makes ‘should/got to’ statements, and asks controlling questions. It is evident that this type of teacher relies more on extrinsic strategies (such as ‘learning for the teacher’).

Depending on the motivating style chosen by the teacher, student engagement (active and conscious learning) and learning outcomes can be quite different. Research results demonstrate that teachers’ autonomy-supportive style is associated with higher student motivation, effective student engagement and positive learning results (Gunnell, Crocker, Wilson, & Mack, & Zumbo, 2013; Jang, Kim, & Reeve, 2016). Meanwhile, teachers’ controlling style is related to lower motivation, ineffective, superficial learning and low learning achievement of students (Haerens, Aelterman, Vansteenkiste, Soenens, & Van Petegem 2015; Hein, Koka, & Hagger, 2015). Moreover, Deci et al. (1981) found that students of autonomy-supportive teachers are more intrinsically motivated and have higher self-esteem than those of teachers who are more control orientated.

It is noteworthy that according to the STD, students’ inner desire for meaningful learning is not a self-contained or automatic process (Ryan & Deci, 2017). Imposing external control might even disrupt students’ natural tendency to learn (Van Nuland et al., 2012). Thus, the behaviour of the teacher (a motivating style of autonomy or control) during the teaching process can strengthen or inhibit students’ active participation. Besides, according to Hornstra et al. (2015, p. 386-387), beliefs expressed by teachers are very important and there could be differences between students’ needs and strengths, and different ways to meet those needs: “The views held by teachers also suggest that students’ needs or the ways to fulfil them not only depend on their ethnicity or culture, but that these could also depend on other characteristics, such as ability levels, SES or behavioural characteristics”.

It is also important to note that the very purpose of the teacher and the concept of education are very important when it comes to teachers’ motivating style. On the one hand, when there is a strong emphasis on performance, feelings of enthusiasm and interest in class, there is danger of them being replaced by experiences of anxiety, boredom and alienation (Niemic & Ryan, 2009). On the other hand, teachers employing the autonomy-supportive style should themselves work in the supportive environment (Reeve, 2009). Teachers guide students in their learning process and bring the educational approach of the school into act in the classroom. Finally, researchers emphasize that the assumptions of the school community are important not only in the narrow sense (the school itself), but also in the wider sense (e.g. teacher training). The study findings of Stroet, Opdenakker and Minnaert (2015) imply that long-lasting effects can be expected of teacher training only when these are tailored to fit the educational approaches of schools.

Research Methodology

Participants and Procedures. The research data were collected in May and October 2018. The participants in the quantitative survey were recruited from five rural schools of one District Municipality in Lithuania. The students of these schools live in an unfavourable social, economic and cultural environment. For several years the educational achievements of these students have remained low and below the Lithuanian average (*Lietuva. Švietimas šalyje ir regionuose 2016. Mokinių pasiekimai, 2016; Lietuva. Švietimas šalyje ir regionuose 2017. Mokytojas, 2017*). Anonymous paper-and-pencil questionnaires were distributed to students and teachers during on-site visits to each school. Prior authorisation was requested from management staff at the schools involved in the study, as well as the parents and/or guardians of the students. The questionnaires for students were completed in the classroom under the supervision of the authors of this article, who explained how the students should complete the instruments and remained available to answer any questions that might arise during the process. It was emphasized that the participation of students and teachers was voluntary and anonymity was guaranteed. This research procedure was carried out in accordance with the recommendations of the Academic Ethics Code approved by the Presidium of the Lithuanian Academy of Sciences.

The research sample consisted of 95 teachers and 183 students from grades 5 through 11. Students of grade 12 did not take part in the survey because of preparation for the the matura examinations. Table 1 presents the descriptive statistics on the teachers and students in this sample.

Table 1 Descriptive statistics of the research sample

The sample of teachers (N = 95)					
	Age groups				
	Less than 29 years	30–39 years	40–49 years	50–59 years	60 years and up
Frequency	–	14	27	38	16
Percent	–	14.7	28.3	40	16.8
	Teaching experience of teachers				
	Less than 5 years	6–10 years	11–20 years	21–30 years	31 years and up
Frequency	4	4	23	26	38
Percent	4.2	4.2	24.2	27.4	40
	Qualification categories of teachers				
	Teacher	Senior Teacher	Teacher-Methodologist	Teacher-Expert	
Frequency	8	60	25	2	
Percent	8.4	63.2	26.3	2.1	

The sample of students (N = 183)				
	Grade 5–8	Grade 9–11	Boys	Girls
Frequency	92	91	90	93
Percent	50.2	49.8	49.2	50.8

Instruments. The teachers' questionnaire was divided into two sections. The first section concerned the socio-demographic characteristics of the teachers, such as their age, years of teaching experience, and qualification categories. The second section consisted of the Problems in Schools Questionnaire (PIS) (Deci et al., 1981). The teachers were presented with eight vignettes, each of which contained four items. Each item represented a different level of teachers' autonomy support: highly controlling (HC), moderately controlling (MC), moderately autonomy-supportive (MA), or highly autonomy-supportive (HA). Possible responses ranged on a seven-point Likert-like scale from 1 (very inappropriate) to 7 (very appropriate) with an intermediate score of 4 (moderately appropriate). The teachers' HC, MC, MA, and HA scales were computed by averaging the eight responses for each. Finally, the teachers' motivating style score was computed as follows: $2(\text{HA}) + \text{MA} - \text{MC} - 2(\text{HC})$. Overall scores ranged from -18 to 18. A high score represents an orientation toward autonomy, while a low, or a negative, score indicates an orientation toward control.

To verify the internal consistency of the Lithuanian version of the Problems in Schools Questionnaire, we calculated Cronbach alpha. It was determined that Cronbach alpha for the present study was above 0.70, which is an acceptable level of reliability in educational research (DeVellis, 2003). Table 2 shows its value for each scale.

Table 2 Internal consistency for each subscale of the Problems in Schools Questionnaire

Subscales	Number of items	Cronbach α	Cronbach α (Reeve, Bolt, & Cai, 1999)
Highly controlling (HC)	8	0.73	0.79
Moderately controlling (MC)	8	0.77	0.77
Moderately autonomy-supportive (MA)	8	0.70	0.78
Highly autonomy-supportive (HA)	8	0.82	0.69

The first section of the students' questionnaire concerned the socio-demographic data: gender and grade. The second section consisted of the short version of the Learning Climate Questionnaire (LCQ) (Black & Deci, 2000). This questionnaire consisted of 6 items answered on a seven-point Likert scale from 1 (strongly disagree) to 7 (strongly agree) with an intermediate score of 4 (moderately agree). The scores on the 6-item LCQ were calculated by averaging the individual item scores. Higher scores indicate greater perceived autonomy

support. The Cronbach’s alpha score, which measures the internal consistency of the items, was satisfactory ($\alpha = 0.90$).

The Problems in Schools Questionnaire for teachers and the Learning Climate Questionnaire for students were downloaded from the website <https://selfdeterminationtheory.org/>. Additionally, written permission to use these measures was obtained from E.L. Deci. The questionnaires were translated from English into Lithuanian by the second author of this article.

Data Analysis. The statistical analyses were performed using IBM SPSS Statistics 22.0. The following methods were applied to analyse the research data: descriptive statistics, Kruskal-Wallis test (a non-parametric test that compares three or more independent samples), and Mann-Whitney U Test (a non-parametric test that compares two independent samples). p-values less than 0.05 indicated a statistically significant correlation. Cronbach’s alpha was used to assess the internal consistency of the questionnaires. Shapiro-Wilk test was employed to determine if the data were normally distributed. The results of this test showed that the data of the Problems in Schools Questionnaire and the Learning Climate Questionnaire were non-normally distributed (Table 3).

Table 3 Results of the Shapiro-Wilk Normality Test

	Shapiro-Wilk statistic	Asymp. Sig.
Problems in Schools Questionnaire		
Highly controlling (HC)	0.987	0.570
Moderately controlling (MC)	0.972	0.066
Moderately autonomy-supportive (MA)	0.952	0.004
Highly autonomy-supportive (HA)	0.903	0.0001
Learning Climate Questionnaire		
My teachers encouraged me to ask questions	0.917	0.0001
I feel that my teachers provide me choices and options	0.914	0.0001
I feel understood by my teachers	0.928	0.0001
My teachers conveyed confidence in my ability to do well in the course	0.924	0.0001
My teachers try to understand how I see things before suggesting a new way to do things	0.928	0.0001
My teachers listen to how I would like to do things	0.944	0.0001

Research Results

In the present article, the teachers’ motivating styles were assessed in two ways: (1) the teachers’ self-reporting on their own behaviour; and (2) the students’ self-reported perceptions of their teachers’ autonomy support. First, we will discuss the teachers’ motivating style from their point of view. Table 4 presents

the descriptive statistics for each motivating style. The 95 teachers who participated in the research had composite scores of the motivating style ranging from -0.50 to 12.50 (median – 4.50; mean – 4.77; SD – 2.37).

Having analysed the scores of the teachers’ motivating style, it appeared that 4.2% of teachers were characterized by a moderately controlling style, 75.8% of the teachers demonstrated a moderately autonomy-supportive style, and 7.4% of the teachers, a highly autonomy-supportive style. The results of Kruskal-Wallis test revealed that the age and years of teaching experience of the teachers did not affect their motivating style. However, it was determined that a highly controlling style was more characteristic of the teachers that had the qualification category of a senior teacher ($\chi^2 = 8.374$; $p < 0.05$).

Table 4 Descriptive statistics of each subscale of the Problems in Schools Questionnaire

	Min	Max	Median	Mean	SD	Skewness	Kurtosis
Highly controlling (HC)	1.63	5.88	3.75	3.67	0.93	-0.12	-0.30
Moderately controlling (MC)	1.88	6.75	5.13	5.09	0.92	-0.61	0.80
Moderately autonomy-supportive (MA)	2.75	6.25	5.00	4.90	0.84	-0.70	0.16
Highly autonomy-supportive (HA)	3.50	7	6.38	6.16	0.70	-1.24	1.97

When analysing the expression of the teachers’ motivating style in a particular situation, differences became apparent. For instance, in a class management situation (C vignette: “Donny loses his temper a lot and has a way of agitating other children. He doesn’t respond well to what you tell him to do and you’re concerned that he won’t learn the social skills he needs. The best thing for you to do with him is ...”), the moderately autonomy-supporting style (56.6% of teachers) emerged, yet a significant proportion of teachers (28.9%) had the moderately controlling style. In another situation (H vignette: “Your child has been getting average grades, and you’d like to see her improve. A useful approach might be to... ”), the teachers were characterized as moderately autonomy-supportive (50.6% of the teachers) or highly autonomy-supportive (45.8% of the teachers). Such results suggest that in situations involving the educational process and rated by the teachers as the participants in the process, the teachers tended to demonstrate the controlling style, whereas in situations which were rated by the teachers assuming the parental role, the teachers revealed the autonomy-supportive motivating style.

The student survey aimed at identifying to what extent the teacher raised the students and their autonomy, or how much control over the students he/she demonstrated (The Learning Climate Questionnaire (LCQ)). The students' responses (Table 5) revealed that the teachers were characterized by a partly autonomy-supportive style.

Having generalized the research results, it was determined that nearly three quarters of the students felt that the teachers provided them with choices and options for learning. Almost two-thirds of the students felt they were understood by the teachers and that the teachers conveyed confidence in their ability to do well in the course and encouraged them to ask questions. Half of the students agreed that the teachers tried to understand how they saw things before suggesting a new way to do things. However, it is noteworthy that nearly two-fifths of the students indicated that the teachers did not show interest in how the students would like to perform tasks.

Table 5 Descriptive statistics of the Learning Climate Questionnaire

	Min	Max	Median	Mean	SD	Skewness	Kurtosis
My teachers encouraged me to ask questions	1	7	5.00	5.04	1.54	-0.53	-0.28
I feel that my teachers provide me choices and options	1	7	5.00	5.15	1.40	-0.60	0.06
I feel understood by my teachers	1	7	5.00	4.95	1.48	-0.45	-0.26
My teachers conveyed confidence in my ability to do well in the course	1	7	5.00	5.02	1.45	-0.55	-0.12
My teachers try to understand how I see things before suggesting a new way to do things	1	7	5.00	4.57	1.76	-0.38	-0.77
My teachers listen to how I would like to do things	1	7	4.00	3.99	1.71	-0.01	-0.75

The boys and the girls expressed a statistically significant opinion about the teachers' motivating style, which did not convey statistically significant differences. However, differences emerged when comparing the opinions of the students of grades 5–8 and 9–11 (Table 6). The younger students (of grades 5–8) mentioned that the autonomy-supportive style was more characteristic of their teachers.

Discussion

Discussing the results of the research, we acknowledge that we have found very few studies on teacher motivating styles and the education or achievement of low-SES students. We recognize this as a limitation of this work. However, it is clear that the basic psychological needs of low-SES students are the same as those of other students. In learning, all children want to be autonomous, competent and build harmonious relationships. These basic needs are universal; they represent innate requirements rather than acquired motives. Needs, when satisfied, promote well-being, but when thwarted, lead to negative consequences (Reeve, Deci, & Ryan, 2004). Therefore, the role of teachers becomes particularly important, as responding to the essential needs of students, they simultaneously enable them to learn actively and meaningfully, as well as feel good, whereas in the absence of such a response, they reinforce indifference, bad feeling and destructive behaviour. Reeve and Jang (2006, p. 216) maintain that “when autonomously motivated, students’ intentional behaviours emerge out of an internal locus of causality, high volition, and a sense of choice over their actions; when controlled, students’ intentional behaviours emerge out of an external locus of causality, high pressure, and a sense of assignment or being told what to do”.

The results concerning the teachers demonstrate that the teachers working with low-SES status students have the moderately autonomy-supportive style, yet they tend to employ the controlling motivating style alongside the autonomy-supportive one. In the students’ opinion, they have a fairly close relationship with their teachers and feel understood by them. The students also maintain that the teachers give them choices, encourage them to ask questions and express confidence in their abilities. However, it can be determined that the teachers rarely seek to empower children to learn independently because, according to the students, they struggle to understand how a student intends to complete a task before suggesting another way; too few teachers ask students how they want to complete the tasks.

Hence, we can see that in this study the teachers working with students of low SES should pay attention to the motivational style they apply. The study of Hornstra et al. (2015) shows that teachers find it harder to teach at-risk students in autonomy-supportive ways. Besides, Reeve (2009) mentions a recurring paradox in the contemporary K-12 classroom: “although students educationally and developmentally benefit when teachers support their autonomy, teachers are often controlling during instruction” (p. 159). The reasons for the adoption of such a motivating style are threefold: influences of outside agents (school policies, administrators, parents, societal expectations, or cultural norms), influences arising from and during classroom dynamics (e.g. students’ listless reaction to a learning activity) and thirdly, influences of the teacher himself/herself

(personality dispositions and beliefs about the nature of student motivation). Thus, the motivation style of a teacher is influenced by his/her own factors, the classroom environment and school factors. We agree with the statement of Hornstra et al. (2015) that teachers must examine the factors that influence their beliefs about students (e.g. SES, ability levels, cultural background).

We would also like to draw attention to a few other aspects that are very important to us. First, according to Rodriguez (2013), the teaching and learning process often tends to be viewed as a simple linear system. It seems that the teacher creates one or another set of conditions, whereas the learner acquires knowledge and abilities, and both participants of the educational process can see each other's achievements through certain forms of assessment. However, the researcher claims that teaching is an interactive and reciprocal system that connects the teacher, the learner and their interaction system. We believe that the teacher must understand the system of the pedagogical process and know what to do, how to do it and why they are doing it.

As already mentioned, the results of our students' survey show that the teachers quite rarely seek to empower children to learn independently (they make too little effort to understand how a student intends to accomplish a task; they hardly ask students how they want to complete the task). It is in these student responses that we can see signs of where our teachers need to "grow". According to Reeve (2009, p.162), "three conditions make any approach to motivating students an autonomy-supportive one: (a) adopt the students' perspective; (b) welcome students' thoughts, feelings, and behaviours; and (c) support students' motivational development and capacity for autonomous self-regulation". It is the observation, understanding and nurturing of students' thoughts, feelings or perspectives that are essential in enabling them to learn. This respectful relationship with students is extremely significant and is connected with the students' motivation and engagement at school (Stroet et al., 2013). Meanwhile, bearing in mind the general perspective of SDT, the power, control and use of salient extrinsic rewards to motivate behaviour can be deleterious to intrinsic motivation and can thus have negative consequences for performance in interesting and personally important activities (Gagne & Deci, 2005).

Secondly, it is evident, that the effect of intrinsic motivation on performance might have a long-term effect (i.e. it takes multiple years to develop) (Van Nuland et al., 2012). So, teachers must have patience.

Thirdly, in scientific works, the autonomous and supportive environment (not the controlling one) is called the student-centred environment. This concept must be properly understood in the Lithuanian context. The educational literature concerning Lithuania is dominated by the differences in the concepts of teaching and learning. It has to be stated that the flaws of the above-mentioned separation are also noticed by foreign experts. They claim that Lithuania has no consensus

on what constitutes good teaching (Shewbridge, Godfrey, Hermann, & Nusche, 2016; OECD, 2017). However, according to Engeström and Sannin (2012), there is no learning without teaching – teaching and learning go together. We cannot avoid mentioning the extensive Danish student survey conducted a few years ago (Andersen & Andersen, 2017), which analysed the impact of teaching on students' academic achievement emphasising their engagement and responsibility (understood as applying a student-centred teaching strategy). The researchers determined that the overall use of a learner-centred strategy had a negative impact on their academic performance, and that this effect was greater on learners from unfavourable socio-economic contexts. The results of the study raise a number of controversial issues and encourage further research. However, one explanation for these results may be a change in the teaching practice where teachers transfer all responsibility for learning to students, regardless of their differences. On the one hand, when working with children with low SES, their individual conditions and characteristics must be taken into account. The school community and the teachers working with such a child must first respond to their basic needs (taking care of health and nutrition if necessary), as well as additional learning support before, during and after school or holidays, i.e. all additional pedagogical tools that aid children's preparation for learning (vocabulary expansion, growth, mindset, stress management, etc.) are important. On the other hand, decades of research has confirmed that direct and explicit instruction is significantly more effective and efficient than partial leadership for all students starting their education (Clark, Kirshner, & Sweller, 2012). Thus, when teachers teach new content and skills (especially for lower achievers), it is more effective to use guidance, practice and feedback rather than asking students to discover the most important aspects.

Finally, in our opinion, it should be noted once again that the motivating style of a teacher is intrinsically related to the relationship. The controlling style is characterized by “tension and pressure to make sense” (Gagne & Deci, 2005), while the autonomy-supportive style welcomes students' thoughts, feelings, and behaviours. Hence, such a respectful glance (relation) to low-SES students accordingly formulates the guidelines for the pedagogical work of the school community, where it must purposefully seek the active, conscious and positive engagement of students from disadvantaged socio-economic backgrounds in the teaching/learning process.

Conclusions

The research results indicate that teachers working with low SES students have a moderate autonomy-supportive style. In the students' opinion, they have a fairly close relationship with their teachers and feel understood by them.

However, it can be determined that the teachers rarely seek to empower children to learn independently. When comparing the data according to grades, the results of the study also show a tendency that the teachers give less autonomy to older students than to younger ones. A statistically significant difference was found between the responses of the students of different grades.

References

- Andersen, I.G., & Andersen, S.C. (2017). Student-centered instruction and academic achievement: linking mechanisms of educational inequality to schools' instructional strategy. *British Journal of Sociology of Education*, 38(4), 533-550. DOI: 10.1080/01425692.2015.1093409
- Appleton, J.J., Christenson, S.L., & Furlong, M.J. (2008). Student Engagement with School: Critical Conceptual and Methodological Issues of the Construct. *Psychology in the Schools*, 45(5), 369-386. DOI:10.1002/pits.20303
- Black, A.E., & Deci, E.L. (2000). The effects of instructors' autonomy support and students' autonomous motivation on learning organic chemistry: A self-determination theory perspective. *Science Education*, 84, 740-756. DOI:10.1002/1098-237X(200011)84:6<740:AID-SCE4>3.0.CO;2-3
- Clark, R.E., Kirshner, P.A., & Sweller, J. (2012). Putting Students on the Path to Learning: The Case for Fully Guided Instruction. *American Educator*, 36(1), 6-11. Retrieved from <https://eric.ed.gov/?id=EJ971752>
- Deci, E.L., Schwartz, A., Sheinman, L., & Ryan, R.M. (1981). An Instrument to Assess Adult's Orientations toward Control versus Autonomy in Children: Reflections on Intrinsic Motivation and Perceived Competence. *Journal of Educational Psychology*, 73, 642-650. DOI:10.1037/0022-0663.73.5.642
- Deci, E.L., Vallerand, R.J., Pelletier, L.G., & Ryan, R.M. (1991). Motivation and Education: The Self-Determination Perspective. *Educational psychologist*, 26(3-4), 325-346. DOI: 10.1080/00461520.1991.9653137
- DeVellis, R. (2003). *Scale Development: Theory and Applications: Theory and Application*. Thousand Okas, CA: Sage.
- Engeström, Y., & Sannino, A. (2012). Whatever happened to process theories of learning? *Learning, Culture and Social Interaction*, 1(1), 45-56. DOI: 10.1016/j.lcsi.2012.03.002
- Gagne, M., & Deci, E.L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4), 331-362. DOI: 10.1002/job.322
- Gunnell, K., Crocker, P.R.E., Wilson, P.M., Mack, D.E., & Zumbo, B.D. (2013). Psychological Need Satisfaction and Thwarting: A Test of Basic Psychological Needs Theory in Physical Activity Contexts. *Psychology of Sport and Exercise*, 14(5), 599-607. DOI: 10.1016/j.psychsport.2013.03.007
- Haerens, L., Aelterman, N., Vansteenkiste, M., Soenens, B., & Van Petegem, S. (2015). Do Perceived Autonomy-Supportive and Controlling Teaching Relate to Physical Education Students' Motivational Experiences through Unique Pathways? Distinguishing between the Bright and Dark Side of Motivation. *Psychology of Sport and Exercise*, 16(3), 26-36. DOI: 10.1016/j.psychsport.2014.08.013
- Hair, N.L., Hanson, J.L., Wolfe, B.L., & Pollak, S.D. (2015). Association of Child Poverty, Brain Development, and Academic Achievement. *JAMA Pediatrics*, 169(9), 822-829. DOI: 10.1001/jamapediatrics.2015.1475

- Hein, V., Koka, A., & Hagger, M.S. (2015). Relationships between Perceived Teachers' Controlling Behaviour, Psychological Need Thwarting, Anger and Bullying Behaviour in High-School Students. *Journal of Adolescence*, 42, 103-114. DOI: 10.1016/j.adolescence.2015.04.003
- Hornstra, L., Mansfield, C., Van der Veen, I., Peetsma, Th., & Volman, M. (2015). Motivational teacher strategies: the role of beliefs and contextual factors. *Learning Environments Research*, 18, 363-392. DOI: 10.1007/s10984-015-9189-y
- Jang, H., Kim, E.J., & Reeve, J. (2016). Why Students become more engaged or more Disengaged during the Semester: A Self-Determination Theory Dual-Process Model. *Learning and Instruction*, 43, 27-38. DOI: 10.1016/j.learninstruc.2016.01.002
- Jensen, E. (2009). *Engaging students with poverty in mind*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Jensen, E. (2013). How poverty affects classroom engagement. *Educational Leadership*, 70(8), 24-30. Retrieved from <http://www.ascd.org/publications/educational-leadership/may13/vol70/num08/How-Poverty-Affects-Classroom-Engagement.aspx>
- Lietuva. Švietimas šalyje ir regionuose 2016. *Mokinių pasiekimai* (2016). [In Lithuanian language] Retrieved from <https://www.smm.lt/web/lt/teisesaktai/tyrimai-ir-analizes/svietimo-ir-mokslo-bukles-apzvalgos>
- Lietuva. Švietimas šalyje ir regionuose 2017. *Mokytojas* (2017). [In Lithuanian language] Retrieved from <https://www.smm.lt/web/lt/teisesaktai/tyrimai-ir-analizes/svietimo-ir-mokslo-bukles-apzvalgos>
- Niemiec, Ch., & Ryan, M.R. (2009). Autonomy, competence, and relatedness in the classroom. Applying self-determination theory to educational practice. *Theory and Research in Education*, 7(2), 133-144. DOI: 10.1177/1477878509104318
- OECD. (2017). *Education in Lithuania. Reviews of national policies for education*. OECD publishing, Paris. DOI: 10.1787/9789264281486-en.
- OECD. (2018). *Equity in Education: Breaking Down Barriers to Social Mobility*. OECD Publishing, Paris. DOI: 10.1787/9789264073234-en
- OECD. (2019). *PISA 2018 Results (Volume II): Where All Students Can Succeed*. OECD Publishing, Paris. DOI: 10.1787/b5fd1b8f-en
- Reeve, J. (2009). Why Teachers Adopt a Controlling Motivating Style Toward Students and How They Can Become More Autonomy Supportive. *Educational Psychologist*, 44(3), 159-175. DOI: 10.1080/00461520903028990
- Reeve, J. (2012). A Self-Determination Theory Perspective on Student Engagement. In: Sandra L. Christenson, Amy L. Reschly, Cathy Wylie (Eds.), *Handbook of Research on Student Engagement* (pp. 149-172).
- Reeve, J., & Jang, H. (2006). What Teachers Say and Do to Support Students' Autonomy during a Learning Activity. *Journal of Educational Psychology*, 98(1), 209-218. DOI: 10.1037/0022-0663.98.1.209
- Reeve, J., Bolt, E., & Cai, Y. (1999). Autonomy-supportive teachers: How they teach and motivate students. *Journal of Educational Psychology*, 91(3), 537-548. DOI: 10.1037/0022-0663.91.3.537
- Reeve, J., Ryan, R.M., & Deci, E.L. (2018). Selfdetermination theory: A dialectical framework for understanding the sociocultural influences on student motivation. In D.M.McInerney & G.A.D.Liem (Eds.), *Big theories revisited 2: Research on sociocultural influences on motivation and learning* (pp. 15-40). Greenwich, CT: Information Age Publishing.
- Rodriguez, V. (2013). The Potential of Systems Thinking in Teacher Reform as Theorized for the Teaching Brain Framework. *Mind, Brain, and Education*, 7(2), 77-85. Retrieved from

https://scholar.harvard.edu/files/vanessarodriguez/files/potentialofsystemsthinking_publishedmbe_6-1-13.pdf

- Ryan, R.M., & Deci, L.E. (2017). Self-Determination Theory: An Introduction and Overview. In *Self-determination theory: Basic psychological needs in motivation, development and wellness* (pp. 3-29). New York, NY, US: Guilford Press.
- Shewbridge, C., Godfrey, K., Hermann, Z., & Nusche, D. (2016). *OECD Reviews of School Resources: Lithuania 2016*. OECD Publishing, Paris. DOI: 10.1787/9789264252547-en
- Stroet, K., Opendakker, M.C., & Minnaert, A. (2013). Effects of need supportive teaching on early adolescents' motivation and engagement: A review of the literature. *Educational Research Review*, 9, 65-87. DOI:10.1016/j.edurev.2012.11.003
- Stroet, K., Opendakker, M.C., & Minnaert, A. (2015). Need supportive teaching in practice: a narrative analysis in schools with contrasting educational approaches. *Social Psychology of Education*, 18, 585-613. DOI: 10.1007/s11218-015-9290-1
- The Institute for Public Policy & Economic Development. (2016). *The Impact of Poverty on a Child's Academic Performance*. Retrieved from <http://www.institutepa.org/pdf/indicators/2016/povertyandacademicperformce.pdf>
- Van Nuland, H.J.C., Taris, T.W., Boekaerts, M., & Martens, R.L. (2012). Testing the hierarchical SDT model: the case of performance-oriented classrooms. *European Journal of Psychology of Education*, 27, 467-482. DOI: 10.1007/s10212-011-0089-y

POWERFUL KNOWLEDGE AS THE FUTURE OF SCHOOL CURRICULUM

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Abstract. *The global, social, economic and technological conditions of the 21st century are drastically changing the way societies and education policymakers understand the goals of education. Pedagogy has always been about how to pass on the knowledge, skills, values, and development of one's personality to the next generation, to create the conditions for growth that meet everyone's needs and provide equal opportunities. However, today this issue has become more relevant than ever as the world is changing very rapidly, society, its values, and needs are changing, as confirmed by the UNESCO goals for 2030.*

Young, pointing out that in many countries education policy neglects what knowledge a student needs today, creates a theory of "Powerful knowledge" based on the work of educational sociology authors such as Durkheim, Bernstein, Bourdieu. The goal of this paper is to conduct a literature review of the concept of 'powerful knowledge'.

Since the year 2009, this term has been described in many articles but is still in development. Analyzing the works of Young and Muller, as well as getting to know works of other authors who complement and develop the concept (Wheelaan, Lambert, Deng, etc.) and those who are more skeptical (White), the definition and features of Powerful Knowledge have been revealed and scientists' thoughts on what makes knowledge "powerful", why it is needed, what place it can play in school curricula have been collected, as well as highlighting questions that have not yet been answered clearly.

Keywords: *curriculum, powerful knowledge, sociology of education.*

Introduction

21st century has put us in a situation, where the role of science and technologies is rapidly growing in society as a whole and also in each individual's personal growth, situation, where new areas and directions to human activity are emerging, where you must have modern knowledge to succeed, but areas in which you need basic, routine skills are disappearing. Consequently, there are pressing questions about the current goals, tasks, and opportunities for education, schools, curricula, and teachers. Education reforms are underway in many countries to respond to the rapid change, seeking to answer questions about the role of schools and teachers nowadays, what a modern student is, how and what to teach them. Educational organizations also pay particular attention to the importance of this issue. The Center for Curriculum Redesign (CCR) explores curriculum

opportunities to reach the present world and be prepared for a future characterized as volatile, uncertain, complex, ambiguous - VUCA. The center offers an education system focused on knowledge, skills, character, and meta-learning, calling it four-dimensional education (Fadel, Bialik, & Trilling, 2015). UNESCO creates the International Commission for the Futures of Education, which will produce a report by November 2021 analyzing the role of education in the world, taking into account global trends such as geopolitical unrest, environmental degradation, and climate change, changing patterns of human mobility and the exponential pace of scientific and technological innovations. The impact of future social, economic, technological and environmental challenges on education will be assessed and recommendations for action taken at different policy levels (UNESCO, 2019). However, it is already quite clear that school and teachers are not the only providers of information to the pupil, as a result, the role of schools as a conveyor of information from one generation to another, which has been a common practice for centuries, is no longer productive and relevant. The skills and competences necessary for a quality life in the 21st century are often talked about in the educational space. The labor market basically declares what skills and competencies workers need without mentioning knowledge, sometimes considering education policy only as of the basis for a successful economy, so Young believes that the economy will never support knowledge-based school programs (Young, Lambert, Roberts, & Roberts, 2014). The European Union Recommendation on Key Competences for Lifelong Learning - A European Reference Framework published on 18 December 2006 identifies 8 key competencies (EU, Council Recommendation on Key Competences for Lifelong Learning, 2019), including several theories on competences. The authors try to classify competences and look for key competences. It also looks for meta-competencies that let you know what a person knows (Weinert, 2001). Knowledge-skills-attitudes are one of the most common basic formulas for competences, and experience-based learning is often emphasized as a starting point for competence acquisition. As well as the Rome Declaration, adopted by the leaders of the 27 Member States and the European Council, the European Parliament and the leaders of European Commission on March 25, 2017, pledges to create a “Union where young people get the best education and training and can study and find work across the continent” (EU, The Rome Declaration, 2017). Admittedly, many education researchers believe that “With a good education, today's students in the future should become job creators rather than job seekers on the labor market (Oganisjana, 2012). Many documents also noted the importance of modern knowledge, but there is a lack of conviction that everyone understands what is meant by “knowledge” in the same way. Educational sociologists raise the question of what knowledge is available to a pupil at school and who has the right to decide it. In this context, the term “Powerful Knowledge”

appears in 2007 and is being developed and promoted since 2009 by a professor of education Michael Young, emeritus professor of education Johan Muller. Since this term and its concept is fairly young, the problem is that it is not yet clearly defined. The goal of this paper is to conduct a literature review of the concept of 'powerful knowledge', so to be able to do this, the most important works by the Young and Muller about this concept over the last 10 years, as well as the views of opponents, were analyzed.

The basics of the Powerful Knowledge concept

The foundation of the concept of powerful knowledge (PK) goes back to the sociology of education when trying to answer questions like - what is knowledge and who has the right to have it, how we understand the relationship between knowledge and society.

First, the concept originates in the views of Emile Durkheim, a French sociologist, and pioneer of educational sociology, who says that knowledge is social - knowledge is rooted in reality and reality is social - knowledge is needed to understand the world to change it. Durkheim believes that we perceive the world differentiated by our thoughts and experiences, we differentiate knowledge according to how we see the reality of the world and intuitively feel that some knowledge is "better" than others - epistemic, morally, and ethically. Durkheim's works also provide a starting point for the separation of knowledge and experience as well as between theoretical and everyday knowledge. Durkheim's conclusion, which is also at the core of the PK concept, is that the progress of humanity is closely linked to specialized knowledge in the field (Durkheim, 1956). However, Young points out that not all specialized knowledge is powerful in the context of the concept he and his companion developed.

The concept of PK is also based on the idea of the British sociologist, a representative of the critical direction of education sociology and linguist Basil Bernstein on the different possibilities of different forms of knowledge, the cultural code and hierarchical knowledge structures he has developed. Bernstein examines the reproductive meaning of education - it adds value to certain knowledge and limits the field of who can determine which knowledge will be acquired. He also sees teachers and schools as power holders (Bernstein, 2000). Based on Bernstein's conclusions on knowledge differentiation, the authors of the PK concept distinguish between two boundaries: 1. Between subjects in school, and 2. between everyday knowledge and what is acquirable at school.

Young and Muller also refer to Vygotsky's notion of specialization or the differentiation of knowledge from experience that arose from the theory of human development. Vygotsky believed that the purpose of school curricula was to provide students with the opportunity to acquire theoretical knowledge in every

subject. Distinguishing theoretical knowledge from the pupils' previous life experiences was one of the central issues for Vygotsky, as was Durkheim (Young & Muller, 2016, p. 121). The authors also based their theory on the field theory of French sociologist Pierre Bourdieu (each field has its types of capital), and one of the capital is a cultural capital with education in the center (Bourdieu, 1997). The idea of the conventionality of capital theory has been used in analyzing the situation in the education system and the opportunities for improving quality.

Although the concept has old roots, the authors use a socio-epistemic view of knowledge, but it is a whole new way of thinking about it. The PK emphasizes the objective nature of knowledge, a value-free reality (Young & Muller, 2016, p. 116). Although it is precisely the lack of objectivity in the knowledge that researchers sometimes consider their weak spot. "All knowledge is situated knowledge, reflecting the position of the producer or knower, at a certain historical moment in given cultural context" (Lennon, 2010), (Alderson, 2019) The concept of powerful knowledge has been developed both as a sociological concept and as a curriculum principle and is being used by a growing cohort of researchers.

It first appears in Wheelahan's work (Wheelahan, 2007). The concept has gained interest among scholars as well as school leaders and other educational staff. EBSCO's Database on 27/01/2020 contains 503 articles on the keyword "powerful knowledge". Swedish scientists believe that PK should be developed as an analytical concept (Gericke, Hudson, Olin-Scheller, & Stolare, 2018). However, there are also critics who ask questions and doubts the usefulness of the PK- "what is it that puts the power in powerful knowledge? Why call the knowledge associated with specialist academic groups 'powerful'?" and points out that not everyone who uses the concept of PK has a common understanding of it, believes that the characterization of PK is entirely consistent with the existing term specialized knowledge, although it does not deny the positive aura and attractiveness of the concept (White, 2019). The concept of "Powerful knowledge" is based on two ideas: each field of science has the "best, most valuable" knowledge, and all decisions on knowledge in school curricula are based on differentiation that there are different types of knowledge (Young M., 2014)

Powerful knowledge as a curriculum principle. Authors of Powerful Knowledge Young, Muller, Lambert (Lambert, 2018), offer curriculum frameworks that prioritize knowledge in individual subjects. The PK starts with the idea of equal citizens with equal rights to knowledge; rights that should not be restricted by thinking abilities or motivation, ethnicity, class or gender. The curriculum should be considered as guaranteed equality based on the best knowledge or at least a gradual approach to its acquisition (Playfair, 2015). The authors emphasize the directions that can be found based on PK theory and school

programs: 1) power and knowledge in social theory, 2) power, knowledge and curriculum theory (Muller & Young, 2019), (White, 2019).

Power and knowledge in social theory. These concepts have been studied extensively individually, but their interconnection has led to a widespread debate among sociologists, psychologists, philosophers, and educators. Powerful knowledge is powerful because it provides the best insight into the natural and social world we have and helps us transcend our individual experiences (Young M., 2013), (Young & Muller, 2013). There is a lot of discussion and authors' explanations about the difference between "Powerful knowledge" and "knowledge of the power" (Muller & Young, 2019). The difference - knowledge as a superiority tool and knowledge that has power itself. The PK does not show power over students but gives power to them. It gives them a chance to think for themselves and do. PK is potentially available to all who acquire it, fundamentally democracy and social justice (Muller & Young, 2019, p. 3). This knowledge is not elitist. The comprehension of power in this concept linked to Potentia vs. Potestas. Mcfahn describes powerful knowledge as "right" and "unchallengeable", "pretty handy", "emancipatory" (Mcfahn, 2019).

Power, knowledge and curriculum theory. Young, thinking about the role of social differentiation in knowledge and the boundaries of knowledge, outlines three future scenarios for school programs:

1. Future - knowledge is a set of fixed, verifiable concepts, non-negotiable, an extension of the past.
2. Future - Recognizes that knowledge has social and historical roots, and the special needs of society are important. Interdisciplinary knowledge is becoming topical, subject boundaries are converging, and education is based on the student experience.
3. Future - Believes knowledge is created by specialists of the field, who continue to develop knowledge, therefore knowledge is faulty, debatable, variable. Believes that segregated subjects are the best way to give students access to 'powerful knowledge' which is a set of subject-based insights and pedagogical techniques that work together to allow all students access to the curriculum in a way that allows them to participate in meaningful learning (Young, Lambert, Roberts, & Roberts, 2014), (Lambert, 2013).

Young believes that PK should be the backbone of formal education, that it is time to restore the importance of knowledge, a central role in education (Young M., 2014). In his view, PK has independent content, free from the knowledge that students gain from their daily experiences, from the context in which they live in, they are academic, specialized in both acquisition and transmission, not every day. Young also distinguishes between knowledge and pedagogy. School curricula must have the knowledge to which everyone has the

same rights and opportunities, but the experience of pupils is related to pedagogy, how the teacher engages pupils and makes the program accessible. The point of the PK is to confirm that social interests do not replace what is important in terms of education (Muller & Young, 2019). Deng (Deng, 2015), disagrees, believing that we cannot leave didactics unexamined- how knowledge is selected and transformed into curriculum content, what educational potential content has, and how such potential can be disclosed or unlocked for the development.

5 types of PK (Maude, 2015): 1. Knowledge that provides students with ‘new ways of thinking about the world 2. Knowledge that provides students with powerful ways of analyzing, explaining and understanding. 3. Knowledge that gives students some power over their knowledge. 4. Knowledge that enables young people to follow and participate in debates on significant local, national and global issues 5. Knowledge of the world.

Powerful knowledge is not distributed unequally (Young & Muller, 2016, p. 117). This is a question of the place for different subjects in school curricula. At the moment, they place significant emphasis on STEM subjects. These subjects provide greater opportunities for transforming, anticipating, and managing the material world, but are they the only ones? The balance has been in favor of STEM since the Science Revolution of the 18th century.

Scientists also discuss with Young and Muller the goals and objectives of schools, putting knowledge in opposition to well-being and happiness, believing that well-being and high-quality knowledge are two separate things (Cigman, 2012). Others, such as (White, 2018), are reluctant to agree that PK is placed at the center of school curricula, believing that practices and other forms of knowledge should not be overlooked. As there is as yet no clear and unambiguous definition of PK, the range of unanswered questions is still quite wide, but at the same time, they also help the concept to develop.

Powerful knowledge attributes. Young (Young, 2009), describes powerful knowledge as:

1. Distinct from common sense knowledge
2. Systematic
3. Specialized

This means that powerful knowledge can serve as a basis for generalization and thinking outside specific contexts or cases.

As mentioned above, PK is separated from everyday knowledge, teachers help pupils to take steps from their current cognition towards very specific ideas (Alderson, 2019).

PK is the result of systematic research, within well-defined disciplines with a well-defined focus, concepts that are interconnected, generalizable, and subdivided into subjects.

PK as a specialized knowledge is socio-epistemic formation. Mostly created in universities. The question of how to recontextualize the 'best' knowledge created in universities and offer it to school subjects is a pressing issue.

The author of the concept selects three PK attributes (Muller & Young, 2019):

1. Academic knowledge contains creativity, the possibility to expand with other contexts, if there is such knowledge, then there is potential to create something new, there are unpredictable opportunities
2. School subjects deepen students' understanding of the formation of knowledge in the relevant field of science. The courses must first give an idea of the structure of the subject before the admirers of the subject can generate new ideas.
3. Ability to generate new ideas, teachers need to know their subject well, be good leaders if the teachers are successful then the students will: be confident in the quality of judgment and understanding, their material and conceptual capabilities in the subject, aware that they have learned only a fracture, but now are able to make new connections, gain new information, generate new ideas.

White (White, 2019), sees them as one attribute - the ability to generate new ideas - presented in three different contexts. Also, White also adds that the ability to generate new ideas is not always PK, it is also possible to produce completely destructive ideas/thoughts.

Although not everything is clear in the context of PC - definitions, and terms, their content is in the process of being developed and shared -, and the debates among scientists continues, but it is clear that the return to the importance of knowledge has begun, likely to be called “powerful knowledge”.

Conclusions

1. The concept of Powerful Knowledge was developed by Young and Muller as an opportunity for school programs to create socially equal education from 2009 onwards.
2. Powerful knowledge is a socio-epistemic concept.
3. PK theory's roots can be found in the works of Durkheim, Bernstein, Vygotsky.
4. In the context of Curriculum theory, the questions of the meaning of “power” in the context of the PK and the place of PK in the curriculum are being considered.
5. In Young's views, there are three different scenarios for the existence of the school curriculum, with PK being the main one in the third scenario.
6. Important attributes of PK are systematic, specialization.

7. The concept of PK is still in development and there are many uncertainties to which other scientists point out.
8. The PK has gained recognition and popularity amongst both scientists and educational staff.

References

- Alderson, P. (2019, August). Powerful knowledge and the curriculum; contradictions and dichotomies. *British Educational Research Journal*, 17. DOI: <https://doi.org/10.1002/berj.3570>
- Bernstein, B. (2000). *Pedagogy, symbolic control and identity: Theory, research, critique*. Oxford: Rowman & Littlefield Publishers.
- Bourdieu, P. (1997). *Outline of a theory of practice, transl. by Richard Nice*. Cambridge: Cambridge University Press.
- Cigman, R. (2012). We need to talk about well-being. *Research Papers of Education*, (27), 449-462.
- Deng, Z. (2015). Michael Young, knowledge and curriculum: an international dialogue. *Journal of Curriculum Studies*, 723-732. DOI:10.1080/00220272.
- Durkheim, E. (1956). *Education and sociology*. New York: Free Press.
- EU. (2017, March 25). *The Rome Declaration*. Retrieved from European Council: <https://www.consilium.europa.eu/en/press/press-releases/2017/03/25/rome-declaration/>
- EU. (2019). *Council Recommendation on Key Competences for Lifelong Learning*. Retrieved from https://ec.europa.eu/education/education-in-the-eu/council-recommendation-on-key-competences-for-lifelong-learning_en
- Fadel, C., Bialik, M., & Trilling, B. (2015). *Four-Dimensional Education*. Boston: Center for Curriculum Redesign. DOI:978-1518642562
- Gericke, N., Hudson, B., Olin-Scheller, C., & Stolare, M. (2018, November). Powerful knowledge, transformations and the need for empirical studies across school subjects. *London Review of Education*, 3(16.), 428-444. DOI:10.18546/LRE.16.3.06
- Lambert, D. (2013, November 13). *The science teacher, science thinking resources and pedagogy*. Retrieved from https://www.youtube.com/watch?v=r_S5Denaj-k&t=53s
- Lambert, D. (2018). The road to Future 3: the case of geography. In D. Guile, D. Lambert, & M. Reiss (Eds.), *Sociology, curriculum studies and professional knowledge: New perspectives on the work of Michael Young* (pp. 132-145). London: Routledge.
- Lennon, K. (2010, June 23). Re-enchanting the World: The Role of Imagination in Perception. *Cambridge University Press*, 3(85), 375-389. DOI: <https://doi.org/10.1017/S0031819110000239>
- Maude, A. (2015). What is Powerful knowledge and can it be found in the Australian geography curriculum? *Geographical Education*, 28.
- Mcfahn, R. (2019, April 4). *So what is 'Powerful knowledge?'*.
- Muller, J., & Young, M. (2019, January). Knowledge, power and powerful knowledge revisited. *The Curriculum Journal*. DOI:10.1080/09585176.2019.1570292
- Oganisjana, K. (2012). *Uzņēmējspēja un uzņēmība*. Riga: Raka. DOI:9789984462356
- Playfair, E. (2015, August 19). What is powerful knowledge? Retrieved from <https://eddieplayfair.com/2015/08/19/what-is-powerful-knowledge/>
- UNESCO. (2019). *Futures of Education: learning to become*. Retrieved from

<https://unesdoc.unesco.org/ark:/48223/pf0000370801?posInSet=444&queryId=812a8f42-ff53-4977-ab6a-cd13641a499e>

- Weinert, F. (2001). Concept of competence: A conceptual clarification. In D. S. Rychen & L. H. Salganik (Eds.), *Defining and selecting key competencies* (pp. 45–65). Hogrefe & Huber Publishers.
- Wheelah, L. (2007). How competency-based training locks the working class out of powerful knowledge. *British Journal of Sociology of Education*, 28(5), 637-651. DOI:10.1080/01425690701505540
- White, J. (2018). The weakness of powerful knowledge. *London Review of Education*, 16(2), 325-335. DOI:10.18546/LRE.16.2.11
- White, J. (2019). The end of powerful knowledge? *London Review of Education*, 3(17), 429-438. DOI:10.18546/LRE.17.3.15
- Young, M. (2009). Education, globalization and the ‘voice of knowledge’. *Journal of Education and Work*, 22, 193–204.
- Young, M. (2013). Powerful knowledge: an analytically useful concept or just a ‘sexy sounding term’? A response to John Beck’s ‘Powerful knowledge, esoteric knowledge, curriculum knowledge’. *Cambridge Journal of Education*, 43, 195-198.
- Young, M. (2014, March 25). The curriculum and the entitlement to knowledge.
- Young, M., & Muller, J. (2013). On the powers of powerful knowledge. *Review of Education*, 229-250.
- Young, M., & Muller, J. (2016). *Curriculum and specialization of knowledge*. New York: Routledge. DOI:978-1-1138-81491-2
- Young, M., Lambert, D., Roberts, D., & Roberts, M. (2014). *Knowledge and the Future School*. London: Bloomsbury Academic. DOI:978-1-4725-3473-6

A STUDY ON THE CHANGES OF PERSPECTIVE ON DISCRIMINATION AMONG IN-GROUP PEERS IN ROMANIAN SCHOOLS

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Abstract. *Even if most of modern schools today value diversity, promote multiculturalism, enforce antiharassment policies, they still confront with discrimination and its negative effects. Irrespective of teachers' efforts to stop this phenomenon, discrimination will always manifest within classrooms through less or more aggressive forms as children have a tendency to reject what is different as a form of self-protection.*

The specific focus of this article is on different types of discrimination of in-group peers at gymnasium and high school. The two levels of school were selected as at these ages (11-15 for gymnasium and 15-19 for high school) students possess the cognitive and emotional capacities to deal with such experiences. The investigations performed led to the identification of discrimination based on social categories, financial conditions, ethnicity (mutual discrimination between Romanians and Gypsies/Roma), environment of provenance (rural versus urban areas), physical or mental disability, religion (the sample involved in the research are mostly orthodox, but there are also confessions with differences in religious beliefs and practice).

The present study has as starting point a research done in 2007, which put under the lens the main types of discrimination existing within classroom groups of peers from gymnasium and high school. The study was resumed in 2019 using the same criteria of investigation. We compared the two series of data and the results reflect the differences of students' perspectives on the same types of discrimination investigated at 12 years distance in time. As research methods we used the investigation based on questionnaire, the conversation and the systematic observation. The data gathered were processed using the SPSS analysis. The results of the research could be used to establish strategies of antidiscrimination based on respect and tolerance for diversity.

Keywords: *discrimination, ethnicity, financial conditions, in-group peers, social categories.*

Introduction

Discrimination refers to any differentiation, exclusion, restriction or preference on a series of criteria mentioned by the law (Portal legislativ, 2006; Consiliul Național pentru Combaterea Discriminării din România, 2019). Among

the criteria established according to the Romanian Laws are: ethnicity, language, religion, social category, personal beliefs, gender, sexual orientation, physical or mental disability, chronic noncontagious disease as well as any other criterion which leads to restriction, lack of recognition, use or exercise, in terms of equality, of the human rights and of the fundamental liberties in the political, economic, social, cultural or any other field of public life. Discrimination means explicit negative treatment or less favourable treatment for individuals or groups of people in similar contexts. Although in any democratic society discrimination is sanctioned, unfortunately, in real life discrimination still occurs. This happens because discrimination is based on stereotypes and prejudices that people are not always aware of (Actored, 2012).

In schools discrimination has negative impact on students: at individual level: low school performances, lack of motivation, sense of guilt, low self-esteem, stress, depression etc.; at group level: deficient communication, situations of conflict, encouragement of stereotypes, unproductive competition, delay in developing maturity of thinking (Mihăiescu, Putineanu, & Rîureanu, 2018). Students who deal with the humiliating experience of discrimination are affected in a multitude of forms. As a rule, they are reluctant to approach this problem in public even if, for some of them, discrimination has become a daily problem. Our paper aims to present a concrete situation of discrimination among the students from the schools included in the study so this information could help teachers identify more easily the different types of discrimination of in-group peers and helps them take the necessary measures. At the same time, the paper presents a change in students' opinions on the same types of discrimination investigated at 12 years distance in time.

Literature review

Discrimination based on social category starts from the hierarchical differences in society determined by three variables: economic (occupation, income, fortune), interaction (personal authority, social connections) and political (power). The concept of social category is connected to domination, power and conflict (Ferreol, 1998). Discrimination is, in this context, differential, unfair treatment towards persons because of their affiliation to a certain social group (Mihăiescu et al., 2018). In the same context, in schools children who come from families with good, respected professional position often discriminate those whose families have lower social positions.

Financial conditions are tightly connected to the concept of social category. As a source of discrimination it is often met in classrooms, as students involved in the study stated. Image is important for the gymnasium and high school students as, in their opinion, it gets or imposes respect from colleagues. It is

rendered through brand clothes, latest models of mobile phones, allowance, the cars used for transportation to and away from school. Children who come from families with poor financial background often become the target of their rich colleagues as they are ridiculed for their clothes, their less expensive personal objects etc.

At social level, discrimination generates a vicious circle in which different forms of discrimination lead to a pileup of situations in which a group is disadvantaged by another, to the increase of social distance between individuals, to the reinforcement of negative stereotypes, all of which contributing to further increase of the probability of discrimination (Proiect Dezvoltarea programelor de studii universitare și extinderea oportunităților de învățare pentru studenți și piața muncii, 2013). One of the criteria of discrimination with such mapping is that of environment of provenance of the students. Many students from rural areas in close proximity to towns are enrolled into gymnasium schools in towns. Parents think that education in urban schools is better than that in the rural schools and as such their children are provided with more chances of getting into a good high school. Furthermore, the enrolling into high school, the upper school level, is done according to the means obtained in the national exam taken after gymnasium graduation so that many children from rural environment get to attend town high schools. Irrespective of the school level, children who live in urban areas display adverse attitudes manifested through negative labelling and exclusion of the ones who come from villages.

Discrimination based on ethnic criterion represents a form of exclusion of a group because its members share a series of attributes derived from the peculiarities of their traditional culture that make them be regarded as inferior or less desirable in society (Mihăiescu et al., 2018). In Romania, although there are prejudices against Jews, Turkish, and Hungarians as some of the country's ethnic minorities, the group that seems to suffer more from discrimination is Roma. Research done by authorities and non-governmental organizations show that Rom identity is a social stigma as Gypsies (controversial term because it is quite often used with negative connotation) are associated with indolence, dirt and crime (Marin & Csonta, 2013). On the other hand, prejudices persist as many Roma refuse to get involved in social activities, refuse to get active on the labour market or to allow their children to attend school. However, in the recent years, thanks to the efforts of non-governmental organizations and Romanian authorities there has been some progress regarding a change of perspective on education. Schools throughout the country have organized formal and non-formal educational activities for the Rom adults and children and Roma had a rather good attendance. Teachers do their best to encourage Roma children to attend school in order to contribute, at least partially, to the dissolution of the vicious circle generated by lack of education, integration on the labour market and poverty

(Neagu, Dowden, & Macovei, 2010). In the area where the research was conducted the minority population is Roma. According to their customs, their children (especially girls) do not attend school for more than 5 to 6 years as they marry young. On the other hand, the majority population places great importance on the role of education for their children's future social and professional success and expect their children to undergo the whole system of education. The differences of culture between the two ethnicities lead to mutual distrust and disregard. Parents' attitude is mimicked by children. Both Romanians and Roma discriminate each other in classrooms.

Discrimination of people with physical or mental disabilities is based on fact that the standard of a "normal life" is not to have a disability of any kind. The accent is laid on disability, on what a person cannot do, instead of what the respective person can do. The effect of this perspective is segregation of these persons, especially those with mental disabilities. In Romania children with disabilities go to public schools. Although there is some reluctance towards them, teachers, as well as students make efforts to integrate them. The discussions in focus-groups showed that their discrimination is not caused by their disabilities, but because they become turbulent and interrupt the didactic activities (Neagu et al., 2010).

Discrimination based on religious criterion means the exclusion or rejection of a person or a group of persons because of their religious affiliation. In today's society, marked by numerous global conflicts, which encompass also religious reasons, this type of discrimination, is ever more present and its effects get more serious. In Romanian society religious tolerance is rather high and discrimination based on this criterion is contextual. In the group involved in our study religious discrimination makes reference to possible discrimination of people of religious affiliations other than those of the majority population, which is Orthodox Christian in our country (Neagu et al., 2010).

Methodology of research

The present study uses as starting point a research done in 2007, which put under the lens the main types of discrimination existing within classroom groups of peers from gymnasium and high school. The identification of such elements was based on theoretical background and focus-group discussions with students from both school levels. The study was resumed in 2019 using the same criteria of investigation: social categories, financial conditions, ethnicity, environment of provenance, physical or mental disability, religion. Descriptive analyses of the selected items were realized in order to determine a hierarchy in the two school levels, gymnasium and high school. The data provided in the two studies showed

if there had been any changes of perspective on discrimination within classroom peers at twelve years distance in time.

The participants. The sample for research was made of 200 students from Vrancea County, Romania, 100 from gymnasium and 100 from high school. The two levels of school were selected as at these ages (11-15 for gymnasium and 15-19 for high school) students possess the cognitive and emotional capacities to deal with such experiences. They were involved in the research on a voluntary basis.

The instrument of research. As research methods we used the investigation based on questionnaire, the conversation and the systematic observation. The respondents had to choose one of the following options of a five-step scale: (1) to a very low extent, (2) to a low extent, (3) to an average extent, (4) to a large extent, (5) to a very large extent.

Findings and results

For the descriptive analyses, we used SPSS software, the t-test for the independent samples.

Table 1 Means and Standard Deviation of Criteria of Discrimination in School

Items of	Gymnasium 2007	Gymnasium 2019
Social categories	4.62 (0.733)	4.68 (0.614)
Financial conditions	4.08 (1.322)	4.74 (1.178)
Ethnicity	4.16 (0.682)	3.82 (0.995)
Environment of provenance	4.82 (0.438)	3.92 (1.307)
Physical or mental disability	4.74 (1.126)	4.02 (0.892)
Religion	3.86 (1.525)	3.76 (1.080)

Source: Autors 2007, 2019

Table 2 Description of Hierarchy of Criteria of Discrimination in School

Rank	Gymnasium 2007	Gymnasium 2019
1.	Environment of provenance	Financial conditions
2.	Physical or mental disability	Social categories
3.	Social categories	Physical or mental disability
4.	Ethnicity	Environment of provenance
5.	Financial conditions	Ethnicity
6.	Religion	Religion

Source: Autors 2007, 2019

For the 2007 study on the indicators of discrimination among in-group peers in Romanian gymnasium schools the top three ranks were for environment of provenance (m = 4.82), physical or mental disability (m = 4.74), social categories

($m = 4.62$). Things changed 12 years later. Thus, the top three ranks for the same school level are for financial conditions ($m = 4.74$), social conditions ($m = 4.68$), physical or mental disability ($m = 4.02$). Since 2007 Romania joined EU which allowed access to various cultures and commercial diversification on our market. As a result children have been exposed to many temptations from clothing to informational technology. In the recent years children have associated image with trendy brand clothes, expensive school requisites, phones and tablets. Children who cannot afford such items become the target of their peers' discrimination. The social conditions in this context make reference to parents' professions and position in the social hierarchy. This indicator is tightly connected to the previous one, that is good social position equals financial security.

For physical or mental disability indicator there is quite a large difference between the means from 2007 study ($m = 4.74$) and the 2019 study ($m = 4.02$). This is due to, we believe, the inclusion policies developed over the years, which diminished teachers' and peers' reluctance to the presence of children with physical or mental disabilities in classrooms. On the other hand, the third rank in the 2019 hierarchy shows that there are still prejudices related to their slowing down the didactic process. The mean above 4 for this item shows that it is still perceived as a major criterion of discrimination, as it was 12 years earlier.

We used the T test for the independent groups to determine the differences of the opinions regarding the criteria of discrimination among in-group peers in Romanian schools. The significance level was set to 0.05. Starting from the significant differences from a statistical point of view among students' appreciations, we could state the relevance of the criteria of discrimination among in-group peers in Romanian schools in gymnasium school level in 2007 and in 2019. The analyses showed significant differences for three items (environment of provenance, physical or mental disability, financial conditions, $p < 0.05$). We registered statistically insignificant differences for three items (social category, ethnicity, religion), indicating the convergence of opinions of the students from gymnasium school level.

For gymnasium, starting from the statistically significant differences, the place of provenance ranked first ($m = 4.82$) in the 2007 study, whereas it ranked 4th in the 2019 study ($m = 3.92$). Students involved in the study explained that in the recent years many children from rural areas have been transferred to schools from the urban areas as parents consider that schools in town have better teachers and as such their children have more chances to acquire good education.

Table 3 Means and Standard Deviation of Criteria of Discrimination in School

Items of	High school 2007	High school 2019
Social categories	4.46 (0.613)	4.58 (0.538)
Financial conditions	4.94 (0.935)	4.86 (0.756)
Ethnicity	4.66 (1.118)	3.72 (1.070)
Environment of provenance	3.94 (0.856)	3.64 (0.995)
Physical or mental disability	3.52 (0.838)	3.32 (0.960)
Religion	3.50 (0.678)	4.28 (1.102)

Source: Autors 2007, 2019

Table 4 Description of Hierarchy of Criteria of Discrimination in School

Rank	High school 2007	High school 2019
1.	Financial conditions	Financial conditions
2.	Ethnicity	Social categories
3.	Social categories	Religion
4.	Environment of provenance	Ethnicity
5.	Physical or mental disability	Environment of provenance
6.	Religion	Physical or mental disability

Source: Autors 2007, 2019

For the 2007 study on the indicators of discrimination among in-group peers in Romanian high schools the top three ranks belonged to financial conditions ($m = 4.94$), ethnicity ($m = 4.66$), social category ($m = 4.46$). In 2019 the ranking changed: financial ($m = 4.86$), social conditions ($m = 4.58$), religion ($m = 4.28$). The first rank for both studies is for financial conditions, which demonstrates teenagers' interest for the benefits they can get for their image from their parents' financial situation. This is the reason for which teenagers with poor financial background are often discriminated. Ethnicity as source of discrimination moved from the second rank in 2007 ($m = 4.66$) down to the fourth rank in 2019 ($m = 3.72$). The explanation lies in the fact that over the last 12 years there have been developed social and school programmes that targeted Gypsies/Roma population (as the minority population in the area where the research was done). The increased attendance of the Roma in schools made some of the children of both ethnicities more tolerant, whereas others maintained their racist opinions.

The second rank for the 2019 study is for social conditions. The causes are the same as in gymnasium, according to the students participating in the study. Although ranked last in the 2007 research, religion as source of discrimination moved up to the third rank in the 2019 research. The emphasis laid by the media on the specifics of different religions and the association of terrorism and intransigence with certain religions made this topic become source of discrimination in schools.

At high school level, statistically significant differences were registered for 2 items: ethnicity and religion. For ethnicity the mean was higher in 2007 ($m = 4.66$) than in 2019 ($m = 3.72$), whereas for religion the mean was lower in 2007 ($m = 3.50$) than in 2019 ($m = 4.28$).

Conclusions

Our study indicates the main sources of discrimination among in-group peers in the Romanian school, at gymnasium and high school levels. It also emphasizes a change of perspective on discrimination among students over a period of 12 years. 2007, the year when the first study was conducted, is the year when Romania joined EU. It is the year that triggered different changes that affected all aspects of social, economic, cultural and political life. Thus, in 2007, according to the opinions of the students' involved in the research, environment of provenance, physical or mental disability, social categories were perceived as main sources of discrimination among in-group peers for gymnasium level, whereas financial conditions, ethnicity, social categories were considered as main sources of discrimination for high school. Over time there have been many changes that can also be seen in the alteration of people's perspective on different negative issues of social life. Thus in 2019, according to the opinions of the students involved in the research, financial conditions, social categories, physical or mental disabilities were perceived as major sources of discrimination for gymnasium, whereas for high school, students acknowledged financial conditions, social categories and religion as main sources of discrimination among in-group peers.

Our study draws attention on the importance of good knowledge of the criteria of discrimination in classrooms and helps teachers prefigure the risks and the social and individual effects of discrimination. The data gathered might be of use for the teachers who should be able to adapt their classroom management strategies so that they could promote nondiscrimination achieved through tolerance and reinforcement of positive relationships within the group.

Moreover, the results of the study may be used as teaching materials in classrooms so as students can better grasp the concept of discrimination with its forms of manifestation, with its criteria and their identification in everyday life. In an interactive approach students could be provided with the opportunity to debate points of view on the matter, to develop role plays, all resulting in better awareness of this issue, in promoting tolerance and positive integration. Thus, if everyone participating in the didactic process is aware of the magnitude of discrimination, then efficient changes can be made to reach one of the global principles for human rights friendly schools: non-discrimination and inclusion (Amnesty International, 2012).

References

- Actored. (2012). *Ghid de bune practici pentru aplicarea principiului nediscriminării în activitățile didactice*. Retrieved from https://www.actored.ro/file_comp/documente/ActorED_Ghid_de_bune_practici.pdf
- Amnesty International. (2012). *Becoming a human rightsfriendly school. A guide for schools around the world*. London: Peter Benenson House.
- Consiliul Național pentru Combaterea Discriminării din România. (2019). *Profil* [Datafile]. Retrieved from <https://cncd.ro/profil>
- Enachi-Vasluianu, L., & Mălureanu, F. (2007). *A Study about discrimination*. Not published.
- Gilles Ferreol. (1998). *Dicționar de sociologie*. Iași: Polirom.
- Marin, A., & Csonta, A. (2013). *Discrimination of Roma Communities. Romania National Report*. București: NET KARD Project.
- Mihăiescu, O., Putineanu, D., & Rîureanu, C. (2018). *Discriminarea pe înțelesul tuturor*. București: Asociația pentru Incluziune Socială Proetnica.
- Neagu, M., Dowden, G., & Macovei, O. (2010). *Respect pentru diversitate*. București: British Council România.
- Portal legislativ. (2006). *Legea Nr. 324* [Datafile]. Retrieved from <http://legislatie.just.ro/Public/Detalii DocumentAfis/73606>
- Proiect Dezvoltarea programelor de studii universitare și extinderea oportunităților de învățare pentru studenți și piața muncii. (2013). *Discriminarea și strategii antidiscriminatorii* [Datafile]. Iași: Fundația solidaritate și speranță. Retrieved from http://dpus.usv.ro/docs/A6/A6.4_continut_discriminarea_si_strategii_antidiscriminatorii-final.pdf

МОДЕЛЬ НЕПРЕРЫВНОГО ПРОФЕССИОНАЛЬНОГО РАЗВИТИЯ ПЕДАГОГОВ ДОПОЛНИТЕЛЬНОГО ОБРАЗОВАНИЯ: ОПЫТ ПРОЕКТИРОВАНИЯ В ПРОСТРАНСТВЕ РЕГИОНА

The Model for Continuous Professional Development of Additional Education Teachers: Design Experience in the Regional Domain

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Abstract. *The mainstreaming of the additional education for children requires the training of the teaching staff capable of effectively developing the creative urges and gifts of pupils through the free choice of diverse activities. Additional education specialists should not only professionally know and have a good command of their subject, which supports children's hobbies, but they shall also act as a catalyst for the development of the individual's motivational potential, professional self-determination and as a long-term result they shall modify the innovative resource of society. Nevertheless, a teacher being a competent specialist in a certain subject domain such as theater and musical performance, aircraft modeling and robotics, powerlifting and football may not have sometimes the required knowledge and skills for the child's personality education and for designing expected educational results.*

The need for the scientific and methodological support to the professional development of the teaching staff in the additional education system has evoked the decision to elaborate a conceptually new model of training for this category of specialists, thus, having made it the purpose of the study. The novelty of the study was the fact that the said model was based on the personified nature of the choice of the teachers' educational trajectory. It appeared to be a common multi-level structure combining diverse fields and forms of advanced training and retraining of additional education specialists. In addition to design and modeling methods there were applied in the study the methods of empirical research, interrogation and questioning, data analysis and generalization. The elaborated and implemented model for supporting the professional development of the teaching staff enabled to systematize and structure the training of additional education specialists in the regional domain. The practical relevance of the model for the continuous professional development was determined by its possible use also in the post-graduate education in another territory.

Keywords: *additional education teachers, design, level approach, professional development model.*

Введение *Introduction*

Сфера дополнительного образования в образовательном ландшафте страны занимает в последние годы все более устойчивые и важные позиции. И целый ряд актуальных документов современной образовательной политики и пристальное внимание государственных структур и рост инновационных проектов в данной сфере позволяет рассматривать ее как значимую и перспективную в контексте развития человеческого потенциала. Как никогда своевременно встает вопрос о необходимости актуализации подготовки педагогического корпуса для решения поставленных перед дополнительным образованием задач. Однако констатируется противоречие между запросами и потребностями общества и государства на сферу дополнительных образовательных услуг и готовностью педагогов своевременно отвечать на новые посылы к качеству и организации подобных услуг. Часто накопленный педагогический опыт – передовой в прежние годы, но сегодня теряющий актуальность – перечеркивает желание рассмотреть свое профессиональное предназначение с новых позиций. Кроме того, следует подчеркнуть отсутствие системного характера к подготовке и обучению педагогических кадров данной сферы: немногие высшие учебные заведения могут похвастаться дипломированными специалистами, готовыми трудиться в системе дополнительного образования.

Отсутствие организационных, содержательных, методических, информационных условий для обучения и повышения квалификации педагогов дополнительного образования, а также их собственная неготовность к осуществлению изменяющихся требований образовательной системы привело к кадровому дефициту и стало одной из основных проблем в выполнении социального заказа по выращиванию педагога «нового типа». Возникла необходимость в пересмотре и видоизменении всей картины научно-методического сопровождения и образовательной поддержки данной категории специалистов. Проблема, решаемая данным исследованием, заключалась в отсутствии модельных представлений о системе постдипломного обучения педагогов, в полной мере отражающей современные требования к преобразованию сферы дополнительного образования детей и взрослых. Целью исследования являлась разработка и апробация модели профессионального развития педагогов дополнительного образования детей и взрослых, ее научно-методического сопровождения в образовательном пространстве региона.

Новизна и практическая значимость *Novelty and Practical Relevance*

Была спроектирована и реализована новая многоуровневая модель непрерывного профессионального развития педагогических кадров сферы дополнительного образования, которая учитывала образовательные потребности каждого педагога и актуализировала самостоятельность в построении индивидуальной траектории своего развития. Составляющими модели являлись вновь создаваемые и реализуемые дополнительные профессиональные программы переподготовки и повышения квалификации (разнообразных форматов и учебных объемов) и учебно-методические комплексы, обеспечивающие поэтапный и непрерывный педагогический рост.

В ходе создания модели была выявлена и обоснована необходимость представленности основных уровней обучения педагогических кадров (уровень переподготовки (до-уровень), начальный, базовый, углубленный, персонифицированный и дополнительный), определены условия формирования организационной рамки системы повышения квалификации данной категории специалистов. Экспериментально подтверждена эффективность модели непрерывного профессионального развития педагогов дополнительного образования в системе постдипломного образования как максимально учитывающей исходный уровень подготовки специалистов и предполагающей возможность проявления субъектной активности в проектировании образовательного маршрута.

Практическая значимость представляемой разработки заключается в совершенствовании практики дополнительного профессионального образования в условиях формирования готовности педагогов дополнительного образования к введению профессионального стандарта. Предложенная многоуровневая модель обучения специалистов в системе постдипломного образования может служить ориентиром при разработке иных личностно-ориентированных технологий повышения квалификации педагогов сферы дополнительного образования различных направленностей и позволяет определять концептуальные подходы к проектированию содержания и организационных форм профессионального развития педагогических кадров.

Обзор литературы *Literature Review*

Автор исследования опирался на следующие теории обучения взрослых: теорию непрерывного образования взрослых (Ignatieva &

Tulupova, 2015; Kalinnikova, 2019 et al.); теорию профессионального развития педагога (Vershlovsky, 2013; Gromkova, 2015; Ignatieva, 2017; Slastenin, 2012; Feldshtein, 2005).

Также изучались положения психологической антропологии о становлении собственно человеческого в человеке в пределах его онтогенеза и профессиогенеза, о развитии человека в качестве субъекта деятельности (Brushlinsky, 2016; Zeer, 2009; Petrovsky, 2008; Slobodchikov & Isaev, 2013); методологические подходы - деятельностный, где личность рассматривается как субъект деятельности, которая сама, формируясь в деятельности и в общении с другими людьми, определяет характер этой деятельности и общения (Leontiev, 2005; Rubinshtein, 2019; Ananiev, 2016 et al.) и андрогогический подход, определяющий содержательную, процессуальную специфику задач повышения уровня образования взрослых людей и выявляющий особенности профессионального развития педагога (Vershlovsky, 2013; Zmeyov, 2015; Zmeyov, 2017; Novikov, 2015).

Отдельно следует подчеркнуть позицию учёных относительно необходимости постановки и выполнения задачи заказа на нового профессионала, а также «анализа кадрового потенциала, построения новых форм, методов и содержания подготовки ...педагогического персонала в системах кооперации «образование – наука - практика» (Ignatieva & Tulupova, 2015). Кроме того, исследовалась проблема персонификации образования (Bespalko, 2015; Galkina, 2011; Kondratiev, 2010), что позволило сделать вывод об отсутствии однозначной трактовки. Персонифицированный подход в образовании в большей степени опирается на концепцию персонификации (Orlov, 2002; Orlov & Orlova, 2011) и предполагает ориентацию образования на конкретную личность, её интересы и потребности, на субъектный опыт.

Исследований, посвященных разработке моделей сопровождения непрерывного профессионального развития педагогических кадров *сферы дополнительного образования* в контексте нового социального запроса до настоящего времени не было.

Методология *Methodology*

Начальный этап исследования базировался на *сборе и оценке* исходных данных относительно существующих направлений и форм обучения специалистов дополнительного образования в системе повышения квалификации на данной территории. Объектом исследования выступила система непрерывного образования педагогов дополнительного

образования образовательных организаций Нижегородской области. Государственные организации дополнительного образования представили аналитические материалы, включающие в себя сведения относительно курируемых направленностей дополнительного образования и видов деятельности по ним, количественный состав обучаемых педагогов по данным направленностям, наименования реализуемых образовательных программ повышения квалификации и их учебный объем, а также количество специалистов, прошедших обучение по данным программам за последние три года. Кроме того материалы включали в себя анкету-исследование, включающее следующие вопросы:

- Существует ли, на ваш взгляд, на нашей территории *единая модель и единые подходы* повышения квалификации специалистов дополнительного образования? (да/нет) Если да, опишите (назовите) их.
- Каков *целевой ориентир* повышения квалификации специалистов дополнительного образования в настоящее время, на Ваш взгляд?
- В чем заключается *актуальность* обучения специалистов курируемых направленностей дополнительного образования в контексте нового социального заказа, на Ваш взгляд?
- Что является, на Ваш взгляд, наиболее *важным для специалистов курируемых направленностей* дополнительного образования при повышении квалификации?
- Каковы главные *проблемы* в повышении квалификации специалистов дополнительного образования, на Ваш взгляд?
- Что бы Вам хотелось *изменить в системе повышения квалификации* специалистов дополнительного образования?
- Исходное исследование констатировало отсутствие единой модели и единых подходов в повышении квалификации специалистов дополнительного образования (свыше 80% респондентов подтвердили вывод об отсутствии *единой модели и единых подходов* обучения специалистов данной сферы, остальные сомневались и высказывали неопределенные суждения о ее наличии), а также отсутствие целостной системы научно-методического сопровождения обучения данной категории специалистов на разных уровнях. В качестве *целевого ориентира* назывались: развитие профессиональной компетентности педагогов через организованное методическое сопровождение; обеспечение теоретической и практической готовности педагогов к введению новых профессиональных стандартов; повышение профессиональной компетентности педагога и пр. *Актуальность*

обучения специалистов определялась необходимостью создания новой стратегии развития дополнительного образования, выполнением законодательства в части необходимости повышения квалификации педагогических работников и др. В числе главных *проблем* выделялись низкий уровень мотивации педагогов в повышении профессиональной компетентности и отсутствие системы последствия обучения на местах работы. Наконец, на вопрос об *изменениях в системе повышении квалификации* специалистов дополнительного образования, ответы включали пожелания актуализации *индивидуального подхода; дифференциации в комплектовании учебных групп; прогнозирования большей персонификации* при разработке модели сопровождения профессионального развития педагогов. Кроме того, применялись методы эмпирического исследования (изучение литературы, официальных нормативных документов по организации дополнительного образования, изучение и обобщение педагогического опыта).

Исходя из начального этапа исследования, была выявлена необходимость создания системы *непрерывного* повышения квалификации специалистов дополнительного образования, ядром которой бы выступала модель непрерывного профессионального развития педагогических кадров сферы дополнительного образования.

«Выращивание» модели включало в себя несколько основных фрагментов: информационно-подготовительный (через зональные семинары-совещания, вебинары, конференции и пр.); организационно-исполнительский (разработка новых программ повышения квалификации, проведение рабочих встреч, согласование графиков и форм реализации межкафедральных модулей и пр.); рефлексивно-корректирующий (анализ результативности многоуровневого обучения педагогов, внесение корректив и дальнейшее «движение» модели). Новая модель сопровождения непрерывного профессионального развития педагогических кадров включала в себя несколько уровней обучения; выбор каждого уровня обуславливался наличным образованием педагога, его профессионально-личностными желаниями и дефицитами, потребностями работодателя в актуализации тех или иных направленностей дополнительного образования в рамках развития организации в целом.

Для специалистов, которые не имели педагогического образования, но обладали опытом и желанием работать с детьми, предусматривался *уровень переподготовки* (как *до-уровень*); образовательная программа включала несколько необходимых к прохождению сессий и итоговую аттестацию с получением диплома государственного образца. *Начальный* уровень был

ориентирован на специалистов дополнительного образования, вступающих в должность, он был представлен образовательной программой повышения квалификации «Школа молодого педагога», которая реализовывалась в очно-заочной форме обучения. Следующий - *базовый* - уровень обучения предлагался для освоения педагогам, желающим повысить компетентность в *конкретной направленности* дополнительного образования (естественно-научной, социально-педагогической, художественной, технической и пр.). Еще один – *углублённый* - уровень предполагал развитие умений педагогов проектировать дополнительную общеобразовательную общеразвивающую (или предпрофессиональную) программу – как базисный элемент дополнительного образования. Осуществление данного уровня происходило через реализацию межкафедральной образовательной программы повышения квалификации, при этом ряд учебных модулей организованы предметными кафедрами института с ориентацией на направленность дополнительного образования слушателей текущих курсов. Итогом прохождения данного уровня являлась презентация вновь разработанных дополнительных общеобразовательных программ в рамках областной научно-методической конференции, одновременно формировался информационно-методический банк нового педагогического опыта. Другой уровень - *персонафицированный* – способствовал мотивации педагога на создание индивидуального образовательного маршрута с выбором содержания, сроков освоения и результатов обучающей программы через включение в *накопительную* систему повышения квалификации. Наконец, предполагался еще *дополнительный* уровень обучения, он был представлен тематическими стажировками и мастер-классами от педагогов-профессионалов и экспертов в данной сфере. Стажировка могла являться и самостоятельной учебной единицей и входить в состав более объемного образовательного маршрута (напр., в накопительную систему).

Самой очевидной для педагога являлась маршрутизация «по вертикали» – от первого до последнего уровня обучения, однако ему предоставлялась возможность осуществления выбора любого уровня повышения квалификации (напр., при необходимости разработки новой дополнительной образовательной программы педагог мог подать заявку на соответствующий уровень обучения). Следует отметить, что в рамках реализации данной модели повысили квалификацию и иные специалисты дополнительного образования – методисты, педагоги-организаторы и руководители организаций дополнительного образования.

Апробация модели сопровождения непрерывного профессионального развития педагогических кадров сферы дополнительного образования проходила в течении двух лет, в процессе ее осуществления и по ее окончании проводились текущие и итоговые мониторинговые процедуры,

включающие наблюдение за развитием мотивации слушателей курсов, изучение и анализ результатов обучения, а также учет реализации индивидуальных потребностей педагогов в процессе повышения квалификации.

Результаты исследования *Results of the Study*

Представляется верным отражение результатов исследования в количественных и качественных критериях. Итак, за два года апробации исходного варианта модели сопровождения непрерывного профессионального развития педагогических кадров сферы дополнительного образования было обучено свыше 1370-и специалистов дополнительного образования; разработано и реализовано шесть новых модульных образовательных программ повышения квалификации, в том числе, межкафедральные; в обучении специалистов дополнительного образования принимали участие девять кафедр института и пять областных Центров дополнительного образования.

Проведенное комплексное исследование позволило влиять на формирование у педагогов способности к проектированию индивидуального образовательного маршрута, что не только придавало смысловую направленность, открытость и целостность всей логике обучения педагогов как активных субъектов своего развития, но продуцировало постепенный переход к последующему самообразованию и обуславливало возможность самоорганизации личностного образовательного пространства.

Таблица 1. Организационная структура модели непрерывного профессионального развития педагогов дополнительного образования, реализуемой в 2017-2018 гг.
Table 1 Organizational Structure of the Model for the Continuous Professional Development of Additional Education Teachers Implemented within 2017-2018

Уровни подготовки// организаторы	Дополнительные профессиональные программы переподготовки и повышения квалификации (ДПП ПК)// формы обучения// учебный объем	Категория специалистов дополнительного образования// педагогический стаж
До - уровень// Нижегородский институт развития образования (НИРО)	Дополнительная профессиональные программа переподготовки «Педагогика дополнительного образования»// Форма обучения: очно-дистантная // 250 ч.	Специалисты организаций дополнительного образования, не имеющие педагогического образования// стаж работы - до 1-го года.
Начальный уровень// НИРО	ДПП ПК «Школа молодого педагога»// Форма обучения: очно-дистантная// 108 ч.	Педагоги дополнительного образования, вступающие в должность// стаж работы - до 3-х лет.

Базовый уровень // областные Центры дополнительного образования	Квалификационные курсы и проблемно-тематические семинары по <i>направленностям</i> дополнительного образования// Форма обучения: очная// 72 ч.	Педагоги дополнительного образования, <i>углубляющие компетенции в конкретной направленности</i> // стаж работы - свыше 3-х лет
Углубленный уровень // <i>НИРО</i>	ДПП ПК « <i>Проектирование дополнительных образовательных программ инновационного формата</i> » (межкафедральная)// Форма обучения: очная// 108 ч.	Педагоги дополнительного образования, <i>повышающие квалификацию</i> // стаж работы - свыше 5-и лет.
Персонифицированный уровень // <i>НИРО</i>	ДПП ПК по <i>индивидуальному маршруту</i> (межкафедральная)// Форма обучения: очно-дистантная// 108 ч.	Педагоги дополнительного образования, <i>прошедшие обучение</i> на предыдущих уровнях подготовки// стаж – свыше 7-и лет.
Дополнительный уровень // <i>НИРО</i>	Тематические стажировки, мастер-классы профессионалов и экспертов сферы дополнительного образования// Форма обучения: очная// 18-36 ч.	Педагоги дополнительного образования, <i>повышающие квалификацию</i> // стаж работы – свыше 7-и лет.

Дополнительная профессиональная программа выступила *базовым организационным элементом модели* сопровождения непрерывного профессионального развития педагогических кадров дополнительного образования. Апробация модели позволяет сделать вывод о необходимости замены дополнительного уровня (как близкого по содержательному и организационному наполнению к индивидуальному образовательному маршруту) на *высший уровень* – как введение в образовательный процесс команды дублёров – педагогов-практиков, успешно реализующих андрогогические функции. Формы освоения образовательных программ повышения квалификации представляется возможным расширить и ввести интенсивное обучение, экстернат, смешанное обучение, а также консультационный режим освоения программ и др., при этом актуализировать разработку программ в сетевой (и дуальной) форме реализации. Педагоги дополнительного образования при вхождении в модель могли осуществлять выбор формата дополнительной профессиональной образовательной программы, уровня ее освоения, сроков и содержания. Наконец, при дальнейшем функционировании модели непрерывного профессионального развития педагогических кадров дополнительного образования можно будет прогнозировать возможности для неформального образования педагогов, предусмотрев создание проектов саморазвития и самоорганизации.

Выводы и предложения *Conclusions*

Одной из задач регионального проекта «Успех каждого ребенка» (как составляющей Национального проекта «Образование») является создание целевой модели развития региональной системы дополнительного образования детей, для чего необходимо создать нормативно-правовые, организационные и методические условия. Представленная и апробированная модель профессионального развития педагогов дополнительного образования позволит результаты раскрытия кадрового потенциала экстраполировать на работу творческих объединений самых разных направленностей (физкультурно-спортивных, туристско-краеведческих, художественных, технических и пр.), а также будет способствовать обновлению содержания дополнительного образования детей и взрослых в соответствии с вызовами времени.

Целостность профессионального развития педагогов должна поддерживаться *едиными* базовыми основаниями в пространстве региона: ценностно-целевое основание - посредством осуществления стратегем актуальной образовательной политики, содержательное основание – через требования профессиональных педагогических стандартов, «инструментальное» основание – с помощью создания новых образовательных технологий (событийно-деятельностных, дуальных, проектных, проблемно-ситуационных, оценочных и пр.), организационное основание – проектированием системной подготовки и повышения квалификации специалистов дополнительного образования.

Перспективы дальнейшей реализации модели непрерывного педагогического развития видятся в формировании единой системы профессионально-личностного роста специалистов дополнительного образования в пространстве региона.

Summary

A new multi-level model for the continuous professional development of the teaching staff in the field of additional education was designed and implemented, which took into account educational needs of each teacher and updated the independence in constructing the personalized trajectory of its development. During the said model creation, the need was identified and substantiated for the representation of the following main training levels for the teaching staff (retraining, beginner, basic, advanced, personified and additional levels), the conditions were determined for the formation of the organizational framework of the continuous education system for this category of specialists. The effectiveness of the model was experimentally confirmed for the continuous professional development of additional education teachers in the postgraduate education system (as one, which takes into account to the fullest the initial level of specialists' training and suggests the possibility for displaying

the subjective activity in the designing of a learning route). In the course of the model implementation the unified regional requirements to the academic program for an additional education establishment and uniform regional requirements to the structure and content of additional educational programs of general development for teachers were elaborated; the analytical “slice” of the teachers readiness for introducing a professional standard through the arrangement and holding of regional pedagogical readings was carried out.

The conducted study enabled to influence on the formation of the teachers' ability for designing an individual educational route starting from the entry to any level of the model and finishing with the choice of variable learning modules, teaching environments and forms of the participation in various scientific and methodological events. All that not only gave the semantic orientation, openness and integrity to the entire logic of training teachers as active subjects of their development but invariably caused the development of the self-reflection of various aspects in the professional activity, which, in turn, produced the gradual transition to the subsequent self-education and stipulated the possibility for the self-organization of the personal educational environment. The experience of designing this model is optimal when training the teaching staff of additional education, since this sphere is not so strictly regulated by educational standards and it suggests itself a regional approach which ensures the human right to the development and self-determination in the regional domain.

The proposed multi-level model for training specialists in the postgraduate education system may serve as a guideline in the elaboration of other personality-oriented technologies for the advanced training of additional education teachers with various orientations and enables to determine conceptual approaches to designing the content and organizational forms of the professional development of the teaching staff.

Литература **References**

- Ananiev, B.G. (2016). *A Man as a Subject of Cognition*. Saint-Petersburg: Piter.
- Bespalko, V.P. (2015). *Pedagogics and Advanced Learning Technologies*. Moscow: Academy.
- Brushlinsky, A.V. (2016). *Philosophy of Psychology*. Moscow: ROSSPEN.
- Feldshtein, D.I. (2005). *Psychology of Human Development as an Individual*. Moscow.
- Galkina, T.E. (2011). *Development of the Additional Professional Education System for Social Specialists Based on a Personalized Approach* Moscow: Perspective.
- Gromkova, M.G. (2015). *Androgogics: Theory and Practice of Adult Education: Manual for the Additional Professional Education System*. Moscow: UNITY-DANA.
- Ignatieva, G.I., & Tulupova, O.V. (2015). Additional Professional Education in Innovative Development of Adult Education. *Mediterranean Journal of Social Sciences*, 6, 178-186. Rerieved from <http://www.mcser.org/journal/index.php/mjss/article/view/8543>
- Ignatieva, G.A. (2017). Contensive-Activity-Related Context of Postgraduate Education of Academic and Teaching Staff: from Theory to Practice. Nizhny Novgorod, NIRO (RIED).
- Kalinnikova, N.G. (2019). Elements of Rapid-Foresight Technology in Elaboration of an Individual Life Strategy. *Work with the Future in the Context of Continuous Education*, 86-91
- Kondratiev, S.V. (2010). Personified Learning as a Method of Human Personality Development. *Educational Technologies*, 53, 3-13.

- Leontiev, A.N. (2005). *Activity. Consciousness. Personality*. Moscow: Smysl, Academy.
- Novikov, S.G. (2015). Strategy of the Russian Education Development in the Epoch of “Sea-Changes”. *Professional Education in Modern World*, 1(16), 26-33.
- Orlov, A.B. (2002). *Psychology of the Personality and Human Essence: Paradigms, Projections, Practices*. Moscow: IC Academy.
- Orlov, A.B., & Orlova, N.A. (2011). Individuality vs. Individuum: as a Vital Issue of Contemporaneity. *Psychology World (Mir Psichologii)*, 1, 32–44.
- Petrovsky, A.V. (2008). *Psychology*. Moscow: IC Academy.
- Rubinshtein, S.L. (2019). *Foundations of General Psychology*. Moscow: AST.
- Slastenin, V.A. (2012). *Pedagogics*. Moscow: IC Academy.
- Slobodchikov, V.I., & Isaev, E.I. (2013). *Human Development Psychology. Development of Subjective Reality in Ontogeny*. Moscow: PSTGU.
- Vershlovsky, S.G. (2013). Adulthood as a Category of Androgogics. *Educational Issues (Voprosy Obrazovaniya)*, 2, 285- 297.
- Zeer, E.F. (2009). *Professional Development Psychology*. Moscow: Academy.
- Zmeyov, S.I. (2007). *Androgogics: Foundations of the Theory and Technology of Teaching Adults*. Moscow: PERSE.
- Zmeyov, S.I. (2015). Adult Education and Androgogics in Implementation of the Concept of Continuous Education in Russia. *Native and Foreign Pedagogics*, 3(24), 94-101.

НЕКОТОРЫЕ ПРОБЛЕМЫ ОБЕСПЕЧЕНИЯ КАЧЕСТВА МАТЕМАТИЧЕСКОЙ ПОДГОТОВКИ БУДУЩИХ УЧИТЕЛЕЙ НАЧАЛЬНЫХ КЛАССОВ

Some Problems of Quality Assurance of Mathematical Education of Future Primary School Teachers

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Abstract. *The article discusses the most significant problems of ensuring the quality of mathematical education of students studying in the direction of Pedagogical Education, profile "Primary Education". The presented results were obtained as a result of the analysis of theoretical studies published in Russian scientific sources, and on the basis of a survey of mathematics teachers and methods of teaching mathematics working in leading pedagogical universities of Russia. As a result of processing the obtained data, the identified problems are ranked by degree of relevance. In the article, the authors proposed possible solutions to the identified problems within the existing regulatory requirements on the basis of their personal experience in teaching mathematical disciplines at a teacher training university, as well as possible risks that arise when they are implemented. The authors present individual examples of the implementation of these ideas in the practice of teaching students at the Herzen State Pedagogical University of Russia.*

Keywords: *primary school teacher training, problems of quality assurance of mathematical education, requirements for mathematical education of future primary school teachers, quality of mathematical education.*

Введение

Introduction

Возрастание внимания общества к проблемам образования в целом и образовательной отрасли в частности перемещает понятие «качество образования» из области изучения и анализа узким кругом специалистов в сферу государственной политики, делает его предметом общественных, профессиональных и научных дискуссий как в России, так и в других странах (Трапitsin, Granichina, & Granichin, 2017; Bordovskij, Трапitsyn, & Granichina, 2008). Особое внимание исследователей приковано к изучению

проблем обеспечения качества подготовки будущих педагогов, в частности учителей начальных классов, поскольку результаты их профессиональной деятельности во многом определяют успешность обучения учащихся на всех последующих уровнях образования. Специфика подготовки будущих учителей для начальной школы заключается в необходимости овладения широким спектром знаний из различных предметных областей. Проблема качества подготовки выпускников в отдельной предметной области – содержание подготовки, объем знаний, их профессиональная направленность, возможность служить базой для дальнейшего профессионального развития – является предметом дискуссий и в педагогической среде, и среди представителей управленческих структур. В предлагаемой статье авторы на основе теоретического анализа научных публикаций, эмпирического исследования мнений преподавателей российских и зарубежных вузов, а также собственного профессионального опыта исследуют основные проблемы математического образования будущих учителей начальных классов и рассматривают возможные пути их решения.

Теоретические основы исследования *Literature overview*

В многочисленных исследованиях R.V. Barr, J. Tagg, (Barr & Tagg, 1995), V. Stewart (2011), B.R. Clark (1986), J. Buchanan (2011) и других исследователей (Bordovskij, Trapitsyn, & Granichina, 2008; Trapitsin, Granichina, & Granichin, 2017 et al.) отражены не только различные подходы к пониманию термина «качество образования», но и разнообразные взгляды на проблему управления качеством профессионального образования, в том числе контроль и оценку качества образования (Rottermanner et al., 2016). Сегодня в сфере образования широко проявляется тенденция к внедрению в образовательных учреждениях инфраструктуры обеспечения качества подготовки учащихся в контексте требований Болонской декларации (для системы высшей школы) и требований международных стандартов ISO 9001:2015, в основе которых методология TQM (Total Quality Management). В этой связи все более повсеместно распространяется информация об особенностях системы управления качеством образования, активно вовлекаются в процедуру обеспечения качества профессиональное сообщество, учащиеся и их родители, работодатели, общественность на уровне района/города/округа, государственных структур, т.е. все потребители образовательных услуг.

Ориентируясь на классическое определение качества, данное в стандарте ISO 9001:2015, качество *процесса подготовки педагогов* мы будем определять как степень его соответствия (потенциала, хода

реализации и результата процесса) заданным и предполагаемым запросам потребителей, в роли которых выступают студенты, их родители, преподаватели, работодатели в системе общего образования, государство и общество в целом (Granichina & Trapitsyn, 2007). При этом структуру качества процесса подготовки учителей мы определим традиционно:

- качество руководства процессом подготовки;
- качество преподавания;
- качество содержания преподавания;
- качество технологии обучения и воспитания;
- качество образованности личности.

К понятию качество образования принято относиться с позиций системного подхода, а это значит, что качество каждого из структурных элементов влияет не только на качество всего процесса в целом, но и на качество любого другого структурного элемента. Однако достижение качества каждого из элементов в отдельности не гарантирует качество системы в целом, а лишь является для этого необходимым условием. Таким образом, понятие качество подготовки педагога мы рассматриваем, с одной стороны, как *качество функционирования* образовательной системы с учетом имеющегося потенциала, а с другой, – *качество образованности личности* будущего учителя.

В связи с этим следует говорить о качестве потенциала, процесса и результата. Эти аспекты качества не существуют отдельно друг от друга, оказывая взаимное влияние и обеспечивая развитие и совершенствование каждого из компонентов. Поэтому можно констатировать, что потенциал процесса подготовки педагога задает условия для его реализации, а качество этого процесса во многом определяет качество результата – чем выше качество процесса, тем, очевидно, выше ожидаемый результат при равных прочих условиях. Вместе с тем при изменении требований к качеству результата перестраивается весь процесс профессиональной подготовки. Изменения порождаются рядом объективных и субъективных причин (Onischenko, 2011).

К объективным причинам следует отнести прежде всего изменения, которые происходят в психике младшего школьника и его социального окружения на микро-, мезо- и макро- уровнях, а также требования, которые предъявляют родители учащихся к системе общего образования. Именно мнение родителей относительно первоочередных задач начальной школы можно рассматривать как социальный заказ системе образования, отражающий основной смысл школьного образования – формирование потенциала личности – и ориентированный на достижение, в первую очередь, личностно значимых результатов обучения.

В свою очередь, подобные изменения и осознание необходимости реформирования собственно системы образования в России инициируют принятие новых стандартов начального общего образования, в которых фиксируется запрос государства и общества, определяя требования к организации и реализации образовательного процесса в начальной школе и его результатам, а также к условиям профессиональной деятельности учителя начальных классов.

В контексте представляемой статьи мы рассмотрим качество подготовки будущих учителей начальных классов в узком аспекте, сосредоточив свое внимание на анализе проблем обеспечения качества их математической подготовки, хотя, на наш взгляд, указанные ниже проблемы являются характерными и для предметной подготовки студентов педагогических вузов в других областях. При этом выявленные нами проблемы будут соотноситься со структурой качества образования, представленной выше.

В России требования к математической подготовке будущих учителей сформулированы в Федеральном государственном образовательном стандарте высшего образования (*Federal'nyj Gosudarstvennyj Obrazovatel'nyj Standart Vysshego Obrazovanija*, 2017). В соответствии с ним, в результате освоения программы бакалавриата выпускники должны обладать определенным набором компетенций, объединенных в три группы – общекультурные, общепрофессиональные и профессиональные компетенции. В частности, к общекультурным относят компетенции, связанные с математической подготовкой учителя: способность использовать естественнонаучные и математические знания для ориентирования в современном информационном пространстве, способность к самоорганизации и самообразованию. Наличие общепрофессиональных компетенций предполагает осознание социальной значимости своей будущей профессии, наличие мотивации к осуществлению профессиональной деятельности. Профессиональные компетенции определяются, в первую очередь, готовностью реализовывать образовательные программы по учебному предмету в соответствии с требованиями образовательных стандартов и т.д.

Однако многолетний опыт работы со студентами, обучающимися по профилю «Начальное образование», свидетельствует в ряде случаев о неполном соответствии уровня профессиональной подготовки будущих учителей в области математики установленным требованиям.

Выявление такого несоответствия в процессе обучения, а также во время прохождения студентами педагогической практики, привело к необходимости определения проблем, решение которых будет способствовать повышению качества математической подготовки будущих учителей начальных классов в частности и качеству профессионального образования в целом.

Эмпирическое исследование *Methodology*

Как было отмечено выше, качество процесса подготовки педагогов определяется степенью соответствия требованиям трех групп показателей – потенциала участников, хода реализации и результатов процесса.

Нами на основе собственного многолетнего опыта преподавания математических и методических дисциплин были выделены две группы проблем – проблемы потенциала студентов, обучающихся по профилю «Начальное образование» (группа А), и проблемы организации процесса преподавания математических дисциплин (группа В):

- А1. Низкая мотивация к изучению предметной области «Математика» у студентов, поступающих на факультеты по подготовке учителей для начальной школы.
- А2. Низкий уровень школьной подготовки в области математики.
- А3. Несформированность у студентов общеучебных умений: поиск, анализ и представление информации, постановка проблем, обоснование утверждений и др.
- В1. Недостаточная ориентированность содержания математических дисциплин в вузе на будущую практическую (профессиональную) деятельность.
- В2. Недостаточное количество учебных часов на освоение математических и методических дисциплин.
- В3. Недостаточное учебно-методическое обеспечение математических курсов в вузе.
- В4. Недостаточная согласованность математического и методического содержания образовательной программы подготовки будущих учителей начальных классов.
- В5. Недостаточная согласованность сроков освоения математических дисциплин и педагогической практики будущих учителей.
- В6. Нехватка квалифицированных преподавателей математики, понимающих специфику подготовки учителя начальных классов.

С целью определения актуальности выделенных проблем и выявления иных проблем, не отмеченных авторами, но являющихся важными для респондентов в плане повышения качества функционирования образовательной системы с учетом имеющегося потенциала, а также повышения качества образованности личности будущего учителя, было проведено анкетирование преподавателей математических и методических дисциплин вузов, имеющих большой опыт подготовки учителей начальных классов.

Исследование проходило в течение ноября-декабря 2019 года. В анкетировании, наряду с преподавателями кафедры начального

естественно-математического образования Российского государственного педагогического университета им. А.И. Герцена (г. Санкт-Петербург), приняли участие преподаватели из российских вузов – Пензенского государственного университета, Петрозаводского государственного университета, Самарского государственного социально-педагогического университета, Северного (Арктического) федерального университета им. М.В. Ломоносова (г. Архангельск), Ярославского государственного педагогического университета им. К.Д. Ушинского, а также Белорусского государственного университета (г. Минск) и Приднестровского государственного университета им. Т.Г. Шевченко (г. Тирасполь).

Все участники анкетирования являлись преподавателями математических и/или методических дисциплин (занимаемые должности: ассистент, преподаватель, старший преподаватель, доцент, профессор), имели стаж работы в вузе не менее 4 лет (средний стаж 29 лет).

В анкете были сформулированы указанные выше проблемы. Респондентам предлагалось: 1) оценить выраженность проблем в баллах от 1 до 10 (1 – не существенная проблема, 10 – наиболее существенная проблема), 2) сформулировать другие проблемы, существенные для обеспечения качества подготовки будущих учителей начальных классов в области математики.

Результаты исследования *Research results*

Ответы на первый вопрос позволили проранжировать выделенные проблемы по степени их выраженности. В таблице (Табл. 1) эти проблемы представлены в порядке убывания их значимости с указанием среднего балла, выставленного респондентами.

Анализ результатов анкетирования показал, что все респонденты признают значимость проблем потенциала студентов (проблем группы А). Эти проблемы заняли 1, 2 и 4 место по степени выраженности.

Говоря о потенциале студентов, следует отметить, что студенты, поступающие в педагогические вузы на профиль «Начальное образование», как правило, не отличаются особыми успехами в освоении математики в школе, не имеют достаточного опыта самостоятельного преодоления познавательных затруднений, характерного для учащихся, углубленно изучающих отдельные предметы. Вузовские преподаватели ограничены в возможностях прямого влияния на преодоление проблем группы А, поэтому целесообразно вести речь об учете этих проблем в практике обучения и корректировке отношения студентов к знаниям и предстоящей профессиональной деятельности.

Таблица 1. Оценка респондентами выраженности проблем, связанных с обеспечением качества математического образования в педвузе
Table 1 Respondents' assessment of the severity of problems related to ensuring the quality of mathematical education in the pedagogical University

Проблема	Средний балл при оценке выраженности проблемы (шкала от 1 до 10)	Место проблемы по степени ее выраженности
Низкая мотивация к изучению предметной области «Математика» у студентов, поступающих на факультеты по подготовке учителей для начальной школы (A1)	7,81	1
Несформированность у студентов общеучебных умений: поиск, анализ и представление информации, постановка проблем, обоснование утверждений и др. (A3)	7,52	2
Недостаточное количество учебных часов на освоение математических и методических дисциплин (B2)	7,29	3
Низкий уровень школьной подготовки в области математики (A2)	7,23	4
Недостаточное учебно-методическое обеспечение математических курсов в вузе (B3)	6,61	5
Недостаточная согласованность сроков освоения математических дисциплин и педагогической практики будущих учителей (B5)	5,80	6
Недостаточная согласованность математического и методического содержания образовательной программы подготовки будущих учителей начальных классов (B4)	5,61	7
Нехватка квалифицированных преподавателей математики, понимающих специфику подготовки учителя начальных классов (B6)	5,42	8
Недостаточная ориентированность содержания математических дисциплин в вузе на будущую практическую (профессиональную) деятельность (B1)	5,14	9

Проблема низкой мотивации к изучению математических дисциплин (A1), по нашему мнению, совпавшему с мнением респондентов, является наиболее значимой из проблем. Не останавливаясь на социальных аспектах недостаточной привлекательности в российском обществе профессии учителя, отметим, что одной из причин низкой мотивации является то обстоятельство, что не все студенты планируют работать по специальности, а обучение по профилю «Начальное образование» представляется им

наиболее легким способом получения диплома. Кроме того, бытовые представления о работе учителя начальных классов становятся причиной часто возникающего у студентов вопроса: «Зачем мы изучаем в вузе математику – для работы с детьми младшего школьного возраста мне вполне хватит имеющихся школьных знаний?». Утилитарный подход к образованию некоторой части студентов объясняется стремлением к минимизации усилий, что вполне объяснимо для людей, не привыкших к преодолению затруднений.

Проблема низкой мотивации, как и остальные проблемы потенциала студентов, не может быть преодолена только за счет организации обучения в вузе. Однако мы можем, с одной стороны, учитывать этот факт, с другой, – оказывать сильное влияние на повышение познавательных интересов студентов, в том числе, интереса к профессии учителя. Для работы в этом направлении могут быть использованы как организационные, так и методические средства. В качестве организационных средств в РГПУ им. А.И. Герцена используется модульная система обучения, позволяющая объединять математические и методические дисциплины, содержание которых тесно связано друг с другом, а также практики, на которых происходит отработка изучаемых в модуле тем. В частности, организация первых учебных практик в условиях модульной системы обеспечивает постепенное вхождение студента в урок, на этих практиках студенты получают возможность проведения отдельных фрагментов уроков по определенным темам под руководством преподавателей, и, следовательно, возможности для оценки важности знаний, определяемых дисциплинами модуля. В качестве методических средств влияния на повышение познавательных интересов в процессе изучения математических и методических дисциплин используются различные задания, связанные с освоением способов практической деятельности, доступных младшим школьникам, и переработкой собственного субъектного опыта (Sheremet'eva, 2008b). В частности, студенты знакомятся с решением геометрических задач на основе перегибания, на основе построений с использованием сетки, осваивают построения на местности (Sheremet'eva, 2008).

Проблема несформированности у студентов общеучебных умений (А3), как следует из ответов респондентов, является серьезным препятствием для дальнейшего обучения и, следовательно, для достижения требуемого уровня качества образования. Она служит причиной падения активности в учебной деятельности, снижения производительности учебного труда, мотивации обучения. Студент оказывается не в состоянии управлять процессом своего обучения. С целью корректировки сложившейся ситуации может быть предложено изменение формы

взаимодействия преподавателей со студентами в процессе обучения в сторону увеличения доли индивидуальной работы преподавателя со студентами. Основанием для такого общения может стать не только написание курсовых и выпускных квалификационных работ, но и выполнение студентами вариативных заданий, предлагаемых в рамках каждого учебного курса. Преподаватель в роли помощника, консультанта, наставника может направлять деятельность студента на поиск информации, проводить совместный анализ этой информации, показывать примеры обнаружения проблем и противоречий, нацеливать на проведение грамотных обоснований полученных выводов. В этом случае профессиональная позиция преподавателя заключается в умении создать условия для «открытой познавательной позиции» будущих учителей.

Проблема низкого уровня школьной подготовки в области математики (А2), хотя и была названа респондентами анкетирования четвертой по значимости, отнесена нами к одной из существенных проблем, препятствующих обеспечению качества образования будущих учителей. Печальным фактом является незнание и неприятие математического содержания будущими учителями начальных классов, которое обнаруживается у значительной части студентов. Многие из них плохо владеют простейшей техникой тождественных преобразований, не умеют строить графики элементарных функций, не обладают пространственным воображением и не способны проводить обоснования на математическом материале. Дополнительные трудности для обучения создаются и крайне неоднородным составом студентов. Так, в РГПУ им. А.И. Герцена в 2019 году на 1 курс по профилю «Начальное образование» были зачислены студенты, разброс баллов ЕГЭ которых составляет 131 балл (от 135 (внебюджетные места) до 266 (бюджетные места)). Эта проблема неоднородности состава обучающихся по уровню математической подготовки была неоднократно указана респондентами в качестве других проблем (не названных в анкете), существенных для обеспечения качества подготовки будущих учителей начальных классов в области математики. Наличие проблемы низкого уровня математической подготовки в сочетании с неоднородностью контингента предполагает, с одной стороны, необходимость проведения преподавателем математики коррекционной работы, с другой, – неизбежность использования дифференцированного подхода в работе со студентами. Средствами решения этой проблемы является создание базы проверочных работ, содержащей достаточное количество разнообразных заданий различных уровней сложности. Для этого целесообразно использовать средства дистанционного обучения. В частности, в РГПУ им. А.И. Герцена используется среда дистанционного обучения Moodle.

Особого анализа требуют проблемы группы В – это проблемы организации процесса обучения математическим дисциплинам. На наш взгляд, это те проблемы, которые вуз может и должен решать, которым следует уделять пристальное внимание, принимая адекватные управленческие решения. В ряде российских вузов происходит реформа организационной структуры управления подразделениями. Наряду с традиционными структурами – кафедрами – появляются директораты образовательных программ. Именно такая структура призвана решать все вопросы, связанные с ее реализацией. Преподаватели, участвующие в реализации программы, несут коллективную и персонифицированную ответственность за обеспечение качества подготовки студентов. Сейчас вузам предоставлены достаточно широкие возможности при разработке образовательных программ и такие вопросы, как ориентация содержания математических дисциплин на будущую практическую (профессиональную) деятельность, количество учебных часов на освоение математических и методических дисциплин, учебно-методическое обеспечение математических курсов, согласование сроков освоения математических дисциплин и педагогической практики будущих учителей, отбор квалифицированных преподавателей математики, понимающих специфику подготовки учителя начальных классов, могут и должны решаться дирекцией образовательной программы.

Выводы *Conclusion*

Наличие перечисленных выше проблем порождает риск неудовлетворения потребностей работодателей и общества в подготовке специалистов соответствующего уровня, а значит и негативную оценку потребителем качества процесса подготовки педагогов в целом. Проблемы первой группы, к сожалению, имеют устойчивый характер. Однако вузовские преподаватели должны их учитывать в своей работе. Проблемы второй группы – это внутренние проблемы организации образовательного процесса, решению которых вузу необходимо уделять пристальное внимание, направлять свои усилия на то, чтобы выпускник – будущий учитель начальных классов – был готов работать на уровне тех требований, которые ставит перед системой образования стремительно развивающееся общество, понимал цели своей работы, не только любил детей, но и работу с ними, чтобы деятельность, в которую включается выпускник вуза, приносила ему радость и удовлетворение.

Acknowledgements

The article was funded in part by RFBR, project number 18-013-00646.

Summary

The article discusses the most significant problems of ensuring the quality of mathematical education of students studying in the direction of Pedagogical Education, profile "Primary Education". The presented results were obtained as a result of the analysis of theoretical studies published in Russian scientific sources, and on the basis of a survey of mathematics teachers and methods of teaching mathematics working in leading pedagogical universities of Russia. As a result of processing the obtained data, the identified problems are ranked by degree of relevance. In the article, the authors proposed possible solutions to the identified problems within the existing regulatory requirements on the basis of their personal experience in teaching mathematical disciplines at a teacher training university, as well as possible risks that arise when they are implemented. The authors present individual examples of the implementation of these ideas in the practice of teaching students at the Herzen State Pedagogical University of Russia.

Литература References

- Barr, R.B., & Tagg, J. (1995). From Teaching to Learning - A New Paradigm for Undergraduate Education. *Change: The Magazine of Higher Learning*, 27, 12-26.
- Bordovskij, G.A., Trapitsyn, S.J., & Granichina, O.A. (2008). Monitoring kachestva pedagogicheskogo obrazovanija: sostojanie i problem. *Standarty i monitoring v obrazovanii*, 6, 28-34.
- Buchanan, J. (2011). Quality teaching: Means for its enhancement? *Australian Universities' Review*, 53(1), 66-72.
- Clark, B.R. (1986). *The Higher Education System. Academic Organization Cross-National Perspective*. Berkley: University of California Press.
- Federal'nyj gosudarstvennyj obrazovatel'nyj standart vysshego obrazovanija. (2017). Retrieved from <http://fgosvo.ru/news/8/1583>
- Granichina, O.A., & Trapicyn, S.J. (2007). Postroenie modeli sistemy kompleksnogo ocenivaniya kachestva dejatel'nosti vuza s ispol'zovaniem processnogo podhoda. *Izvestija Rossijskogo gosudarstvennogo pedagogicheskogo universiteta im. A.I. Gercena*, 9, 222-236.
- Onishhenko, J.V. (2011). Protivorechija organizacii gosudarstvennoj i obshhestvenno-professional'noj ocenki kachestva obrazovanija. *Materialy vtoroj mezhdunarodnoj zaochnoj nauchno-prakticheskoj konferencii "Podgotovka specialistov v sisteme nepreryvnogo professional'nogo obrazovanija: problemy i perspektivy"*, 107-116.
- Rottermanner, D., Arnold, H., Hoefnagels, H., Verhaegen, I., Prats, L., Diaz, J., Laitinen-Vaananen, S., & Pusa, H. (2016). *Evaluation of quality of cooperation in education ecosystem as a mechanism for buildidg professional competencies*. Moscow: Handbook.
- Sheremet'eva, O.V. (2008). Predmetno-metodicheskaja podgotovka uchitelej k organizacii geometricheskoy dejatel'nosti mladshih shkol'nikov. *Nachal'naja shkola*, 1, 86-94.

- Sheremet'eva, O.V. (2008). Preobrazovanie sub"ektnogo opyta studentov kak metodicheskaja zadacha podgotovki budushhih uchitelej nachal'nyh klassov. *Izvestija Rossijskogo gosudarstvennogo pedagogicheskogo universiteta im. A.I. Gercena*, 66, 329-337.
- Stewart, V. (2011). Raising Teacher Quality around the World. *Educational Leadership*, 68(4), 16-20.
- Trapitsin, S.J., Granichina, O.A., & Granichin O.N. (2017). Information and mathematical models for evaluation of the effectiveness and quality of the university. *Proceedings of the 2017 International Conference "Quality Management, Transport and Information Security, Information Technologies"*, 287-291.

GENDER STEREOTYPES IN THE 5TH GRADE MATHEMATICS TEACHING MATERIALS

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Abstract. *Gender equality remains one of the most relevant and therefore most often discussed research subjects. Women's rights and opportunities for self-realization have expanded significantly in recent decades; however, gender discrimination is still encountered in nowadays culture. Various studies show stereotype threat as being one of the undeniable factors for shaping stereotype-based worldview. It is proven that any representation of gender in purely traditional roles not only shapes students' understanding of abilities and interests of their gender but also has a negative impact on tests' results of a negatively stereotyped group. The object of this study is to evaluate the content of mathematics teaching material used in Lithuanian high schools, and the aim is to investigate the manifestations of stereotyping threats in educational books with qualitative content analysis using an author's evaluation matrix. The article presents results that reflect stereotype threat in mathematics teaching materials for Lithuanian fifth grade students.*

Keywords: *gender equality; gender stereotypes; mathematics teaching materials.*

Introduction

It is one of the priorities of today's world to ensure equal opportunities for every individual. Equal rights for everyone no matter their race, gender, religion or sexual orientation ensure moral justice. Gender equality focused on equal treatment is stated as one of core priorities of European Union (Directorate-General for Justice and Consumers, 2018). Historically, females are having more opportunities than ever before; therefore, it might seem that gender inequality is a thing of the past. In Lithuania, non-government women's organizations, the gender studies centers, municipalities and other relevant bodies are encouraged to be a part of different projects that are orientated towards reducing gender inequality. Such activities are all part of the fourth National Program on Equal Opportunities for Women and Men 2015–2021 and its Action Plan, they are coordinated by commission on Equal Opportunities for Women and Men and overseen by the Office of the Equal Opportunities Ombudsperson. However, statistics show goal for equality is yet to be achieved (Statistics Lithuania, 2018).

European Institute for Gender Equality data shows the Gender Equality Index in Lithuania in the year 2019 to be 55.5, European Union average being 67.4 (European Institute for Gender Equality, 2019). Approximately 35% of women have college or university degree while the percentage amongst men is only 26.5%. Also, from 2010 till 2017 women unemployment rate was always lower than men (Statistics Lithuania, 2018). Despite these facts, on average, working women are paid less than men. Same data shows women salary in the year 2017 to be on average 772.5 euros monthly while men on average are paid 910.1 euros monthly. It is also known that women tend not to choose high-paying careers that are related to financial acumen and/or mathematical, logical skills.

Seeking for gender equality does not mean ignoring biological differences and stating that men are the same as women or visa versa. As defined by United Nations Population Fund, “gender equality does not mean that men and women become the same; only that access to opportunities and life changes is neither dependent on, nor constrained by, their sex” (United Nations Population Fund, 2005). Gender is a social category and, therefore, gender roles are merely a social construct. It is important to state that the harm of stereotypical gender roles is that it emphasizes not biological but rather social differences. There is no denying that gender stereotypes contribute to gender inequality (Gender Equality Commission, 2014). Overgeneralized beliefs about women tend to put them in an unfavorable position. For example, women are often portrayed as being better suited for social sciences whereas men are better at exact sciences (Cavanagh, 2008).

Every topic-related research shows gender stereotypes to be harmful. There is no denying that disadvantageous expectations of stereotype-sensitive people cause them to perform worse (Schmader, 2002; Shaffer, Marx, & Prislín, 2012; Van Loo & Rydell, 2013; Casad, Hale, & Wachs, 2017). Gender stereotypes are often directed towards women and knowing those stereotypes may limit natural capabilities and prevent from fulfilling their potential.

Stereotypes are harmful for everyone no matter the age. However, the damage is significantly greater for children and teenagers because they are more sensitive towards prejudice and public opinion (Bauer & Coyne, 1997). Therefore, prejudice towards traditional gender roles (Kachel, Steffens, & Niedlich, 2016; Perrone, Wright, & Jackson, 2009) have to be avoided in teaching materials used at schools.

One may assume stereotype-based learning is not significantly harmful as it shows real life tendencies. For example, women knit more often than men and men more often than women fix cars. However, this portrayal of gender mostly in traditional roles may imply certain expectations towards one's gender. Seeing stereotypical gender roles in teaching materials make pupils believe that these are societal norms and they have to identify with the formulated opinion of public expectations (Cavanagh, 2008).

The issues mentioned above are important not only globally but also in Lithuania. It is undoubtedly important to analyze the presentation of gender roles in teaching materials for the first year of high school as the timing is also considered to be a turning point in children's lives (Žukauskienė, 2002).

The aim of the research is to evaluate contextual content of mathematics teaching materials for the 5th graders of Lithuania in order to explore gender stereotypes.

Literature review

Ahead of time assumptions about gender-related advantages or disadvantages might cause those assumptions to be confirmed. The phenomenon when members of stereotyped groups worry about their performance confirming negative stereotypes is called the stereotype threat (Steele & Aronson, 1995). In other words, believing to be unable to succeed in exact sciences or to be less capable of solving various logical tasks causes women to perform worse. For this reason, the stereotype threat is enabled not only due to public opinion but is also tied to personal beliefs.

In 1999, the stereotype threat effect on women was researched (Spencer, Steele, & Quinn, 1999). Researchers concluded women to be undeniably affected as they performed worse due to the stereotype threat. More than a decade later, other researchers examined whether feeling powerful can eliminate the deleterious effect of the stereotype threat on women's math performance by evaluating their working memory capacity (Van Loo & Rydell, 2013). They conclude the research by stating that feeling powerful helps women perform better despite the challenging situation and stereotypical statement about men having an advantage. All the women who participated in this study claimed to feel vulnerable as they were afraid to confirm negative stereotypes with their results; however, the impact on women who were feeling powerful was minor. Researchers suggest motivating women in order to reduce the effect of the stereotype threat.

The research conducted in 2012 was directed towards vulnerability of the stereotype threat regarding women's perception of their abilities in fields of science, technology, engineering and mathematics (STEM) (Shaffer et al., 2012). The study focused on the group-based approach of women while many other researchers tend to pay attention to individual approach. Results revealed that women performed worse than men when in threat-based conditions. Men were not impacted by any given stereotype threat conditions. Moreover, women who were presented with information that highlighted men's abilities and their alleged superiority in STEM were not interested in rebutting the stereotype and imagined to be almost incapable of changing this attitude by their results.

Following study might be the most important for our research as it is directed towards the stereotype threat effect on school-aged girls. Researchers studied how the stereotype threat conditions impact girls (Casad et al., 2017). They noted that while the effects of stereotype threat on adult women are well-documented, almost no such study focused on adolescent girls. Close to five hundred students from standard and honors math classes participated in this study with gender identity as a moderator. Results of this experiment show that girls underperform when informed about gender differences and alleged superiority of boys. The study also confirms that to be vulnerable to the stereotype threat, one must be a member of a stigmatized group and identify with a task or domain of tasks about which a stereotype refers as boys were not impacted by any manipulation of presenting the information.

B.J. Casad, P. Hale and F.L. Wachs (2017) also note that learning environment including teaching materials and the attitudes of teachers (and their assistants) has an impact on students. Therefore, the researchers encourage to carefully assess learning environment and to use any possible interventions to reduce the impact of gender-specific stereotypes.

Taking everything into consideration, the way that knowledge is presented has an impact on the results of the participants. It is implied that students learn not only what is taught directly but also the context of given study material. Presenting a gender in purely traditional roles shapes students' perception of their abilities. Therefore, the presentation of information in teaching materials has to remain as gender-balanced as possible.

Methodology

The material for this study was chosen regarding the teaching materials used in Lithuanian schools. Four textbooks, two task books as well as one test book were chosen for this analysis (Ališauskas, Janušaitienė, Arefjeva, & Daukšytė-Koncevičienė, 2016a, 2016b; Borkevičius, 1997; Butkevičienė, Knyvienė, Sičiūnienė, Stričkienė, Stundžienė, & Vanagas, 2005a, 2005b; Butkevičienė, Stundžienė, & Vanagas, 2011; Cibulskaitė, 2005; Sičiūnienė, 2018; Sičiūnienė, Gecevičiūtė, Radavičienė, & Rudienė, 2008a, 2008b).

Qualitative methods were chosen in order to evaluate the context of mathematical problems found in teaching materials for the 5th graders. For this study, the content analysis was chosen as a research method because of its suitability for pattern examination in selected materials.

Every problem was evaluated according to their expression and their topics. Firstly, it was determined whether a problem is eligible for categorisation. Five types of problems were decided to be uncategorizable: problems without a context (simple equations without any context), problems about animals, problems based

on data (heights, weights etc.), problems based on a family or group activity (mixed gender) and problems, where a gender cannot be determined because of plurality.

In order to use the context analysis, evaluation matrix based on researched problems was created and used as a research instrument. Therefore, if a problem was considered to be appropriate for categorisation, then it was categorised based on its topic. Throughout analysis led every problem to be looked into for the topic indication. Not only numbered problems but also prefaces of study units as well as illustrations of problems were put into consideration the same way numbered problems were. Altogether nearly six thousand problems were analysed. Based on the indication, each topic in problem was categorised. There might have been more than one topic in a problem. Categories together with indicators are shown in Table 1. This research instrument was aimed at calculating categorical distribution of topics depending on the gender.

Table 1 Categories and indicators

Category	Indicators
Skillfulness	Professions: builder, electrician, baker etc.
	Repairs, installations etc.
	Making of essential items
	Yard work: plowing, fruit picking etc.
Movement	Transportation: by car, by train, by bus, by bike
	Walking, travelling by feet
	Flying
	Sailing, boating
Leisure	After school activities
	Socialisation, communication
	Mushroom picking
	Organising parties, contests etc.
Sagacity	Figures: drawing, folding, cutting out, coloring etc.
	Data: collecting, representing etc
	Solving mathematical and logical problems
	Doing puzzles, competing at competitions
	Doing homework
	Classwork (lessons at school)
Housework	Looking after flowers, putting them in vases etc.
	Profession-unrelated sewing, knitting
	Profession-unrelated housekeeping
	Profession-unrelated cooking
	Eating
Shopping	
Sports	Psychical education class activities
	Sports clubs
	Fishing
	Active leisure, hiking

Calculation was conducted in the following way. An individual topic means one point in a category. As mentioned before, one problem could mean more than one topic, therefore, more than one point. However, the number of people that are mentioned in problem does not matter. For example, if four boys are playing together, it means one topic and, therefore, one point towards category it fits best. However, if a boy plays together with a girl, a problem is considered to be uncategorizable. This simple computation let patterns and tendencies to be seen.

Research results

During the detailed analysis of selected mathematics teaching materials almost six thousand problems found in 10 study books were assessed for eligibility of categorisation and categorised if considered appropriate.

Categorical distribution of analyzed contexts is given in Figure 1. One in four topics is considered to belong to the sagacity category which makes it the most abundant category. Leisure category together with the housework category were the least abundant among categories. Most typical examples are given together with description of each category.

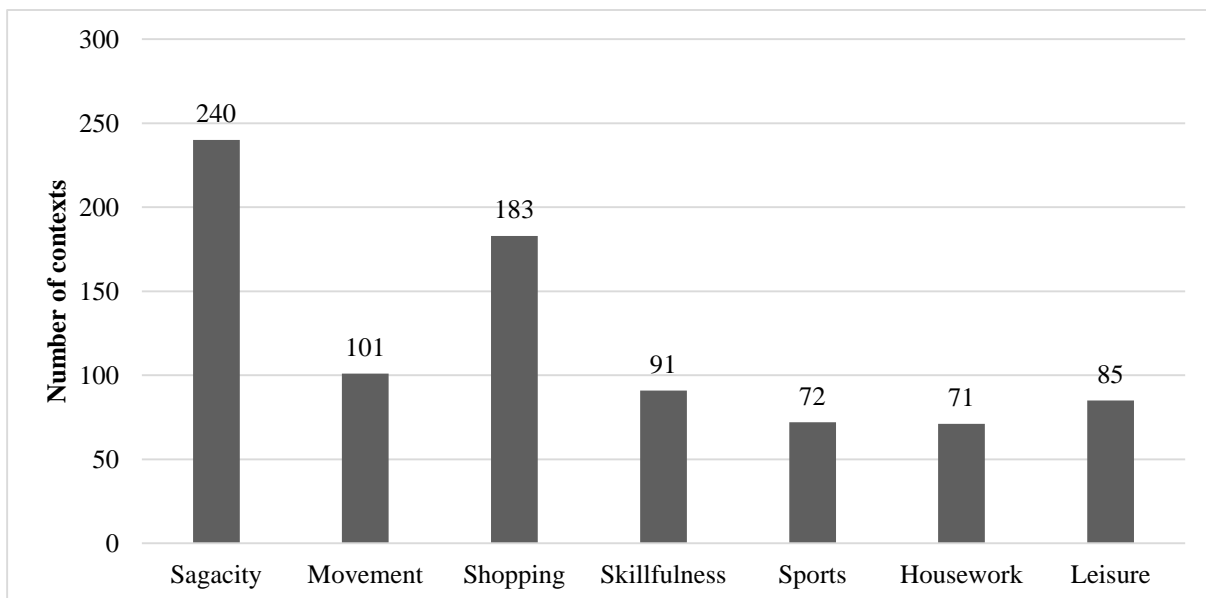


Figure 1 Categorical distribution

Sagacity. Females are mentioned in this category two times less compared to males. Males are portrayed as having money more often than females and the amount of money they have is usually bigger. Exclusively men are shown to be disposing money. Only men take loans, get financing, perform banking operations, work to get paid. There are no problems that are centered on around

women disposing money in any way. Also, whenever females are shown to be working, earning money is out of the question. However, in several cases males are portrayed wondering about getting a job because of desire to earn money.

In mathematical context, males are portrayed as being curious, constantly analyzing their surroundings, noticing recurrences etc. For example, once, little boy is portayed wondering about solving unknown equations, in other example, school aged boy is figuring out addition of fractions by himself. Boys are often shown to be involved in mathematical activities because of their interests; however, girls solve mathematical or logical problems mostly in the classroom. Even formulations of problems supposedly shows male superiority because females often “try” to find out the answer to a problem whereas men “do” tasks or have already did them. In many cases, female perform easier tasks, seek solutions to more basic problems. Also worth noting is the fact, that help solving mathematical or logical problems is often provided by male characters. For example, Kipras helps his brother solve equation, boys help girls by explaining division, and adult aunt asks her nephew to help her with taxes.

Movement. Males are mentioned in this category more than two times more than females. Even though driving a vehicle is very common among mathematical problems, out of all problems woman drove a car only once and rode a bike twice. Males are portrayed driving vehicles constantly. Males drive not only cars, but also trucks, motorbikes, busses. As for many cases in this category, women use transportation but are not in charge of operating it.

Shopping. Males and females are mentioned in this category almost the same amount of times. In the shopping category, both males and females are mostly school-aged boys and girls. Both boys and girls often buy school supplies and snacks. Boys also buy household items needed for repairs such as paint or nails and girls buy household items needed for home decor and groceries for cooking. Shopping topics are tied to stereotypes found in contexts of other categories.

Skillfulness. Males are mentioned in this category two times more than females. A profession is the most frequently mentioned amongst the topics. Males are portrayed as having more opportunities and a wider range of professions available as they take part not only in masculine professions but also work as bakers, teachers etc. Men are shown working as drivers, pilots, beekeepers, gardeners, salesmen, farmers, fishermen, painters, builders, fabric workers etc. However, females are shown to be having only traditionally feminine careers, for example, bakers, teachers, needlewomen, ceramicists, florists, saleswomen, secretaries, and waiters.

Males often take part in activities that require physical strength, stamina and/or particular skills. For example, men are repairing broken things, making household improvements, making furniture etc. In researched teaching materials, females are portrayed as not having any skills or physical capabilities that would

let them make any useful items or repair something. Women are portrayed as helpless as they can only plan improvements and then seek for help to implement them. For example, females are shown planning on getting help improving household or organising various tasks to achieve desired upgrades.

Sports. Males are dominant in this category. Three out of four topics in this category belong to males. When males compete with females, males are shown to win; they are portrayed as better, faster and stronger. Males also participate in a wider variety of sports activities compared to females. There are no topics of females rowing, playing sports games for fun, shooting or competing for medals. However, males are portrayed playing many sports games including basketball, football, etc., they also compete in arm wrestling, shooting, skating, swimming championships. Whenever males and females participate in same activity, men are dominant. For example, boys run faster than girls in a competition. It is also worth mentioning that only males are shown to choose sports activities as a way to spend their freetime.

Housework. Housework category is dominated by female acts. Almost three out of four topics show females being involved in housework. Women are portrayed as housekeepers doing stereotypically feminine tasks such as cooking, taking care of plants, sewing, weaving, knitting, taking care of children. Almost every topic of a male character is him eating something.

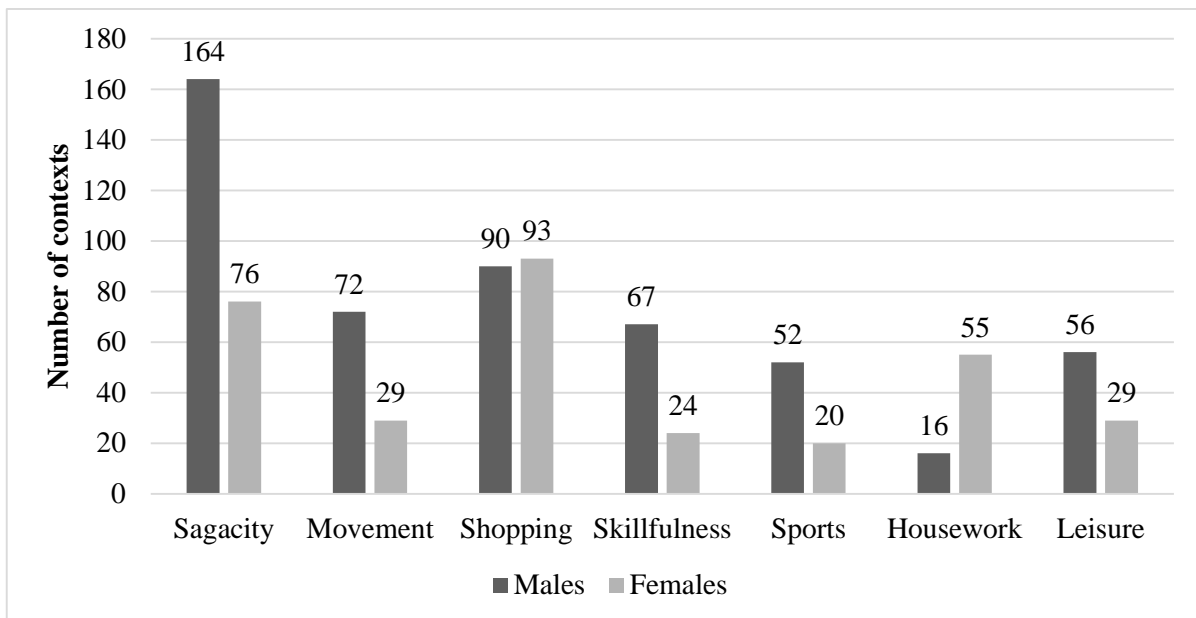


Figure 2 *Categorical distribution regarding gender*

Leisure. Females are portrayed socializing or enjoying free time almost two times less than males. Males are shown being interested in socializing,

vacationing, researching information about cars, collecting various things. Females are portrayed mostly hanging out with girlfriends, reading books etc.

Categorical distribution of analyzed contexts regarding gender is given in Figure 2. Altogether 843 problems (together with prefixes) were taken into account. It clearly shows male dominance in almost every category except housework, which is stereotypically feminine.

Discussion

Despite women being better educated than men and working more, on average, in Lithuania men earn more than 15 percent than women. Women tend not to choose high-paying careers that are related to financial acumen and/or mathematical, logical skills.

Mathematics teaching materials for Lithuania's fifth graders were chosen to be researched in order to evaluate the stereotype threat in the context of ensuring equality between genders. The stereotypical worldview was found to be the basis of mathematical problems in all the study books.

In June 2015, European Parliament adopted a resolution (European Parliament, 2015) on the EU strategy for equality between women and men. This resolution states, that gender segregation is still practiced in many educational institutions. It also points to importance teaching materials have on pupils' worldview (Gender Equality Commission, 2014).

There is no denying the damaging effect of stereotype threat for a stereotype-sensitive group, in this case, females. The stereotype threat affects females of all ages and has to be avoided whenever possible, especially when one gender is portrayed to be advantageous in some context. It is also important to emphasize that adolescent girls are even more sensitive towards prejudice and public opinion so are even more vulnerable to stereotype threats.

The stereotype-based contextual content of teaching materials poses to be a threat of stereotypes to remain. There can be no further ignorance towards stereotype-based gender roles in teaching materials. Therefore, we would recommend that a group of professionals, including mathematicians-scientists, scientists of mathematical didactics, mathematics teachers and educologists should discuss context of all sorts of teaching materials such as textbooks, task books etc., consider importance of gender depiction and create standards for authors of teaching materials. Psychologists with children development expertise should also be involved in this discussion so there would be no harm done when depicting genders in teaching materials.

As big as this issue is, the first step may be for textbooks reviewers to be obliged to consider gender depiction when revising new teaching materials and to be able to demand for changes to be made by authors whenever necessary.

References

- Ališauskas, A., Janušaitienė, O., Arefjeva, M., & Daukšytė-Koncevičienė, L. (2016a). *Serija "Atrask" MATEMATIKA Vadovėlis V klasei I dalis*. Kaunas: Šviesa.
- Ališauskas, A., Janušaitienė, O., Arefjeva, M., & Daukšytė-Koncevičienė, L. (2016b). *Serija "Atrask" MATEMATIKA Vadovėlis V klasei 2 dalis*. Kaunas: Šviesa.
- Bauer, P.J., & Coyne, M.J. (1997). When the name says it all: preschoolers' recognition and use of the gendered nature of common proper names. *Social Development, 6*(3), 271-291. DOI: <https://doi.org/10.1111/j.1467-9507.1997.tb00106.x>
- Borkevičius, A. (1997). *Matematikos testai 5 klasei*. Vilnius: Margi Raštai.
- Butkevičienė, R., Knyvienė, J., Sičiūnienė, V., Stričkienė, M., Stundžienė, Ž., & Vanagas, V. (2005a). *Matematika Tau 5 klasei I dalis*. Vilnius: TEV.
- Butkevičienė, R., Knyvienė, J., Sičiūnienė, V., Stričkienė, M., Stundžienė, Ž., & Vanagas, V. (2005b). *Matematika Tau 5 klasei II dalis*. Vilnius: TEV.
- Butkevičienė, R., Stundžienė, Ž., & Vanagas V. (2011). *Matematika Tau 5 klasei. Uždavinynas*. Vilnius: TEV.
- Casad, B.J., Hale, P., & Wachs, F.L. (2017). Stereotype threat among girls: differences by gender identity and math education context. *Psychology of Women Quarterly, 41*(4), 513-529. DOI: <https://doi.org/10.1177/0361684317711412>
- Cavanagh, S. (2008). Stereotype of mathematical inferiority still plagues girls. *Education Week, 28*(1), 9.
- Cibulskaitė, N. (2005). *Matematika XXI a. Vadovėlis 5 klasei. II dalis*. Vilnius: Kronta.
- Directorate-General for Justice and Consumers (European Commission). (2018). Gender equality 2017. DOI: <https://doi.org/10.2838/431877>
- European Institute for Gender Equality. (2019). Gender equality index. Retrieved from <https://eige.europa.eu/gender-equality-index/2019/LT>
- European Parliament. (2015). The EU Strategy for equality between women and men post 2015. Retrieved from http://www.europarl.europa.eu/doceo/document/TA-8-2015-0218_EN.pdf
- Gender Equality Commission (Council of Europe). (2014). Combating gender stereotypes in and through education. *Report of the 2nd Conference of Europe National Focal Points on Gender Equality*. Retrieved from <https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=0900001680590ff0>
- Kachel, S., Steffens, M.C., & Niedlich, C. (2016). Traditional masculinity and femininity: validation of a new scale assessing gender roles. *Front Psychol, 7*, 1-19. DOI: <https://doi.org/10.3389/fpsyg.2016.00956>
- Perrone, K.M., Wright, S.L., & Jackson, Z.V. (2009). Traditional and nontraditional gender roles and work-family interface for men and women. *Journal of Career Development, 36*(1), 8-24. DOI: <https://doi.org/10.1177/0894845308327736>
- Schmader, T. (2002). Gender identification moderates stereotype threat effects on women's math performance. *Journal of Experimental Social Psychology, 38*, 194-201.
- Shaffer, E.S., Marx, D.M., & Prislín, R. (2012). Mind the gap: framing of women's success and representation in STEM affects women's math performance under threat. *Sex Roles, 68*, 454-463. DOI: <https://doi.org/10.1007/s11199-012-0252-1>
- Sičiūnienė, V. (2018). *Matematikos uždavinynas 5-6 klasei*. Kaunas: Šviesa.
- Sičiūnienė, V., Gecevičiūtė, I., Radavičienė, R., & Rudienė, A. (2008a). *Formulė. Matematikos vadovėlis V klasei. Pirmoji knyga*. Kaunas: Šviesa.

- Sičiūnienė, V., Gecevičiūtė, I., Radavičienė, R., & Rudienė A. (2008b). *Formulė. Matematikos vadovėlis V klasei. Antroji knyga*. Kaunas: Šviesa.
- Spencer, S.J., Steele, C.M., & Quinn, D.M. (1999). Stereotype threat and women's math performance. *Journal of Experimental Social Psychology, 35*, 4-28.
- Statistics Lithuania. (2018). Retrieved from Official Statistics Portal website <https://osp.stat.gov.lt/statistiniu-rodikliu-analize?theme=all#/>
- Steele, C.M., & Aronson J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology, 69*(5), 797-811.
- United Nations Population Fund. (2005). Frequently asked questions about gender equality. Retrieved from <https://www.unfpa.org/resources/frequently-asked-questions-about-gender-equality>
- Van Loo, K.J., & Rydell, R.J. (2013). On the experience of feeling powerful: perceived power moderates the effect of stereotype threat on women's math performance. *Personality and Social Psychology Bulletin, 39*(3), 387-400. DOI: <https://doi.org/10.1177/0146167212475320>
- Žukauskienė, R. (2002). *Raidos psichologija*. Vilnius: Margi raštai.

INTELLECTUAL HUMILITY AS STRENGTH IN THE PROCESSES OF THE FORMATION AND DEVELOPMENT OF KNOWLEDGE

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Abstract. *The aim of the research: To describe the intellectual humility of a teacher as strength in the processes of forming and developing knowledge. Intellectual virtues presuppose the objective of deep, factual perception with a possibility to make mistakes. A lot of pedagogues lack the activities important for virtues without dependence on mood or similar supporting means (the total level of virtue). A teacher who distinguishes with intellectual humility, who belongs to the virtues of the first range (the initiation of learning process and its guiding towards the right direction) and has connection with other intellectual virtues, aims for coordinated learning relationship where the sense of equality is present, as well as broaden perspective, distinguishes with flexibility while re-considering convictions, fear which is felt by an intellectually humble person when he/she misses information or something is not understood. An intellectually humble teacher, developing his/her knowledge, distinguishes with the constant pursuit for development, ability to self-evaluate strengths and weaknesses, seeing relationship with others as perspective for development. The definition of intellectual humility is usually related with the recognition that your convictions and opinions can be wrong. This virtue is concerned with the strengths of a teacher. Being an intellectually humble person opens possibilities to the independence of a learner while forming or developing knowledge and understanding. In this process the potential of colleagues is recognized, strong and weak points are firmly pointed out, intellectual arrogance is avoided. This presupposes more possibilities for the change of learning both to a learner and the one dependant on him/her.*

Keywords: *Intellectual humility, intellectual virtue, forming knowledge, developing knowledge.*

Introduction

Pedagogical reality is versatile, requiring both integrity and multi-dimension at the same time. In such process of learning so that a positive change in a learner could occur, a teacher plays an important role. In the issue of the status of education the aspects are highlighted that “the generalized data of the observation of lessons show that in lessons teaching, organizing of the passive work of students predominate...”; “from the data of the assessed schools it can be claimed that overall attitude is missing in educational process”; “in almost every second school of the country (48,5 per cent of the assessed schools) it has been

recommended to improve teaching attitude and educational methods” create problematics that something is wrong with the acting of a teacher, as it should be contextually (Lietuva. Švietimas šalyje ir regionuose, 2016). It is also confirmed by the statement in the report of NMVA (Nacionalinė mokyklų vertinimo agentūra, 2015) that in school a teacher still actively participates and the self-evaluation of a pupil, as well as help when problems occur are not frequent phenomenon. In OECD PIAAC research (2016) the abilities of the reading and mathematical literacy of the Lithuanian adults are attributed to the 2nd level, more than a half is of lower abilities, whereas in problem-solving while using technologies we are at the bottom of the list. So that a teacher could teach a pupil, he/she must learn himself/herself first, be oriented towards future, distinguish himself/herself with empathy, the ability to support a pupil in complicated situation, etc. In order to learn this, he/she has to be able to be humble. Virtues add to the formation of knowledge, whereas knowledge is the very core of everything, but the conception of intellectual virtues is impoverished (Taylor, 2016). The presence of intellectual virtues is a rare phenomenon. People lack the presence of the level of existence of complete virtues (Baehr, 2014). The attention of labour market is directed towards soft skills, comprising several intellectual virtues, such as curiosity, openness, intellectual autonomy and intellectual humility (Friedman, 2014). Education system has to educate certain intellectual and spiritual humility among learners (Cowley, 2017). Intellectual humility and respect are necessary in all the disciplines of education (Gruppen, 2014).

The aim of the research: To describe the intellectual humility of a teacher as strength in the processes of the formation and development of knowledge.

The questions of the research. The following questions are aimed to be answered: what is the significance of intellectual virtues in the process of the formation of knowledge? What is intellectual humility in the process of the development of knowledge?

Methodology

The methods of search. Systematic review is used as a search method, orienting towards the processes of the change of learning, when it is focused on intellectual humility.

The search of the database. The selection of scientific articles is performed in the database “Academic Search Complete”. “Intellectual humility” is used as a key phrase in search. Having checked the articles found according to the search criteria, 8 articles were chosen. The search was restricted to the data of the research phenomenon in the perspective of education. Empirical articles were not found for analysis and in Lithuania it was researched performing psychological

analysis (Marazaitė & Kociūnas, 1998), it is mentioned in religious works (Rimkutė, 2006; Vasiliauskaitė, et al., 2012) thus theoretical articles are used for analysis.

The criteria of inclusion and elimination. While performing the selection of articles, the following criteria were used: the entire article published in scientific journals, the type of source – academic journal, the language of article – English, the main sources – educational sources and 2014-2019 were chosen.

Receiving and managing links. Only English texts in reviewed journals were chosen for further review. Information provided in forums and articles is used.

Results

Intellectual virtues in the process of the formation of knowledge

Intellectual virtue was considered to be essential in the process of education already in the times of Plato (Taylor, 2016). Nowadays teachers are assigned to give a lecture not only on academic contents, but also encourage the development of the virtues of the participants of lifelong learning. Intellectual virtues are character traits which are acquired during certain period of time (revising practice), they are available and non-requiring technical skills. There is a possibility to educate that in pupils (Taylor, 2016). They define intellectual features related with people, who, having received a new task or challenge, are able to quickly adapt to the needs of a new project (Ortwein, 2015). It is aimed to deeper perceive important issues by intellectual virtues. An intellectually virtuous person is the one who pays a lot of attention to details, tries to avoid mistakes and contemplates while performing researches, etc. They do not allow knowledge to exist, which occurs only because of epistemic success. Knowledge is based on reasoned convictions, thus it is factual, whereas understanding is connected with the perception of the structure of a certain piece of reality (Taylor, 2016). Virtuous agents not only aim for certain convictions, but also want to perceive structural relationship between these convictions. Reaching for knowledge, it is necessary to search for certain convictions in order to eradicate wrong ones, paying most of attention to the truth and its correction. That is connected with proceeding to understanding reader issues which contain these convictions.

Some firm opinions are not compatible with openness. To recognize that there is a possibility to make a mistake and somebody else is making a mistake is the recognition of non-perfection. It is connected with the attitude as possibly wrong, but that attitude is not weakened (Taylor, 2016). A teacher is a person who creates various learning situations including pupil generation after generation. Aiming for improvement, open attitude should be a component of activity for a teacher.

The theory of knowledge, based on virtues, aims to bind knowledge with moral concepts (Salloum, 2017).

1. The epistemology of virtues is normative while asking oneself questions which include not only what we have to know (remember, reason, inquire), but also questions how we should know and what is good cognition.
2. The epistemology of virtues transfers the location of assessment from individual convictions and hints to virtues and cognitive manner.

The levels of intellectual virtues are distinguished according to criteria when a certain person is – S, virtue – V (Baehr, 2014):

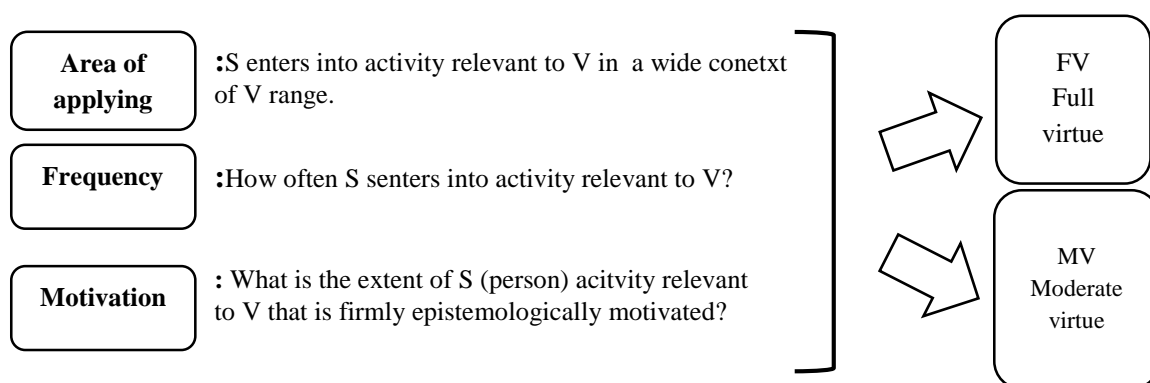


Figure 1 *The levels of intellectual virtues according to 3 criteria*

Full virtue: (a) S enters into activity relevant to V in *all (or almost all)* contexts relevant to V; (b) *in all (or almost all)* contexts S *always (or almost always)* enters into activity relevant to V when it is needed; (c) *in all (or almost all)* contexts relevant to V the active performance of S (person) is *always (or almost always)* firmly epistemologically motivated.

Moderate virtue: (a) S enters into activity relevant to V in *several* contexts relevant to V; (b) *in several (separate)* contexts S *regularly* enters into activity relevant to V when it is needed; (c) *in several* contexts relevant to V the active participation of S (person) is *regularly* epistemologically motivated.

Educating virtues is closely related with the educating of compassionate virtues. The teacher is an example of it to a student. The best case is when a teacher distinguishes with the possessing of total virtue.

Intellectual virtue – humility

One of the statements is that education should not only provide confidence while evaluating simply accessible sources of meaning, but it should also teach intellectual humility (Cowley, 2017). Intellectual humility is the core of self-

evaluation. It is described as dispositional profile including cognitive, behavioural, motivational and emotional responses to perceive one's limitations (Priest, 2017). Ortwein (2015) distinguishes 9 intellectual virtues, one of them is intellectual humility. They are divided into three categories:

1. To start learning process and guide it towards proper direction.
2. To ensure that learning process would be fluent.
3. To overcome the challenges of productive leaning.

The virtues of range 1. These character traits involve curiosity, wish to wonder and raise questions why it is happening. It is related with the wish to explore. These virtues have the attitude of intellectual humility in the perception within the limits of its intellect. Also, there is anxiety because of advantages and status. Preparation is evidenced by autonomy, active, the ability of thinking directed towards oneself, ability to reason oneself. And it involves knowing when it is possible to trust others in learning context. The following virtues belong to this range: *curiosity, intellectual autonomy and intellectual humility.*

Curiosity. It enables to look for answers even when it is not planned in advance. It is aiming to fill in gaps. *Intellectual autonomy.*

Intellectual humility. People who do not have impulses due to their charming or enviable features evidence intellectual humility (IH). The ones who only slightly stress that they have such features of which they can be proud of. These are people to whom these features and winnings are not very important. Suitable pride is psychologically healthy. Intellectual arrogance is opposite to that. A person who distinguishes with intellectual arrogance, in our case a teacher, demonstrates attitude superior to others. In this way the expanding of his/her attitude is possibly limited and there is even the rejection of other, more persuasive attitudes. IH is a necessary intellectually honest evaluation (accounting) of one's abilities.

Without possessing/developing the above-mentioned intellectual virtues, problematicity occurs while speaking about **the virtues of the 2nd range.** This range is "filled in" by *attentiveness*, which keeps attention, focus on important details, the nuances of meaning; *carefulness* – intellectual accuracy: *understanding of good thinking and the requirements of learning, as well as sensitivity to others.* It provides deeper meanings, possibility to quickly pay attention and avoid traps and mistakes. Also, easy answers are not enough. Honesty with regard to own understanding. That is the ability to perform certain actions not under the circumstances of fear, but under the conditions of intrinsic motivation.

3rd range. Coping with challenges distinguishes with *open attitude.* Openness is the feature of educated mind. It is necessary as pedagogical component. Openness is one of "doubly valuable" virtues, the aim of which is: both recognition and understanding (Taylor, 2015). Ortwein (2015) claims that

such a person demonstrates epistemic humility. There are teachers the ideas of whom are unsuitable and inflexible even if contrary evidence is given. Such behaviour weakens their possibilities to reach understanding, knowledge and wisdom, as they just refuse to change their ideas and convictions. The teachers of open attitude are ready to listen to the contrary evidence and if there is a need, specify their convictions. IH supports openness, but these two virtues are different (Taylor, 2015). The author, describing an open person, also names IH as one of the aspects:

- 1) Widely motivated to reach for knowledge and understanding;
- 2) Especially motivated to consider the evidence and arguments possessed when new convictions or understandings are being formed and retained steady;
- 3) One has to be intellectually humble;
- 4) Intellectually courageous and thorough. Closed people even do not want to consider how new evidence or arguments could expand their understanding.

Courageous activities are also attributed to this range. Courageous activities can be motivated by some other virtues: justice, sympathy, generosity, love of knowledge.

Intellectual humility in the process of the development of knowledge

Indoctrination causes closed thinking, whereas closed thinking threatens the striving for knowledge and understanding (Taylor, 2016). The development of knowledge is encouraged by such virtues as intellectual sobriety, persistence, honesty and humility (Salloum, 2017). Thoughts can be refused too early due to the lack of humility and persistency. IH is important in the process of the development of knowledge of a teacher and distinguishes with several essential characteristics (see Table 1).

Table 1 The Characteristics of Intellectual Humility in the Process of the Development of Knowledge

The part of the process of the development of knowledge	Characteristics
IH is perceived as motivation and ability to exactly evaluate one's intellectual falseness which can include the lack of knowledge and understanding (Taylor, 2016).	Ability to evaluate, recognize one's weak, limiting and strong points.
Aiming to be IH, we have to recognize the limits of our knowledge and understanding. For that we need to acknowledge that understanding can be deepened, expanded or more connected with the truth (Taylor, 2016).	

IH involves the ability to recognize the limitations of our convictions and world-view and suitably exchange them after facing new evidence (Truscot, Kearney, Davis, & Roach, 2017).	
Intellectual humility is the perception of the limitations of intellect, weaknesses and mistakes (Payette & Barnes, 2018).	
We have to be always ready “to be attacked” and never be sure that we are aware of our weaknesses and strengths (Cowley, 2017).	
IH is related with the conscious revealing of the opposite perspectives of colleagues (Gruppen, 2014).	Ability to notice, evaluate the perspective of others, see as a possibility of self-improvement.
IH helps people to develop confidence and goodwill in situations which can cause the escalation of conflict and the deterioration of trust (Truscot et al., 2017).	
IH is close to constant learning: aiming for clear personal aims, trying to learn something, we have to step out of comfort zone (Gruppen, 2014).	Striving for constant improvement.
It motivates to acquire deeper understandings (Ortwein, 2015).	
The part of the process of the development of knowledge	Characteristics
IH is important while facing unconfirmed evidence (Salloum, 2017).	Striving for constant improvement
Highlighting IH helps to fight with attitude that letter A (10 in Lithuania) means that pupils (as well as I) understood everything (Payette & Barnes, 2018).	

IH can be understood as average between the contradictory discrepancies of intellectual arrogance (non-evaluation of intellectual falseness) and intellectual modesty or duty (overestimating of intellectual treachery) (Taylor, 2016). According to the data of the table we can see that in the process of developing knowledge the most distinctive characteristics of an IH person, in our case teacher, are reaching for constant improvement, the ability to self-evaluate strengths and weaknesses, relationship with others as the perspective for improvement.

Limitations. This systemic review has limitations. The first limitation is related with the fact that without discovering empirical articles, theoretical ones are used for analysis. The second – due to the main keywords. Only the phrase *intellectual humility* is used in search without using possible equivalents. The third – sources used for analysis are only in English.

Discussion

In literature it has been noticed that teachers usually overestimate their knowledge and are too much confident in their assessment. The fact that we often make mistakes while evaluating what we know and do not know requires to

demand IH and behaviour accompanying it with colleagues even when we believe that we know. Recognizing what we ignore can be as much important as what we pay attention to (Gruppen, 2014). The profession of a teacher is as if dictating, favourable to appear for such stereotypes as “a teacher cannot be the one who does not know”, “a teacher cannot make mistakes”, etc. It influences that a teacher often ignores a lot of things, suppresses, does not recognize, as it is safer “to live” like that. Another side also exists, which is related with examples when knowledge is overestimated due to the role in a lesson, community, etc. In a lesson a teacher takes the role of a more advanced one in learning and it can form contrariety to IH. If we expressed the above-mentioned statement by a phrase, it would sound like that: “how can I, with so much experience, knowledge, abilities, yield to somebody”. The existence of a similar kind of such statements of meaning occurs because IH is understood as weakness, there is a lack of deeper perception about the significance of IH in the processes of the formation and development of knowledge. IH threatens that one will have to change whereas it is rarely a comfortable or easy activity. Our natural response to contradictions is to resist, not to accept and not consider regarding the possible validity of knowledge, convictions and priorities (Gruppen, 2014). Here a tight relationship with openness appears. Taylor (2016) describes an open person who has a tendency towards the improvement of knowledge and understanding, one of the components is IH. An open teacher:

- 1) Widely motivated to aim for knowledge and understanding;
- 2) Especially motivated to consider the evidence and arguments possessed when he/she forms new convictions or understandings and retains them steady;
- 3) Has to be intellectually humble;
- 4) Intellectually courageous and thorough.

Closed teachers even do not want to consider how new evidence or arguments could expand their understanding. An IH teacher is aware that there is always space for improvement and that IH allows to recognize his/her weak points (Payette & Barnes, 2018).

“Without the roles of teachers traditionally distinguished in educational science – the teacher of a subject (the conveyor of information, leader of teaching process, organizer of educational process) and an educator (a cooperating senior friend, the leader of a class), such roles as a consultant, the leader of teaching processes, encourager, researcher, catalyst, mediator of changes, social pedagogue, cooperating colleague, etc.) appear.” (Dudaitė & Prakapas, 2016). Stephen et al. (2017) indicate IH as important in the relationship of consultations:

Open attitude towards a consulted person includes ability to balance ultimate perspectives. They do not reject ideas contradicting to their ideas, but they also do not accept without essential evidence. A consultant can only change

convictions only being completely sure. Consultants with lower IH can choose stricter consultation methods. They can take over the control of the process of problem solving and offer fixed suggestions based on their competence, but without considering the pedagogical convictions or context of the consulted. IH should neither prioritize nor encourage their attitude. There should be cooperating attitude. An important aspect of IH – respect to others' convictions encourages to honestly exchange ideas. One can express opinion while asking for the opinion of the consulted.

A teacher has often assumed the role of an expert and consultation relationships which are oriented towards IH lose possibilities for realization. In this way there is no impulse forward in none of the person participating in this relationship. There is a frequent situation when one does not want, does not see, etc. reasons are because of communication with a colleague who can be the stimulant of change. Colleagues help us respond to our attitude and provide alternative perspectives (Gruppen, 2014). Alternative perspectives open wider, more favourable conditions to a teacher for going deeper.

Intellectual virtues (and vices) form the way people make contacts – the manner of their contact with outer world. They serve as a certain moral system or infrastructure directing people towards positive or negative intellectual activity (Ortwein, 2015). Freire (2000) states that dialogue is impossible without humility because naming the world people constantly re-create it and there is no space for pride. The philosopher highlights that if at least one aiming for a common goal to learn and act lacks humility, dialogue is not further developed. Freire (2000) raises such questions as: “How can I establish a dialogue, if I always consider others to be inept, but never perceive my knowledge?; How can I continue dialogue, if I think I am separated from others, the “I” of whom cannot acknowledge the “I” of others?; How can I participate in a dialogue, if I feel I am the member of the group of “real” people, to whom truth and knowledge belong and who overtake all the rest who do not belong to this group, consider them to be “those people” or the populace?; How can I participate in a dialogue, if I follow the assumption that the naming of the world is the task of the elite and that the participation of the folk in history is to be avoided, as it marks degeneration?; How can I participate in a dialogue, if I do not recognize the input of others which even hurts me?; How can I participate in a dialogue, if I am afraid that I will be expelled and the possibility to be expelled only makes me suffer, feel weak?”. Continuing the thoughts of the philosopher, we stress that “raising” yourself above others, as well as dialogue, creating new meanings, are incompatible. Teachers who lack IH or have lost it cannot be somebody's partners naming the world. The wish and aim to find out more than they know now are stressed.

Conclusions

Personal transformation is the main basis of the growth of the character of intellect. A teacher has special responsibility to be open to pedagogics, constantly try to improve the understanding of his/her area. Most of them have become intellectually arrogant and stick to the information received before. There are conflicts which do not allow teachers to be intellectually humble, they include other professional virtues like critical scepticism, competition and trust. The development of knowledge is encouraged by IH. The conception of IH as strength would enrich awareness about the possibilities of the development of the knowledge and understanding of a teacher. Its absence in learning is understood as considering others (pupils, heads, colleagues) to be ignorant, non-recognizing of their "I", non-participation in dialogue, as the input of others is not recognized, which hurts, etc. A teacher, being intellectually humble, can "ease" or "quicken" moving towards the bigger autonomy of a learner. And that is related with the ability to create learning conditions for a pupil and reach for positive learning impact. We can never reveal all the mysteries of reality, but in some situations we can recognize ourselves. Self-cognition without intellectually humbly recognizing one's ignorance can cause many hindrances, limitations to a teacher.

References

- Baehr, J. (2016). Is intellectual character growth a realistic educational aim? *Journal of Moral Education*, 45(2), 117-131.
- Bendrojo ugdymo mokyklų veiklos kokybė. Nacionalinės mokyklų vertinimo agentūros metinis pranešimas. (2015). (5).
- Cowley, C. (2017). Education, Despair and Morality. *Journal of Philosophy of Education*, 51(1), 298-309.
- Dudaitė, J., & Prakapas, R. (2016). Lietuvos mokytojų, dirbančių su „Activinspire“ interaktyviaja sistema, patirtys organizuojant pamokos darbą. *Socialinis darbas*, 14(2), 199-209.
- Freire, P. (2000). *Kritinės sąmonės ugdymas*. Vilnius: Tyto Alba.
- Friedman, T. (2014). How to get a job at Google. *New York Times*, February 22. <http://www.nytimes.com/2014/02/23/opinion/sunday/friedman-how-to-get-a-job-at-google.html>
- Gruppen, L.D. (2014). Humility and respect: core values in medical education. *Medical Education*, 48, 53-58.
- Lietuva. Švietimas šalyje ir regionuose. Mokinių pasiekimai (2016). Vilnius: Švietimo aprūpinimo centras.
- Marazaitė, I., & Kociūnas, R. (1998). Psichologinė nuolankumo analizė. *Psichologija*, 18, 65-81.
- Ortwein, M.J. (2015). The Regulation of Understanding through Intellectual Virtue. *Journal of Thought*, 71-85.

- Pagrindiniai suaugusiųjų gebėjimai. PIAAC tyrimo rezultatai. Retrieved from <https://www.oecd.org/skills/piaac/>
- Payette, P., & Barnes, B. (2018). Coaching for Intellectual Humility and Intellectual Perseverance. *The National Teaching & Learning Forum*, 27(3), 4-6.
- Priest, M. (2017). Intellectual Humility: an interpersonal theory. *Ergo*, 4(16), 463-480.
- Rimkutė, A. (2006). Religijos terminijos tvarkyba Draugijoje. *Terminologija*.
- Salloum, S. (2017). The pace of practical wisdom in science education: what can be learned from Aristotelian ethics and a virtue-based theory of knowledge. *Cultural Studies of Science Education*, 12, 355-367.
- Taylor, R.M. (2016). Open-mindedness: an Intellectual Virtue in Pursuit of Knowledge and Understanding. *Educational theory*, 66(5), 599-618.
- Truscot, S.D., Kearney, M.A., Davis, D.E., & Roach, A.T. (2017). Intellectual Humility and Morality as Consultee-Centred Consultation Epistemologies. *Journal of Educational and psychological consultation*, 27(1), 26-142.
- Vasiliauskaitė, A. (2016). Sielovados principai Šv. Benedikto regulos tekste. *Soter: religijos mokslo žurnalas*.

CRITERIA AND INDICATORS OF FORMATION OF HUMANISTIC AND VALUE ATTITUDE OF PRIMARY SCHOOLCHILDREN TOWARDS THEMSELVES

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Abstract. *Scientific works show that it is necessary to solve the humans problem of the formation of values and value attitude. Early school age is a period of active development of ideological orientations, interests, behavioral strategies, assessments and self-evaluation. The purpose of the study lay in developing and testing the diagnostic tools of the formation of a humanistic and value attitude of the schoolchildren towards themselves and in determining on this basis the appropriate pedagogical conditions for improving the investigated quality. The primary schoolchildren (n = 317, age 8-9) took part in the study. The results of the preliminary stage of the pedagogical experiment revealed the need to raise the level of humanistic and value attitude of children (low level – 61,5%, average level – 30,9%, high level – 7,6%). Primary school teachers are important organizers of the educational process with students, but they do not use enough methods that are effective in solving this research problem. In order to humanize the environment in primary school, authors suggest using game exercises, conversations, elements of training, including children in various types of socially significant activities, creating axiological educational situations, etc.*

Keywords: *humanistic and value attitude, levels of formation of humanistic and value attitude, pedagogical conditions, primary schoolchildren.*

Introduction

An important issue today is the study of patterns of formation, establishment and development of a conscious, active, creative person. New trends in the development of Ukrainian society, qualitative transformation of various life

aspects, of changes in the content and nature of the material and spiritual conditions of life, forming radically different economic and sociopolitical environment – all this cannot affect the outlook of the individual. There are serious changes in the structure of youth value orientations in the new social conditions. Changes in the value orientations of youth do not occur suddenly, this is preceded by a number of preconditions. Changes in the society, in the material and spiritual sphere, require new approaches to the analysis of spiritual values.

The main element in the worldview formation are value orientations. They determine the interaction, struggle and harmonization of interests, requirements, criteria, regulate the behavior, defining the strategy of social life of the individual. At the same time, it is important not only to develop a system of values that allow a person to adapt to a new society quickly and actively – it is important not to lose own national ideals, moral values, cultural traditions of the society.

The purpose of the article is to analyze the current state of formation of humanistic and value attitude of the primary schoolchildren towards themselves. According to the purpose, the task of the study is defined: to distinguish the structural components of humanistic and value attitude towards oneself; to define criteria, indicators and levels of formation of humanistic and value attitude of the primary schoolchildren towards themselves; to determine the pedagogical conditions of formation of humanistic and value attitude of the primary schoolchildren towards themselves.

Research methods: to obtain empirical data, in order to identify the levels of humanistic and value attitude of children, was used targeted follow-up of children in various activities, pedagogical analysis, interviewing, clarifying conversations, design methodology «Diagnosis of emotional and value attitude towards oneself» by A. Pryhozhan and Z. Vasyliauskaite (Shchetinina, 2000), the method of «Acceptance of oneself», expert evaluation, questionnaire «Self-determination in life situations», which contributed to the objective study of the state of the problem in the practice of modern primary school.

The theoretical background

An important aspect of the study of the value orientations of youth in the new conditions is the analysis of the system of human values. The concept of «value» and «value orientation» arose on the verge of several areas – philosophy, axiology, social and cultural anthropology, sociology, and psychology.

The category of value is one of the most difficult categories. In the definition of this category in relation to its nature, role, meaning for various aspects of life and human behavior there are contradictory judgments. This is due to the fact that this category is not only theoretical, but reflects the real criteria, benchmarks for behavior and actions of the individual.

According to scientists (Hitlin & Piliavin, 2004), values express different motivational goals and make it possible to understand the links between previous social positions and individual choices that serve to recreate aspects of a social structure.

The definition «value» reveals the attitude of man to the world, which concerns not so much intellectual as the affective side. The value is as if distributed between a person and the surrounding environment and exists in their interaction. The bearer of value can be any personality, object, phenomenon, which is in interaction with the consciousness of a personality.

Values displayed in human consciousness form value orientations. Values are a life goal and ideological orientations that are formed in the process of comparing personal experience, culture and traditions. Value orientations of the person are studied in the context of pedagogical diagnostics, are considered in tight connection with the spiritual culture, spiritual needs, interests, evaluative judgments. Different variants of the research of values and value attitude exist: ranging, rating, hierarchical linear models, structural equation test for value and behavioral attitude and behavioral hierarchy (Homer & Kahle, 1988; Boninger, Krosnick, & Berent, 1995; Hitlin & Piliavin, 2004).

Formation of needs and values comes from childhood under the influence of various factors and causes. The development of a person depends on the environment in which the child is located, who surrounds her, which priorities are preferred. Researchers underline that parents, peer groups, professional circles and culture can serve as sources of values in general. Meanwhile some values can only be taken as social norms. However, a positive self-attitude, activation of the concept «oneself» will lead to the assimilation of values (Verplanken & Holland, 2002).

Neff K. considers an alternative conceptualization of a healthy attitude towards oneself in the form of self-affirmation, which corresponds to the humanistic value of man (Neff, 2003). It is like self-pardon, but it is not identified with passivity and inactivity with respect to the shortcomings that are observed in oneself. Positive and emotional attitude includes feelings of kindness and caring for oneself and others (Nelson, Hall, Anderson, Birtles, & Hemming, 2017). Moore J. and Smith M. demonstrate the degree of self-esteem dependency on performing daily evaluations of oneself and others, and the impact of others' assessments on social and emotional well-being (Moore & Smith, 2018).

Scientists investigate various aspects of value attitude: to computer training (Vekiri & Chronaki, 2008), to the environment (Onur, Sahin, & Tekkaya, 2012), etc. The research of humanistic and value attitude to oneself becomes actual one.

An important factor in the spiritual development of the child is the formation of value orientations on a humanistic basis. Therefore, its worldview, which is the

basis for shaping the system of humanistic and value-based attitude of the child to himself, becomes important in the formation of the values of the individual.

The definition «humanistic-value attitude of the child to himself» in our research is interpreted as a relatively resistant system of values expressed in the child's ability to empathy, awareness and perception of the surrounding reality through the prism of their own evaluative judgments based on cognitive, emotional and evaluative, behavioral components.

Methodology, organization and results of the research

The results of the preliminary stage of the pedagogical experiment presented in this paper are found to be a part of a broader study conducted in primary schools in Vinnytsia region (Ukraine). The ultimate goal of the study is the scientific substantiation and experimental verification of the effectiveness of the pedagogical conditions for the formation of a humanistic and value attitude of the primary schoolchildren towards themselves. At the stage of the statement, 317 primary schoolchildren of 3-4 classes in both urban and rural schools took part in the experiment.

Diagnostic examination of the formation of the primary schoolchildren of humanistic and value attitude towards themselves was made in each individual component (cognitive, emotional and evaluative, behavioral ones).

For the quantitative processing of the results of diagnostics, we have developed a mechanism for assessing the level of formation of humanistic and value attitude of the primary schoolchildren towards themselves. According to the results of each diagnostic procedure, the degree of manifestation of a certain indicator for each criterion correlated with the content (qualitative) characteristics of the levels of formation humanistic and value relationship of the child to himself and was evaluated at a five-point scale. At the end of each index, its numerical value $P_{m.n}$ was found as the arithmetic mean of the points obtained, where m is the serial number of the criterion, n is the ordinal number of the indicator for this criterion. If $0 \leq P_{m.n} < 2$, we believed that the respondent had a low level of manifestation of this indicator, if $2 \leq P_{m.n} < 4$ – average level, if $4 \leq P_{m.n} \leq 5$ – high one.

In order to determine the level of formation of each structural component of the value attitude of the primary school student towards himself, we transferred the data received for each respondent for each indicator into standard scores: the high level of the indicator was estimated at 2 points, the average – 1 point, the low – 0 points. The coefficient of formation of each component of the value attitude K_m was calculated by the formula 1 created by the authors:

$$K_m = \sum_{k=1}^n K_{m.n}, \quad (1)$$

where n – number of indicators according to which the diagnostic study was conducted,

$K_{m.n}$ – number of points obtained for each of the n indicators (high – 2 points, the average – 1 point, low – 0 points).

Depending on the received quantitative value of the coefficient K_m the level of formation of the corresponding component was determined:

High level – $5 \leq K_m \leq 6$;

The average level – $2 \leq K_m < 5$;

The low level – $0 \leq K_m < 2$.

Using the analogous procedure, we determined the numerical coefficient of the level of formation of the value attitude (K_v) of the primary school student towards himself as to a holistic entity. For this, the coefficients of the formation of the components of K_m were repeatedly converted to standard points depending on the determined level (high – 2 points, average – 1 points, low – 0), and numerical value of the coefficient K_v was found for each respondent according to the formula 1.

The study and analysis of the theoretical basis on the subject of research has given us the grounds for the concept of humanistic and value attitude of the primary pupil towards himself as a relatively stable system of values, expressed in the ability of the child to the holistic experience, awareness and perception of the surrounding reality through the prism of their own evaluative judgments based on cognitive, emotional and evaluative, behavioral components. For each component we have identified diagnostic criteria and relevant indicators.

Thus, we consider the criterion of the cognitive component to be humanistic and valuable awareness of the child, whose indicators are: awareness of the personality of his value as a Human; a system of ideas about worthy and unworthy behavior; value and meaning formations associated with the image of «I am». The criterion of the emotional and evaluative component is the emotional and value settings in the relationship interactions, the indicators of which are: experience of the personality of his value; emotional attitude to situations that affirm dignity, respect for comrades; adequacy of self-esteem. The criterion of a behavioral component is characterized by the presence of a stable humane life position; its indicators are the person's desire for development; the ability to regulate behavior according to a value relation to oneself and others.

Based on the distinguished criteria and indicators, we have identified the levels of formation of humanistic and value attitude of primary pupils toward

themselves (high, medium, low). Here is a description of the identified levels in the context of the formation of each component (cognitive, emotional and evaluative, behavioral ones):

High level:

These students are characterized by the fact that their humanistic and value orientations are aimed at themselves and other people; they respect, love and appreciate themselves, acquaintances and strangers and their loved ones. They formulated a system of decent and unworthy behavior; value and meaning entities that are associated with the image of «I am» are manifested. They worry not only about their values, a situation that affirms dignity, but also respect their comrades, listen to themselves and respect the opinions of adults; self-esteem is characterized by adequacy. They strive for self-development, are able to set themselves humanistic goals, to regulate behavior in accordance with the value relation to themselves and to others.

Average level:

The humanistic and value orientations of these children are aimed at moral and valuable life guidance, search and choice of life path; they do not despair, they value everything that gives them life. However, they are not sufficiently aware of their own value, but differentiate their negative and positive features; the system of decent and unworthy behavior in them is not sufficiently formulated; value and meaning entities that are related to the image «I'm» not clearly expressed. Insufficiently expressing their values, a situation that confirms dignity, a respectful attitude to their comrades is situational; more often or only listen to themselves, and adult thoughts are taken into account in most cases from the point of view of their own benefit, or they fully submit to the position of an adult without trying to express their own position. Self-esteem, as a rule, is slightly overestimated (sometimes – understated). They do not always strive for self-development, they are able to set goals, but not always these goals have a humanistic and value orientation; aspire to regulate behavior in accordance with the value relation to themselves and to others, but sometimes they do not succeed.

Low level:

Valuable orientations of these children are aimed only at material values. They do not realize their value at all; the system of decent and unworthy behavior in them is not formulated; value and meaning entities that are related to the image «I am» have not expressed at all. Not expressing their values, a situation that affirms dignity, almost do not show a respectful attitude to their comrades. They neither listen nor to themselves, nor to the opinion of adults. Often show aggressiveness. Their self-esteem is inadequate. Do not seek self-development, their life goals are not humanistic and value orientation. They do not know how to regulate behavior in accordance with the value relation to themselves and to others.

To study the condition of the formation of the cognitive component of the humanistic and value relation to ourselves, we have developed a questionnaire «I am a Man!» which contains 12 questions and unfinished sentences aimed at identifying the humanistic and value awareness of children. The first five questions are aimed at determining the level of awareness of the personality of his value as a Person; four following – a system of ideas about worthy and unworthy behavior; the last three are the nature of value and meaning entities associated with the image of «I am».

1. I think that as a Human, I am capable of ...
2. I think that I as a person worthy ...
3. «Honor others» means ...
4. «Respect yourself» means
5. For me, the honor is ...
6. What, in your opinion, is worthy of a person: what are his actions, manifestations of which qualities?
7. And what is unworthy? Who is called a scumbag? For what?
8. Is it possible for you to always be a worthy man who is respected by everybody?
9. What prevents you from becoming such a person? What should you do in your character?
10. The true Person is ...
11. The main aim of Person...
12. In my life, I adhere to the following rules: ...

Upon completion of the survey, we conducted refining conversations, during which the children were invited to continue the sentence:

1. I am a person because I always ...
2. I am a person and therefore never ...
3. When I'm offended, I ...
4. I know that I'm unlike others because ...

The analysis of the results divided all respondents into three groups. To the first group (high level) 34 respondents (10,7%) were assigned. These students are characterized by the fact that their humanistic and value orientations are aimed at themselves and other people; they respect, love and appreciate themselves, acquaintances and strangers and their beloved. They formulated a system of decent and unworthy behavior; value and meaning entities are associated with the image of «I am».

We included 117 respondents to the second group (36,9%). Their humanistic and value orientations and moral and value-oriented guidelines of life aimed at finding and choosing a way of life; they do not despair, they value everything that gives them life. However, they are not sufficiently aware of their own value, but differentiate their negative and positive features; the system of decent and

unworthy behavior in them is not sufficiently formulated; value and meaning entities that are related to the image I'm not clearly expressed.

The third group includes children whose value orientations are aimed only at material values. Such were 166 respondents (52,4%). They do not realize their value at all; the system of decent and unworthy behavior in them is not formulated; value and meaning entities that are related to the image «I am» were not expressed at all.

The obtained results show the predominance of low level of humanistic and valuable awareness of primary pupils; many children do not have the need for self-knowledge and self-analysis, without which there can be no full sense of life, worthy of a Human. There is a mass of consciousness under the influence of very similar and depleted needs of children. The lowest results relate to the love of people and respect for others.

In order to determine the state of formation of the emotional and evaluative component of early school-aged children, we studied the emotional and value settings in relation interactions. Diagnostics of the depth of experience of the personality of his value was carried out with the help of the design method A. Pryhozhan and Z. Vasyliauskaite (Shchetinina, 2000). During the implementation of this technique, the children drew three pictures: «Bad boy/girl», «Beautiful boy/girl», «I am».

Analysis of the drawings showed that most children had a positive attitude towards themselves (drawing «I am»), using warm colors. The children tried to portray themselves in the center, which testifies to an adequate self-esteem, trying to explain why on the one picture the boy (girl) is bad, and on the other is good. The final conclusion was made only after clarifying conversations.

The study of emotional attitude to the phenomenon of human dignity and subjectively related concepts (the situation of self-affirmation and humiliation of dignity) and respectful attitude to friends took place in the process of purposeful pedagogical supervision of children in various activities (educational, extracurricular, game, under time of informal communication with peers, with relatives, with teachers, etc.), as well as in interviews with teachers (class teacher, teacher of music, teacher of English language, psychologist). It should be noted that the results of these diagnostic procedures have shown that children can experience their values, but at the same time self-asserting and degrading their dignity.

Establishing the degree of adequacy of self-assessment for early school-aged children was through the implementation of the method «Acceptance of oneself», which is aimed at determining the positive and negative qualities of the individual, their individual characteristics; the ability to recognize their disadvantages and demonstrate pluses, tolerates and understands others who also have their drawbacks and dignity.

The children were offered to divide a sheet of paper into two halves. On the left, in the column «My shortcomings», it was necessary to record everything honestly that a child considers their shortcomings today, now, at the moment.

After that, the children were given the following instruction: «In front of each drawback that you mentioned and listed, in the column «My Dignity» write one of its merits, something that can be countered by the disadvantages that you have at the moment». For each stage of work was given 5 minutes. Upon completion of the methodology with children, specific conversations were held. In addition, the children had to finish the sentence: «My relationships with classmates can be described as ...», «Most of all I value in my classmates ...». As a result of all the above mentioned procedures, it turned out that only.

37 respondents (11,7%) are not only experiencing their values, a situation that confirms dignity, but also respect their comrades. They listen to themselves and respect the opinions of adults; self-esteem is characterized by adequacy. Therefore, we interpret their emotional and value settings in relation interactions as having a high level.

156 respondents (49,2%) do not have enough of their values, a situation that confirms dignity, a respectful attitude to their comrades is situational. They are more likely to listen only to themselves, and adult thoughts are taken into account in most cases from the point of view of their own benefit, or they fully submit to the position of an adult without trying to express their own position. Self-esteem, as a rule, is somewhat overestimated (sometimes – understated). Therefore, we interpret their emotional and value settings in relation interactions as having an average level.

124 respondents (39,1%) do not worry about their values, the dignity situation almost does not show a respectful attitude to their comrades. They do not listen neither themselves, nor the thoughts of adults. Often show aggressiveness. Their self-esteem is inadequate. Therefore, we interpret such emotional and value settings in relation interactions as having a low level.

Thus, according to the study, for the majority of early school-aged children, the low level of emotional and value facilities in the intercourse interactions is characteristic, which testifies to the low level of formation of the emotional and evaluated component of the humanistic value relation to oneself.

To find out the state of formation of the behavioral component of the humanistic and value attitude towards themselves, we offered a questionnaire «Self-determination in life situations», questions are aimed at determining the presence of a stable, humane attitude of the primary schoolchildren.

Since the aspiration of the individual for development involves the ability to set goals for ourselves, we have proposed to children the questionnaire «Polifactor assessment of vital values». Questionnaire questions allow to evaluate the vital values of the primary schoolchildren based on the following factors: the factor of

self-realization, external success, service to society, protection of one's own Self, full life, strength and independence, friendship, wealth and health.

The analysis of the results showed that early school-aged children aspire to self-realization, full-fledged life, ready to serve society, want to have strength and independence, set goals and are ready for self-development.

The results of the children's responses to the questionnaire's questions were corrected in the process of targeted monitoring of children in various activities, which allowed investigating the practical skills of primary pupils to regulate behavior in accordance with the value relation to themselves and others.

As a result of the implementation of all the above diagnostic procedures, the following conclusions were made regarding the presence of a stable, humane attitude of the primary schoolchildren. The high level of its formation was recognized by 24 respondents (7,6%), as they seek self-development, are able to set themselves humanistic goals, to regulate behavior in accordance with the value relation both to oneself and to others. The average level – 98 respondents (30,9%). These children do not always strive for self-development; know how to set goals, but not always these goals have a humanistic value orientation. They want to regulate behavior in accordance with the value relation both to themselves and to others, but sometimes they do not succeed. The low level is characteristic of 195 respondents (61,5%). They do not seek self-development, their life goals are not humanistic and value orientation. They do not know how to regulate behavior in accordance with the value relation to themselves and to others.

The obtained results indicate that many children do not have the desire for development, there is a mass in the regulation of behavior in accordance with the value relation not to oneself, but to others.

The study of humanistic and value awareness, emotional and value settings in relation interactions, the presence of a stable, humane attitude among the primary schoolchildren made it possible to draw conclusions about the levels of formation of the components of their humanistic and value attitude towards oneself, namely, cognitive, emotional and evaluative, behavioral ones (Table 1).

Table 1 Levels of formation of components of humanistic and value attitude of the primary schoolchildren towards themselves

	High level		Average level		Low level	
	amount	%	amount	%	amount	%
Cognitive component	34	10,7	117	36,9	166	52,4
Emotional and evaluative component	37	11,7	156	49,2	124	39,1
Behavioral component	24	7,6	98	30,9	195	61,5

The generalization of quantitative and qualitative research results for all three components showed that a high level of humanistic and value attitude formation is available to 31 respondents (9,8%); the average is 139 respondents (43,8%); low – in 147 respondents (46,4%) (Fig. 1).

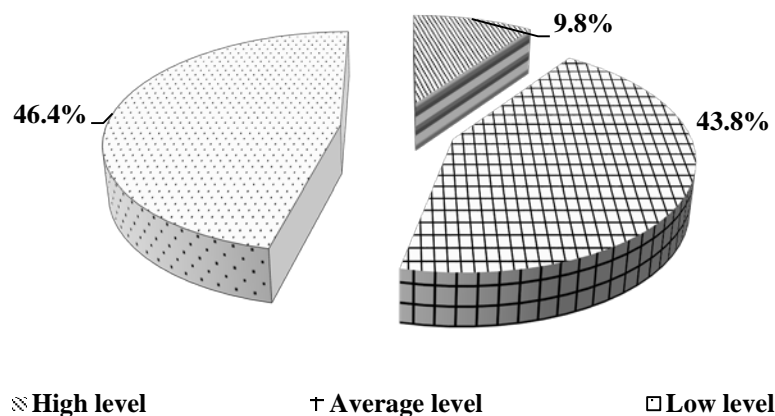


Figure 1 Generalized result of the diagnostics of the level of formation of the humanistic and value attitude of the primary schoolchildren towards themselves

The synthesis of the materials of the staging phase of the experiment showed that teachers are aware of the importance of forming a value attitude of the primary schoolchildren towards themselves. However, they do not use enough methods that are effective in solving this problem. The educational work is limited in familiarizing children with game exercises and activities aimed at fostering a friendly relationship between children. The cooperation of educational institutions and parents on this problem is unsatisfactory.

Discussion

On the basis of our research, we determined the pedagogical conditions for the formation of the humanistic and value attitude of the child towards himself:

1. Humanization of the environment in primary school, which involves increasing attention to the student's personality as the highest value of society.
2. Organization of the subject-subjective interaction of participants in the educational process, which requires from the teacher to treat a child as a smart partner; enrich the world of a child with positive emotions; recognize the fullness, subjectivity and equality of the participants in the interaction.
3. Use of a positive example of moral behavior presented in oral folk art, fiction and real life, in order to influence emotions, feelings of children,

and to develop positive and value attitude towards themselves, actions and deeds of other people.

4. Creation of axiological educational situations, during which the child faces with a moral choice, carrying out the process of internalization and introspection of humanistic values.
5. Inclusion of children in various forms of socially significant activities aimed at helping peers, relatives, acquaintances, people with special educational needs or the elderly, active participation in which will promote the transformation of humanistic feelings in the development of a stable humane life attitude.
6. Using the game exercises, conversations, elements of training to activate reflexive processes, development of the ability to self-assess of values and moral self-education of self-development.

An important condition for the effectiveness of the implementation of the spiritual development of the child, formation of child's value orientations is the preparedness of teachers for this educational work on humanistic principles and develops their ability to professional self-improvement, developing a subject position (Demchenko, Kit, Holiuk, & Rodiuk, 2018). In the process of organization of educational activity at the universities future teachers should be aware of the basic principles of the subject-subjective approach in education, to learn the system of psychological and pedagogical knowledge about the value as a scientific phenomenon, the peculiarities of the formation of semantic-oriented sector in the early school age. The mastery of modern personality-oriented technologies and methods of forming axiological development of pupils of primary school is significant, in particular they are methods of conducting trainings, creation of educational situations, techniques of collective gaming communication (Lapshyna & Lyubchak, 2019).

Conclusions

1. Theoretical and methodological analysis of literary sources made it possible to determine the components (cognitive, emotional and evaluative, behavioral) of humanistic and value attitude of primary schoolchildren towards themselves.
2. To conduct the experimental research, we were offered criteria (humanistic and value awareness, emotional and value settings in relation interactions, the presence of a stable humane position of life) and indicators of the investigated quality.
3. Analysis of the results of the ascertaining stage of the study showed the predominance of low level of its formation (46,4%) by all the components we identified. The substantiation of pedagogical conditions was made on the

basis of this research. In our opinion, in order to form humanistic and value attitude towards themselves by primary schoolchildren, it is necessary to create a partnership environment, provide subjectivity in communication, demonstrate the samples of moral behavior, organize socially significant activities and educational situations of choice, activate reflexive mechanisms of individual.

Summary

At the stage of the technocratization and informatization of society, the axiological component is the basis of the humanization of society and the education of man as a person, a citizen, a patriot. Values and value orientations are important phenomena that have an interdisciplinary status and are studied within the framework of philosophy, axiology, social and cultural anthropology, sociology, psychology. The formation of needs and values is a complex dialectical process that begins in the early years under the influence of various factors. The early school age is sensitive to the assimilation of humanistic settings and value orientations, the development of habits and skills of moral behavior in general and, above all, the formation of a humanistic and value attitude of the child towards himself. Theoretical and methodological analysis gave an opportunity to substantiate the content of the value and orientative approach in the educational process of the primary school, which involves the synthesis of cognitive, emotional and evaluative, behavioral components. Planned and conducted ascertaining experiment revealed the dominance of the low level of formation of the humanistic and value attitude towards themselves by the primary school students. In view of this, there is a need to create special conditions in the educational process of the school for the forming the axiological sphere of children.

References

- Boninger, D.S., Krosnick, J.A., & Berent, M.K. (1995). Origins of attitude importance: Self-interest, social identification, and value relevance. *Journal of Personality and Social Psychology*, 68, 61-80.
- Demchenko, O., Kit, G., Holiuk, O., & Rodiuk N. (2018). Development of future teachers' subjectivity in the context of preparation for working with gifted children. *Society. Integration. Education*, II, 507-519. DOI: <http://dx.doi.org/10.17770/sie2018vol1.3167>
- Goluk, O., Gaydukevich, A., Pakhal'chuk, N., Karuk, I., & Kolesnik, K. (2018). Education of children's self-esteem as a projection of moral and humanistic values. *Science Review*, I(8), 5, 13-17.
- Hitlin, S., & Piliavin, J.A. (2004). Values: Reviving a dormant concept. *Annual Review of Sociology*, 30, 359-393.
- Homer, P.M., & Kahle, L.R. (1988). A structural equation test of the value-attitude-behavior hierarchy. *Journal of Personality and Social Psychology*, 54, 638-646.
- Lapshyna, I., & Lyubchak, L. (2019). Using the Technology of Collective Game Communication in the Process of Forming the Diamonological Competency of Primary School Pupils. *Society. Integration. Education*, II, 267-279. DOI: <http://dx.doi.org/10.17770/sie2019vol2.3995>
- Moore, J.S.B., & Smith, M. (2018). Children's levels of contingent self-esteem and social and emotional outcomes. *Educational Psychology in Practice*, 34(2), 113-130.

- Neff, K. (2003). Self and identity. *Taylor & Francis*, 2, 85-101.
- Nelson, J.R., Hall, B.S., Anderson, J.L., Birtles, C., & Hemming, L. (2017). Self-compassion as self-care: a simple and effective tool for counselor educators and counseling students. *Journal of Creativity in Mental Health*, 12, 1-13.
- Onur, A., Sahina, E., & Tekkaya, C. (2012). An investigation on value orientations, attitudes and concern towards the environment: the case of Turkish junior school students. *Environmental Education Research*, 18(2), 271-297.
- Shchetinina, A.M. (2000). *Diagnosis of social development of a child*. Velikiy Novgorod: NOVGU im. Yaroslava Mudrogo.
- Vekiri, I., & Chronaki, A. (2008). Gender issues in technology use: Perceived social support, computer self-efficacy and value beliefs, and computer use beyond school. *Computers & Education*, 51(4), 392-1404.
- Verplanken, B., & Holland, R.W. (2002). Motivated decision making: Effects of activation and self-centrality of values on choices and behavior. *Journal of Personality and Social Psychology*, 82(3), 434-447.

CAREER DECISION MAKING PROCESS OF THE 8TH GRADERS WITHIN THE REFORM PROCESSES IN LATVIA

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Abstract. *The present study investigates the career choice of 8th graders in the context of reform processes in Latvia and changing demands of the job market. Career planning in this article is seen as a spiralling and dialectic process that is influenced by multiple factors, the process that involves planning, generating options, evaluation of options and making decisions. Reform processes in Latvia requires career counsellors to help young people to maintain an attitude of acceptance while choosing a career path, and in addition to develop meaningful and professional life changing discussion on available career options in order to become significant adviser while guiding pupils on adapting to changing requirements of a job market. The aim of the study is to explore the main influences determining the career choice of the 8th grade pupils as well as to explore the sources of information that determine them on making such decisions. Research methodology: For the purpose of this study the authors chose a pilot questionnaire in order to explore the career path of the 8th graders. The study draws on tendencies of youngsters' choice of a career obtained in Latvia and Czech Republic. Research findings: Considering the changing demands of a job market, the teachers need to consider an adaptive career managing processes for the youngsters by taking into account a dialectic interplay of multiple influences on pupils' career choice and to foster a more sustainable career path in helping pupils to gain career maturity in decision making and developing competencies needed for the future.*

Keywords: *career choice, basic school pupils, reform processes in Latvia, competencies.*

Introduction

The present study investigates the career choice of the 8th graders in the contexts of reform processes in Latvia and the changing demands of a job market. The aim of the study is to explore the main influences that determine the career choice of the 8th grade pupils as well as to explore the sources of information that determine them on making such decisions.

The reform processes in Latvia towards implementing a competency based on approach put quite high demands on teachers in fostering pupils' professional growth. The reform processes are aimed on developing pupils' competence by reinforcing a shift from ready-made knowledge transfer to a learning process, where the teacher offers diverse, complex, and personally meaningful tasks in the pedagogical process, which enable pupils to develop an understanding how to interrelate the acquired knowledge.

A particular attention in schools is paid to pupils' professional choice and competencies that pupils need to acquire to be successful in a job market. Changes that are taking place globally, requires a set of sustainable competencies that are suited to fit for the dynamic and unpredictable models of economic and social development (Rychen, 2003). A competency that the pupils need to acquire involves their ability to meet complex demands of a job market, by mobilising all the resources in a particular context (OECD, 2003). This requires transforming educational system in a way that deepens and transforms teaching approaches as well. Teachers need to take into account new expectations on the part of learners that require more innovative approaches towards learning.

Adaptive Career Planning Skills of the 8th Graders in the Changing Job Market Situation

During the years of Latvia's independence, the strategic goals of society development aimed at more efficient use of human resources have changed, and in order to achieve this, the educational objective and educational implementation system are being revised to promote more targeted investment of human potential (knowledge, abilities, skills, experience, led education process. Contemporary improvement of human quality of life can be achieved by investing in human education (Brigmane, 2014).

The turn of the 20th and 21st centuries is characterized by changes in the life processes of the world, Europe and Latvia, including the disappearance of occupations of the previous century and the emergence for completely new professions. The rapidly changing situation in the labor market and in the society makes every individual, including pupils and their teachers, a need to adapt to changing situations and to be educated throughout their lives. The emergence of new professions, the overproduction of professions that had been required in the recent past, unemployment, uncertainty, increasing the financial resources of educational institutions to attract pupils to their schools, an urgency for graduates to make career choices within a limited time, creates difficult situation for the students to make a logical and thought-through professional steps towards their career choice and career management. Education policy makers acknowledge that the 21st century's labour market dynamics are linked to the need to improve career

education at schools in order for graduates to be able to navigate fast-changing living conditions and make independent career choices at any stage of their lives. Recent guidance from the European Lifelong Guidance Policy Network (EMCDDA) has emphasized the importance of career education in its diverse forms of delivery, as well as in the learner's ability to lead their careers in a lifelong perspective (Oomen & Plant, 2014).

There is a huge body of literature focusing on a career guidance, but still it is under aspects of research concerning the importance of childhood's experiences, among which is family's socioeconomic background that influences pupils' career choice, their unconscious motivation and why they choose a particular path of a career. While guiding students in their career decision making processes, one needs to be aware of both, rational and unconscious aspects of a decision-making process of pupils.

Super and Knasel (1996) defines career adaptability as involving: plan, exploration, ability to use information, decision making skills and reality orientation aspects. The term has been advanced by fostering one's ability to cope with difficulties at work. Adaptive skills are necessary for developing one's flexibility to fit in a global market economy. This also includes entrepreneurial sensibilities and emotional intelligence (Salovey & Mayer, 1990). The adaptability is a context rich term (Flum & Blustein, 2000) and has a context bound dimension. At the same time, it has as a future oriented dimension. Therefore, a career counsellor needs to be sensitive to the context and to involve pupils in a lifelong adaptive process that more often is an unplanned and unpredictable. According to Vygotsky (1978), children's understanding of the world is influenced by socio cultural context and the guidance of significant people, mentors. Therefore, teachers and career counsellors need to recognize the need of role models in the process of learning about the job market (As cited in Starr, 2000). As Marcus (2017) argues, the career choice of the 8th graders is influenced by their performance in certain fields of science. Pupils will most likely choose to study the subjects in the secondary school stage where they are more confident about their ability.

Socio-economic changes in Latvia since independence, the transition from a planned economy to a market economy and changes in the education system have created a new environment in which individuals need to be more actively involved in a decision-making process about their educational pathways and professional activities. The availability of human resources, the quality of labor resources, mobility (geographical and occupational) and productivity in Latvia are becoming increasingly topical, necessitating the need to promote the acquisition of knowledge and skills within the school curriculum that enable people to better adapt to changing your career (Jaunzeme, 2014).

Young people who have not been able to make career decisions during school constitute the highest number of registered unemployed young people, 31.8% of them are graduates of general secondary education.

The Research Methodology

For the purpose of this study the authors have designed a pilot questionnaire with the aim to explore the sources of information about the world of professions and the main influences in their career choice. The participants of the study are the 8th graders who are on the path of the career choice.

The survey was conducted in the schools of second biggest city of Latvia in Daugavpils during December 2019. Total number of respondents were 111. The sample comprises 67 boys and 44 girls. The questionnaires were distributed in the classes during the lessons via researchers and teachers of these pupils. At the beginning the researchers explained the aim of this questionnaire to the pupils and asked if there were some uncertainties. Because of this approach the return on questionnaires was 100%. We used only nominal (demographic variables) or so called dichotomic variables (options were only yes/no for the questions) in our pilot questionnaire, that is why we analysed the data only in descriptive way – descriptive analysis. The analysis was conducted via software STATISTICA. We counted the frequency for each item in connection with gender. The graphs used in this article were prepared by using software Microsoft Office Excel.

Research Findings

The empirical data gained in the questionnaire on Czech pupils indicate that pupils feel themselves as independent experts in making their career choices and display a high degree of radicalism as a result of their emancipation from the family. They declare that they want to decide themselves about their future, regardless their parents' decisions and influences (Hlad'o, 2012). The author points the socioeconomic status of the family as a significant determinant of pupils' choice. Namely, pupils who come from the families with a low socioeconomic status, are less influenced and guided by the family in the process of their career path. Different situation can be observed among the pupils and their parental influences in Latvia who are willing to listen to parental advices. The career choice of children in Czech Republic is influenced by their own decision (78%), 9% of pupils' decisions were influenced by their friends and 2% of choices were influenced by their teachers (Hlad'o, 2012). Among the most popular sources of information among the youngsters about the future job market becomes an internet (45%), school (39%) and parents (39%). The career choice is one of the most debated topics in families in both, Czech Republic and Latvia.

The research data on the main influences in regards to the choice of the career for boys and girls presents the following picture:

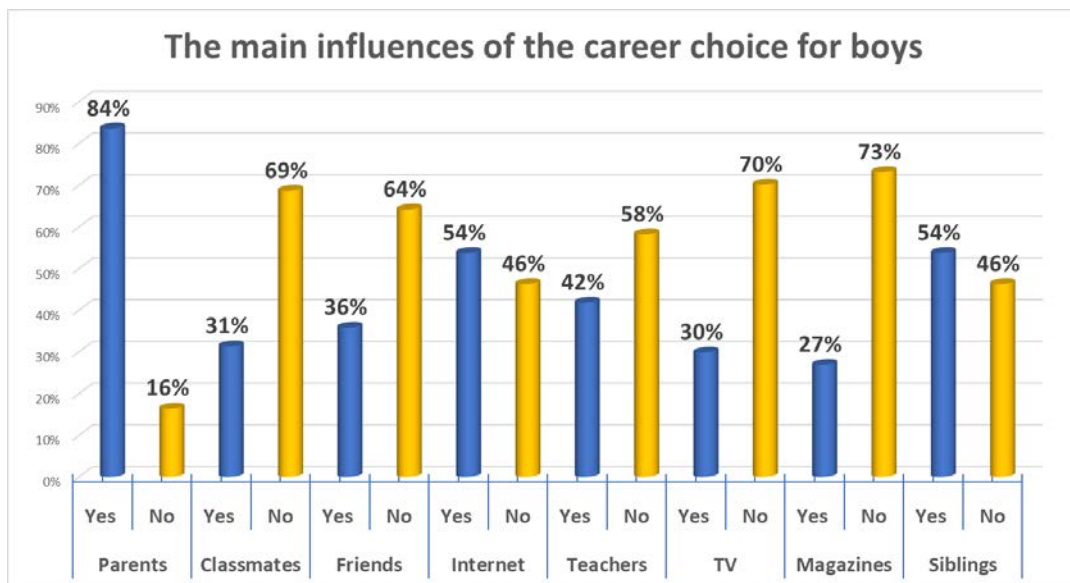


Figure 1 The main influences of the career choice for boys

The data gained in the pilot study indicates that the 8th graders are willing to listen to parents’ advices about the career choice in contrast to pupils from the Czech Republic who prefer to be independent in their career choice. In both countries the opinion of siblings is important for the 8th graders in their career choice.

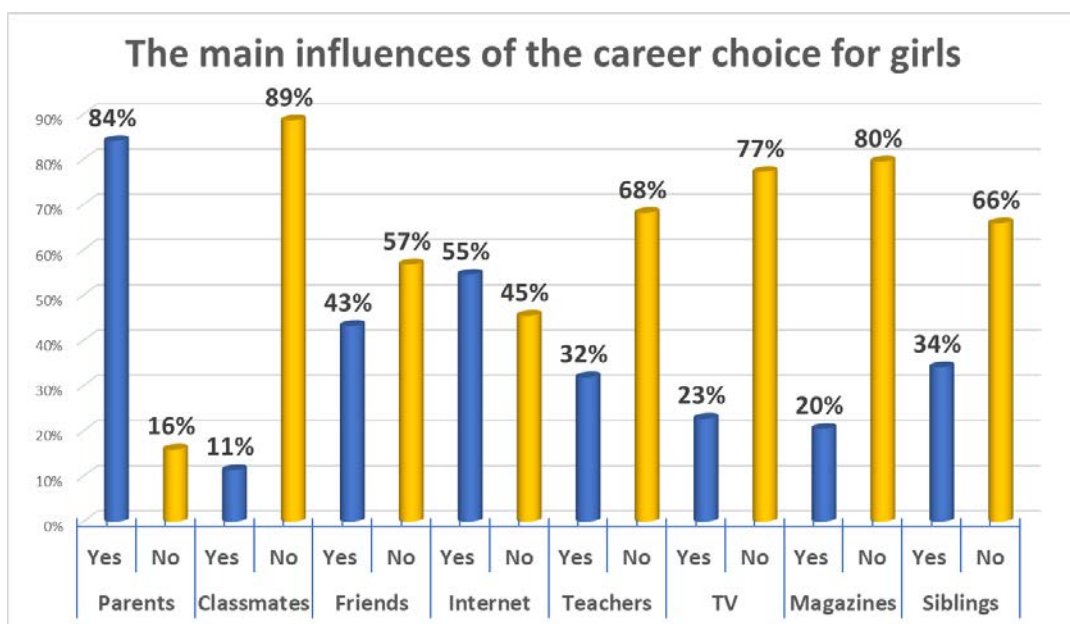


Figure 2 The main influences of the career choice for girls

As for girls, the parental advice is still worth considering. The girls also consider the opinion of friends and information gained in the internet.

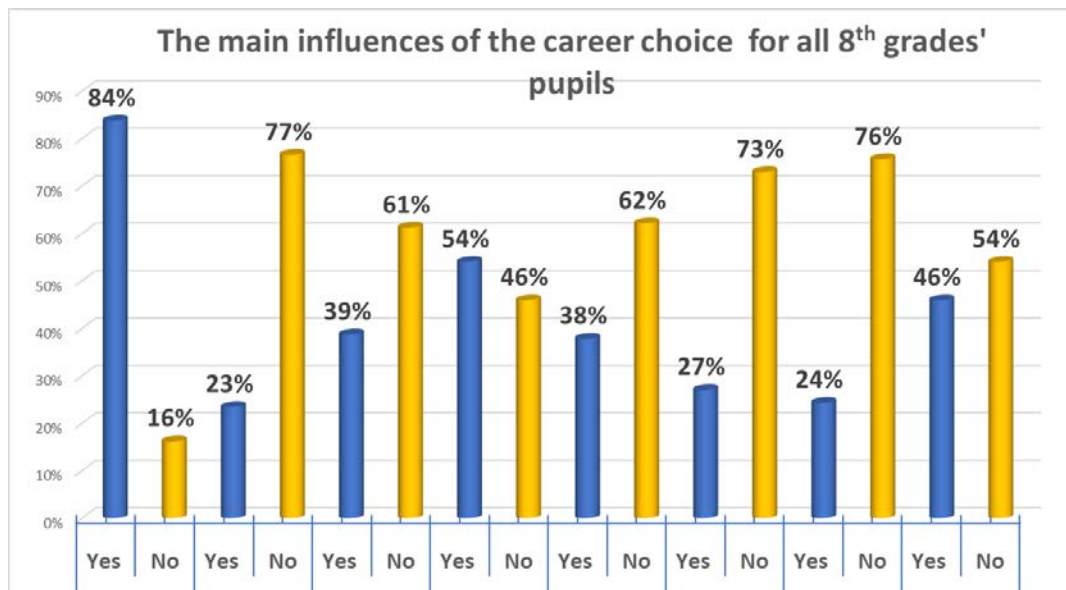


Figure 3 The main influences of the career choice for the 8th graders

The analyses gained from the total sample of 8th graders allow us to conclude that parents still play a significant role in the career choice of the teenagers, although internet and siblings play not the least significant role in the career choice of the teenagers.

We received interesting results while exploring on the differences between boys and girls on the question: *Do classmates influence your career choice?* It is only one question (in the case of “influences”) where we found some bigger differences in answer between boys and girls. In this case boys are influenced in their career choice by their classmates more often than girls (see Figure 4 below).

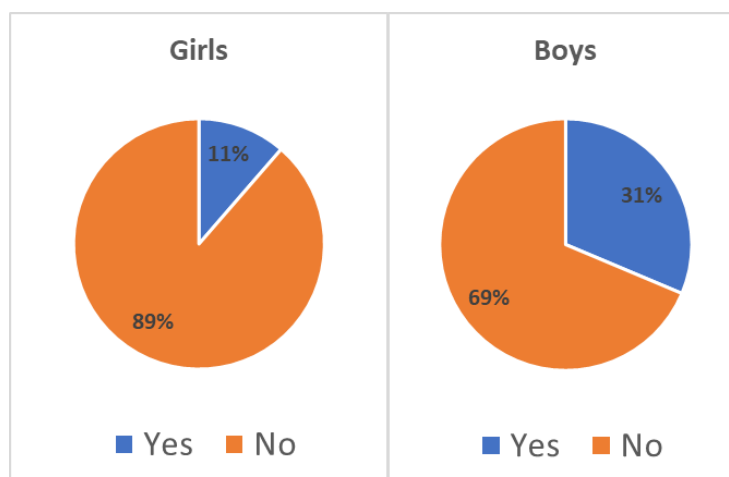


Figure 4 Influence of classmates for the career choice of the 8th graders

The other part of our questionnaire explored the main sources of information for the pupils for their career choice that are reflected in Figure 5.

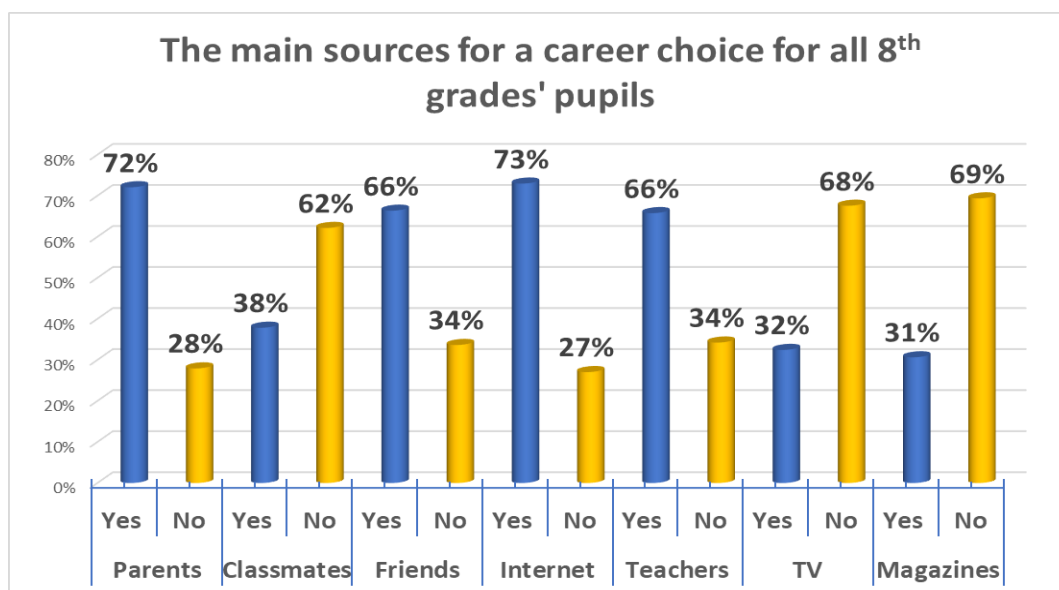


Figure 5 The main sources of information for the career choice for the 8th graders

Among the main sources where teenagers gain information about the career options are still parents, internet and friends. Teachers are also play a crucial role in introducing pupils to the professional world by encouraging them to participate in shadowing the experts of career field, pupils might be interested in, and other activities offered at school. In Czech Republic, among the most popular sources of information among the youngsters about the future job market is the internet (45%), school (39%) and parents (39%).

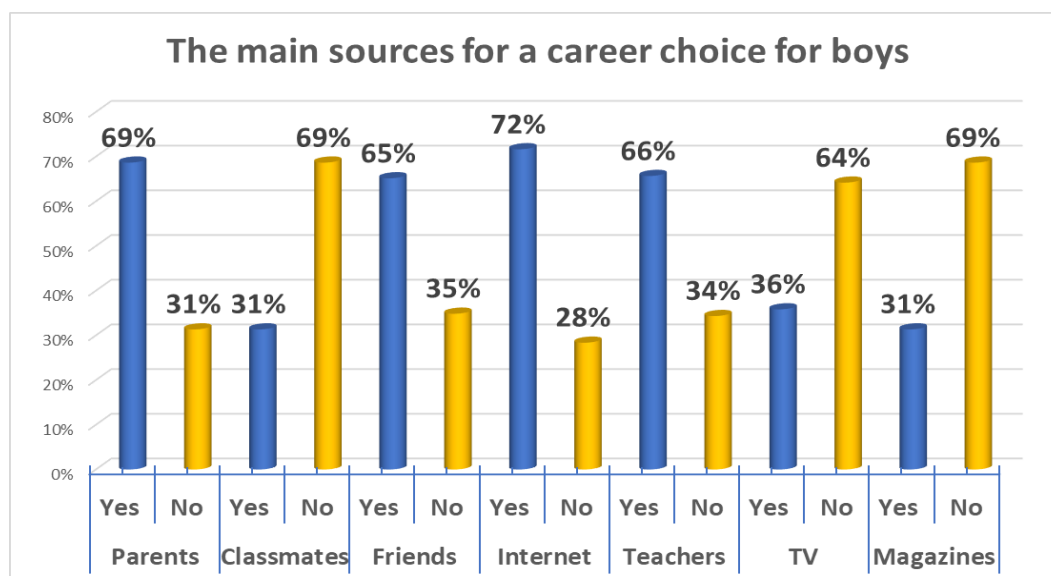


Figure 6 The main sources of information for the career choice for boys

The differences among girls and boys are very slight and is reflected in Figure 6 and 7.

As seen in the table, the career choice of the boys are influences mainly by internet, parents and friends. Similar picture derives from the responses of the girls as seen in Figure 7.

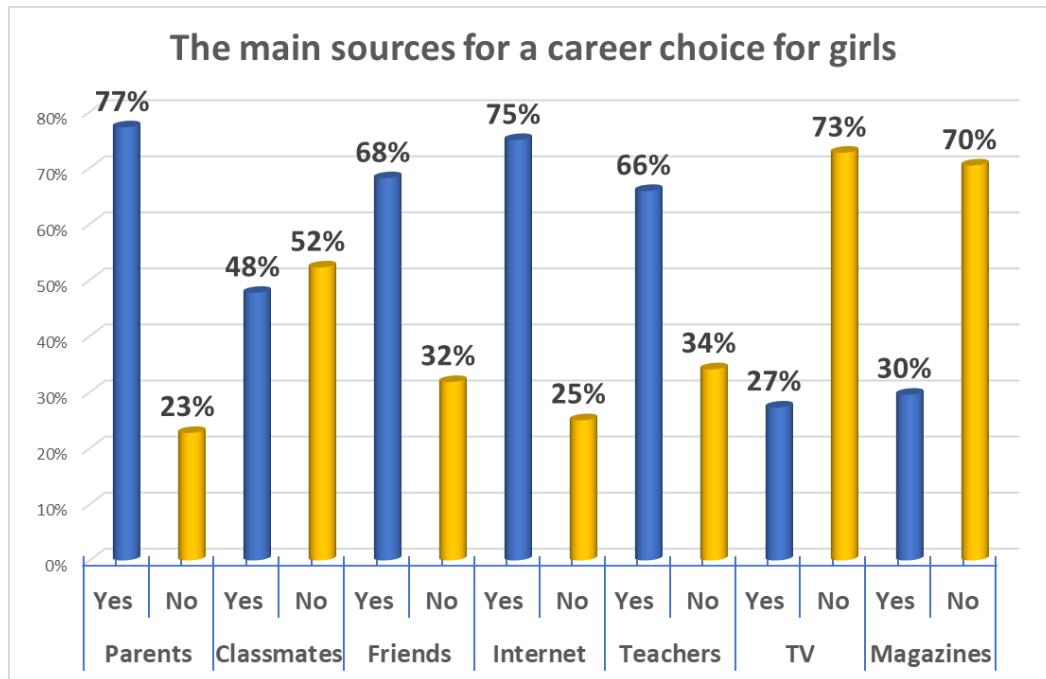


Figure 7 The main sources of information for the career choice for girls

For the girls, the main sources of information are internet, parents and teachers. This allows us to conclude that the career counsellor with the teachers are doing a good job in opening various options of education to their pupils.

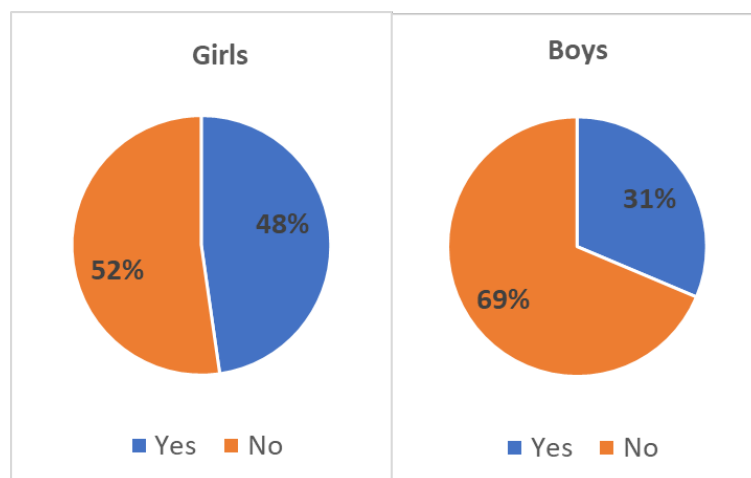


Figure 8 Classmates as a source of information for career choice

The differences between the boys and the girls in the questions focusing on sources of information for the career choice in general are small but we can see some slight differences in detailed information. For example, the differences between the boys and the girls are seen in the question: *Do your classmates tell you about future professional opportunities?* (see Figure 8 below).

In this case this is obvious that the girls more often discuss the future professional opportunities with classmates than the boys. In this way it is also interesting to compare this result with the Figure 4. We can see that the boys on one hand are more often influenced by their classmates than the girls, but on the other hand they probably do not discuss much about their future professional opportunities with them.

Suggestion for the Career Counsellors

Career guidance process needs to be planned in the way that it is adaptive and context bound process where pupils become more attuned to their needs, interests, and values, seeking to learn more about themselves and the job market around (Krieshok et al., 2009).

Career counsellors need to provide various opportunities for their pupils to develop career awareness, career exploration, and life career planning skills. They are required to provide an appropriate support and regular feedback by encouraging pupils to reflect on their own learning and thinking, thus fostering them to become interdependent and innovative problem solvers in the changing job market (Starr, 2000).

The ideas of projects, the weeks of shadowing in the work-based environment encourages youngsters to explore the options of the job market. They develop a confidence in exploring numerous future options.

Early career guidance needs to open children to a variety of options available in the job market in order to develop pupils' awareness of educational and other choices that will be available as they proceed through school education. Career education needs to be a part of school planning process for all graders.

Individual's ability to make decisions is influenced not only by the internal resources and factors of the personality, but also by external resources and circumstances that are classified as non-psychological and therefore difficult to measure. Among them there are economic, political, social, temporal, family, and financial factors (Super & Crites, 1966)

Conclusions

Career planning process need to be perceived as a life-long and a dialectic process that is contextually rich and sensitive. It requires acquiring adaptive career

planning skills in the context of changing job requirements. Career planning involves the stages of generating options, evaluating options, making decisions and planning actions. By developing career awareness pupils will become knowledgeable about themselves and the world of work which would lead to set their mind to adaptive career making process. It is to create their career path as an adventure.

The limitations of this pilot study were a relatively small sample of respondents and a need of further detailed exploration of some significant determinants of a career choice such parents' socioeconomic status and pupils' experiences that requires a more detailed in-depth qualitative study.

The study of year 2019, shows that the parents of Daugavpils students play a key role in the students' professional choice, their opinion is crucial for 8th grade pupils.

For the further research the following questions are set:

1. Is parents' influence too influential in students' career choices, or they tend to be over influential in realizing their own unrealized career opportunities (students' and parents' motives, and reasons should be explored);
2. Pupils themselves do not receive much of support from teachers, guidance counselors and other guidance providers, and make unsustainable and hasty decisions.

References

- Brigmane, B. (2014). *Pieaugušo pašpieredzes veidošanās mācīšanās procesā. (Developing adults' self experience in the learning process)*. Promocijas darbs. Doctoral dissertation. Rīga: RPIVA.
- Flum, H., & Blustein, D.I. (2000). Reinvigorating the study of vocational exploration: A framework for research. *Journal of Vocational Behaviour*, 56, 380–404.
- Hlad'o, P. (2012). The role of the significant others in the transition of Czech pupils between the lower and upper secondary school. *International Conference on New Horizons in Education*, 55, 308–316.
- Jaunzeme, I. (2014). *Karjeras attīstības atbalsta sistēmas darbības izvērtējums Latvijā. Pētījums. (Evaluation of the carrer support system in Latvia. Research.)*. Rīga: VIAA.
- Krieshok, T.S., Black, M.D., & McKay, R.A. (2009). Career decision making: The limits of rationality and abundance of non-conscious processes. *Journal of Vocational Behaviour*, 75, 275–290.
- Marcus, P. (2017). *The psychoanalysis of career choice, job performance, and satisfaction. How to flourish in the workplace*. London and New York: Routledge
- OECD. (2003). *Key competencies for a successful life and well-functioning society. The definition and selection of key competencies: Executive summary*. Göttingen: Hogrefe and Huber Publishers. Retrieved from www.oecd.org/dataoecd/47/61/35070367.pdf

- Oomen, A., & Plant, P. (2014). *Early School Leaving and Lifelong Guidance*. Jyväskylä: University of Jyväskylä – Finnish Institute for Educational Reserch. Retrieved from <http://www.elgpn.eu/publications>
- Rychen, D.S. (2003). Key competencies: Meeting important challenges in life. In D.S. Rychen, & L.H. Salganik (Eds.), *Key competencies for a successful life and a well-functioning society* (pp. 63–107). Göttingen: Hogrefe & Huber Publishers.
- Salovey, P., & Mayer, J.D. (1990). *Emotional Intelligence. Imagination, Cognition, and Personality*, 9, 185–211.
- Starr, M.F. (2000). How early is too Early to Begin Life Career Planning? The Importance of the Elementary School Years. *Journal of Carer Development*, 27(2), 89–102.
- Super, D.E., & Crites, J.O. (1966). *Vocational development*. New York: Columbia University.
- Super, D.E., & Knasel, E.G. (1996). Career Development in adulthood: Some theoretical problems and possible solutions. *British Journal of Guidance and Counseling*, 9, 194-201.
- Vygotsky, L. (1978). *Mind in society. The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

DZIRDES UN BALSS KOORDINĀCIJAS ATTĪSTĪŠANA DZIEDĀŠANĀ: LATVIEŠU VALODĀ IZDOTAJĀ METODISKAJĀ LITERATŪRĀ

Development of Coordination between Hearing and Voice in Singing: Review of Methodical Literature in the Latvian Language

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Abstract. *The aim of the study is to examine the reflection of the processes of formation of musicality, musical hearing and vocal skills in methodological materials published in Latvia. The aim of the study is to analyse the existing methodological materials from 21st century that deal with the development of children's musical hearing as described by various authors. The study focuses on the primary school age, pre-mutation period children who, in addition to general education, are learning singing in vocational or interest education during individual or group lessons (ensembles and choirs).*

The research method used is the selection and summarization of opinions and recommendations of teachers of music subject, singing teachers and conductors in the work with children – soloists and choir singers, who are gaining their first skills in singing and intonative hearing, as described in various literature sources.

The results of the study show that all of the examined materials conceptually coincide, but often different terminology and explanation of techniques is used, which does not always reveal the nature of each expression and technique, thus preventing the theoretically expressed knowledge from being put into practice. Many explanations are based on the empirical work by the authors of the source. There is a lack of methodological techniques that are based on scientifically proven facts.

Keywords: *basic singing skills; children; musical development; musical hearing; vocal pedagogy.*

Ievads

Introduction

Lasot zinātniskos rakstus vokālajā pedagogijā ārvalstu literatūrā, radās interese par Latvijā esošās vokālās metodikas apskatu, kura tapusi 21. gadsimtā. Praktiski katrā mācību iestādē Latvijā ir vismaz viens vokālais ansamblis vai koris. Profesionālās ievirzes izglītībā bērni mūzikas skolu kora klasē tiek uzņemti

no septiņu gadu vecuma, interešu izglītības pulciņos vēl pirms skolas gaitu uzsākšanas.

Vokālā pedagogija var tikt aplūkota gan kā māksla, gan kā zinātne, taču starp dziedāšanas skolotājiem un balss pētniekiem nevalda vienprātība attiekmē un izpratnē par dzirdes balss aparāta koordināciju, kā arī tās attīstīšanas iespējām. Vokālie pedagogi uzskata, ka dziedāšana ir dabas dāvana, kamēr balss zinātnieki, pētot balss darbību, atklāj, ka dziedāšana ir apgūstama prasme. “Svarīgi ir apzināties, ka bērni var tikt iemācīti dziedāt, jo to balss mehānisms ir piemērots šādai darbībai. Skolotājam ir nepieciešams tikai pienācīgi attīstīt dziedāšanas prasmes ar atbilstošiem pedagogiskajiem paņēmieniem” (Hedden, 2012, p. 1).

Dzirde ir viena no primārām uztveres maņām. Dzirdes orgāns ir viens no pirmajiem sensorajiem orgāniem, kas veidojas embriogēnēzē (Brice, 2009). Dzirdes attīstīšana sākumskolas posmā, noteiktu skaņu augstumu precīza reproducēšana runājot vai dziedot, kas kopumā uzlabo atmiņu, palīdz labāk uztvert, iegaumēt, apstrādāt un pārveidot dzirdēto informāciju, tā paaugstinot vispārējos mācīšanās sasniegumus.

Svarīgi, apgūstot dziedātprasmi, ir ievērot, ka bērna dzirdes un balss mehānisms ir nevainojamā kārtībā, tā funkcijas ir saglabātas. Ar dzirdes palīdzību tiek uztvertas apkārtējās vides skaņas. Balss radītā skaņa ir līdzeklis, ar kuru paust savas sajūtas, vēlmes un domas. Bērnu darbība mūzikā ir atkarīga no to vispārējās attīstības un prasmju nobriešanas (Hedden, 2012).

Dziedāšana ir prasme, kuru var un ir nepieciešams attīstīt. Dalīt bērnus “dziedošajos” un “nedziedošajos”, pirms uzsākts nopietns vokālo iemaņu apgūšanas process, ir tuvredzīgi, jo katram bērnam ir atšķirīgi muzikālie dabas dotumi, fiziskā un garīgā attīstība, vide, kurā tas audzis un vērtības, kuras tas ieguvis. Ir jāļauj skolēnam praktiski piedalīties mūzikas nodarbībā, dziedot un spēlējot mūzikas instrumentus, saprotot, ka laika gaitā dziedāšanas prasmes attīstīsies un uzlabosies.

Pētījuma mērķis bija apzināt pētnieku uzskatus par muzikālās dzirdes un balss koordinācijas sinhronizāciju bērniem sākumskolas izglītības posmā. Pētījumā tika izmantota kvalitatīvas kontentanalīzes metode, kas ietvēra tekstuālu datu satura subjektīvu interpretāciju. Latviešu valodā izdotajos metodiskās literatūras avotos tika meklētas kategorijas, kas bija saistītas ar bērnu balsi, dzirdi un balss un dzirdes koordināciju. Tika apskatīti 12 Latvijā publicēti darbi, kuri izdoti no 2001. līdz 2017. gadam. Atbilstoši pētījuma mērķim publikācijās un metodiskajos palīglīdzekļos tika apskatītas paustās atziņas par bērnu dzirdi, balsi un to koordinācijas attīstīšanas iespējām, strādājot ar bērniem jaunākajās klasēs. Pētījumā izmantoto rakstu un metodisko izdevumu autori pārstāv: mūzikas teorijas (*Jeļena Davidova, Gaļina Zavadska*); vispārizglītojošās mūzikas pedagogijas (*Anna Līduma, Linda Mackēviča, Ilze Vilde*); kordiriģentu (*Ingrīda Gailīte, Harijs Kraulis, Laima Lasmane*); pirmsskolas mūzikas skolotāju (*Baiba*

Brice, Solvita Grasmāne); logopēdijas (Irēna Miltiņa, Baiba Trinīte, Sarmīte Tūbele); vokālās pedagoģijas (Nellijs Pāgraba); mūzikas autoru (Mairita Bičuka) interešu laukus.

Bērna dzirde **Children's Hearing**

Bērniem muzikālās spējas parādās ļoti agrīni. Dzīves pirmajos mēnešos bērns spēj emocionāli atsaukties uz mūziku ar mīmikas un kustību palīdzību, kā arī uztvert ritmu, saklausīt melodiju. “Muzikālās spējas piedzimstot ir visiem cilvēkiem. Katrs bērns ir absolūti muzikāls [...] kopš dzimšanas, taču šī spēja izpausties ir jāattīsta dzīves laikā” (Brice, 2009, p. 10). Bērni piedzimst ar potenciālu. Taču vai un kur viņi šīs dabas dāvanas attīstīs ir ļoti atkarīgs no vides un cilvēkiem, kurā tas atrodas.

Cilvēka dzirdes uztveri var iedalīt muzikālajā un fonemātiskajā. Katrai no tām ir nozīmīga funkcija gan dzirdes aparāta, gan cilvēka attīstības gaitā kopumā. Ar muzikālo dzirdi var saprast arī skaņas augstuma, intonatīvo, tonālo, melodisko, u.c. ar muzikālo darbību saistītas dzirdes sajūtas. Fonemātisko dzirdi var saprast arī kā vārdisko un tembrālo dzirdi. Muzikālā dzirde attīstās agrāk nekā fonemātiskā (Līduma, 2015).

Mūzikas pedagoģijas un logopēdijas literatūrā tiek pausti līdzīgi uzskati par dzirdes diferenciaciju, kas norāda: muzikālās un fonemātiskās dzirdes motorie komponenti ir dažādi. Skaņa augstuma dzirdi raksturo tādi parametri kā: augstums, ilgums un tembris, taču runas dzirdē vadošais komponents ir artikulācija. Fonemātisko uztveri raksturo spēja atšķirt uztvertās skaņas vārda struktūrā (Līduma, 2015; Tūbele, 2002).

Melodiskā un fonemātiskā dzirdes attīstība pirmajos dzīves gados norisinās paralēli. Tikai runājot var attīstīt fonemātisko dzirdi, bet tikai muzicējot – muzikālo dzirdi. Muzikālās dzirdes attīstībā var veidoties aizture, ja strauji tiek attīstīta fonemātiskā dzirde. “Viens no iemesliem zemajam muzikālās dzirdes līmenim ir straujas tembrālās dzirdes attīstība, apgūstot valodu. Bez tālākas mācīšanās šie bērni var palikt [...] muzikāli neattīstīti” (Līduma, 2015, p. 137).

Muzikālā dzirde ir sarežģīta, daudzpusīga, kompleksa parādība. Muzikālajā darbībā svarīga ir niansētas dzirdes sajūtas attīstība. Ar muzikālo dzirdi plašākā nozīmē tiek saprasta gan skaņas augstumu dzirdēšana, gan muzikālā tembra un dinamikas izšķiršana, bet šaurākā nozīmē tā ir skaņas augstuma dzirdēšana, bez kuras nav iedomājams saprātīgi uztvert, reproducēt un analizēt mūziku. Skaņas augstuma dzirdēšana savā izpausmē attiecībā uz vienbalsīgu melodiju tiek dēvēta par melodisku. “Tiek izšķirtas trīs melodiskās dzirdes pamatīpašības: atpazīšana; melodijas reproducēšana; jūtīgums pret intonācijas precizitāti. Šīs īpašības liecina

par skaņkārtas izjūtas, jeb tonālās dzirdes attīstības pakāpi, kā arī dzirdes un kustību koordināciju” (Davidova, Čuang, Rauduvaite, & Zavadska, 2017, p. 9).

Muzikālā dzirde veidojas kā augstākā psihiskā funkcija. Tās attīstībai ir nepieciešama sensori motorā mācīšanās. Šajā posmā bērns pievērš uzmanību un reaģē uz skaņas avotu. Nākamajā etapā bērns cenšas atdarināt dzirdēto skaņu, piemēram, dziedot, cenšoties izpildīt saklausītajos skaņas augstumos. Tā ir ļoti sarežģīta balss vingrinājumu sērija, “un, iespējams, cītīgākais skaņu atdarinātājs vēlāk ir arī labākais dziedātājs” (Bičuka, Grasmāne, & Pagraba, 2003, p. 17).

Anna Līduma uzskata, ka bērna muzikālo spēju attīstībai “mācību stundās nepieciešams ne tikai dziedāšanas aparāta treniņš, bet arī vispārēja ķermeņa kustību koordinācijas attīstīšana” (Līduma, 2015, p. 137). Cilvēks attīstās kopveselumā, tādēļ nevajadzētu uzsvērt kādas atsevišķas prasmes attīstīšanu, jo īpaši sākumskolas vecumposmā.

Bērna balss ***Children's Voice***

Aplūkojot jautājumus par bērna balseni, tās darbības īpatnībām un attīstības problēmām dažādu Latvijas autoru pētījumos var novērot, ka tiek pievērsta uzmanība balss producēšanā iesaistīto orgānu anatomiskai uzbūvei un to funkcijām, vokālo iemaņu nostiprināšanai dažādu repetatīvu vingrinājumu veidā, kā arī viedokļi par balss skaņējuma estētiku, “tomēr bieži parādās pretrunīgi uzskati par bērna balss dabu un attīstības metodēm, ko var izskaidrot ar bērna fizioloģiskās un psiholoģiskās attīstības savstarpējo attiecību sarežģītību un muzikālo prasmju attīstības pakāpi” (Davidova et al., 2017, p. 97). Jāuzsver, ka dziedātāji sākumskolā, septiņu līdz deviņu gadu vecumā aug un attīstās ļoti atšķirīgi. Vieni tikai pamazām mācās koordinēt savu balss aparātu, kamēr citi jau aktīvi piedalās koncertdarbībā.

Baiba Trīnīte norāda, ka “pirmsmutācijas periodā, paralēli balss veidošanās orgānu anatomiskajai attīstībai (balss saites kļūst garākas, ņemot vērā dzimuma atšķirību), savu attīstību beidz arī viens no svarīgākajiem bass rezonatoriem (rīkles dobums). 12 gadu vecumā pēc savas morfoloģiskās uzbūves rīkles dobums ir tāds pats kā pieaugušam cilvēkam. Līdz ar to bērna balss iegūst plašāku tembrālo skaņējumu” (Trīnīte, 2006, p. 24). Jāņem vērā, ka katra bērna balss aparāts attīstās atšķirīgi, tādēļ nepieciešami izvērtāki pētījumi, kuri aplūko bērna vispārējo fizisko, garīgo un emocionālo attīstību, saistībā ar vokālā aparāta izmaiņām un darbības īpatnībām.

Dziedāšanas apgūšanas sākumposmā svarīgi ir pievērst lielāku uzmanību bērna vispārējajai fiziskajai attīstībai, stājai un elpas pārvaldībai, nekā pievērsties tikai balss aparāta koordinācijas jautājumiem. Balsene ir elpošanas sistēmas daļa, kura regulē skaņas augstumu dziedāšanas laikā, taču ja pārējais ķermenis

nedarbojas harmoniski, arī balss skanējums būs vājāks, nekā, ja tiktu ievērotas dziedāšanai piemēroti ķermeņa stājas un elpas paņēmieni. Balss aparāts šajā vecumposmā aug, tas ir ļoti jūtīgs pret slodzi. Staltas stājas un kontrolētas elpas apguve saudzē gan balss aparātu, gan palīdz attīstīt tā darbību. Jāņem vērā, ka bērniem vēl nav izveidojusies izturība ilgstošai slodzei, tādēļ tie ātri zaudē koncentrēšanās spēju. Laima Lasmane norāda: “Jāstrādā uzmanīgi, pakāpeniski, jo daudziem bērniem viss jaunais saistīts ar psiholoģisko pārdzīvojumu. Bērns nedrīkst uztraukties. Skolotājam jāveic skaidrojums apzinātai darbībai” (Lasmane, 2012, p. 112). Skolotājam jāuzrauga, lai bērns nepārpūlētos, iemācītos saglabāt vienotu balss skanējumu, un tā kvalitāti gan pēc nodarbības, gan koncertiem. Aizsmakums, balss skanējuma pasliktināšanās, diskomforts balsenes apvidū pēc dziedāšanas nav pieļaujami. Dziedot ansablī vai korī uzmanīgi ir jāseko līdz, lai visi dziedātāji pielietotu vienmērīgu un vienotu skaņas intensitāti, veidotos ne tikai sabalansēts skanējums, bet tas būtu arī atbilstošs katra dziedātāja tā brīža balss mehānisma iespējām, un bērna izpratnes pakāpei par veicamo uzdevumu.

Gan Jeļenas Davidovas, gan Ingrīdas Gailītes metodiskajos materiālos tiek norādīts, ka bērna dziedāšanas paņēmienam raksturīgākais ir falseta skaņveides tips, jeb dziedāšana ar augstu balsenes pozīciju, izmantojot tikai galvas rezonatorus, kas rada dzidru, taču ne pārāk spēcīgu skaņu. “Bērns dzied galvenokārt uz balss saišu iestiepuma rēķina, ar balss saišu maliņām. Īsā balss sprauga vienmēr ir atvērta. Balsenes muskulatūra septiņu līdz deviņu gadu vecumā turpina savu attīstību, līdz ar to balss tembrālā nokrāsa vēl nav izteiksmīga. Bērna balsīm raksturīgs maigs skanējums augstā reģistrā” (Davidova et al., 2017, p. 13; Gailīte, 2005, p. 27).

“Balss pakāpeniski pilnveidojas līdz ar centrālās nervu sistēmas un iekšējo sekrēcijas dziedzeru attīstību” (Miltiņa, 2005, p. 31). Svarīgi ir jau pašā dziedāšanas apgušanas sākumā mācīt tādus vokālos paņēmienus, kuri veicina vispārēju turpmāko attīstību, lai bērns jau uz iegūtām iemaņām spētu aptvert un praktiski pielietot jaunās.

“Bērnu balsis ir augstas un skanīgas. Zēnu un meiteņu balsis skan vienādi, tādēļ neredzot mazo runātāju, bieži sakām – tur runāja bērns, īpaši nenorādot uz dzimumu. Balss pamatfrekvence bērniem nostabilizējas vecumā no četriem līdz desmit gadiem. Tā ir 200-300 Hz” (Trinīte, 2006, p. 24). Zēnu un meiteņu balss aparāta uzbūve un skanējums pirmsmutācijas periodā ir ļoti līdzīgs, tādēļ metodisko paņēmienu izvēle vairāk attiecas uz katras personības interesēm un motivāciju darboties, nekā uz anatomiskajām atšķirībām.

Vokālās darbības laikā galvas smadzenēs patstāvīgi tiek saņemti un analizēti nervu signāli par aktīvo orgānu stāvokli, kas daļēji atspoguļojas apziņā “dažādu izjūtu veidā: vibrējoša (kas izriet no rezonanses izraisītas audu vibrācijas), muskuļu (no muskuļu saraušanās), taustes (no gaisa spiediena). Visas šīs izjūtas

sintezējas smadzenēs un tiek pārveidotas sarežģītā dziedāšanas elpošanas izjūtā” (Davidova et al., 2017, p. 89). Bērns var analizēt skaņveides procesu ne tikai ar dzirdes, bet arī ar sava ķermeņa sajūtām. Svarīgi ir skolēnam iemācīties sajust skanējumu ar ķermeni. Pirmkārt – bērnam dziedot ir jājūtas komfortabli, gan runas un balss aparāta apvidū, gan visā ķermeņa muskulatūrā, otrkārt – jāatrod un jāiemācās apzināti izsaukt tās sajūtas, kuras atbilst estētiskam balss skanējumam.

Dzirdes un balss koordinācija *Coordination between Hearing and Voice*

“Sešgadīga bērna smadzenes sasniedz 90% pieauguša cilvēka smadzeņu masas, kā arī nervu šķiedru savienojumi ir gandrīz pilnīgi izveidojušies. Septiņu līdz vienpadsmit gadu vecumā pieaug spēks, ātrums un kustību koordinācija. Bērns spēj apgūt darbības, kam nepieciešama apmācība un treniņš” (Apinis, 1998, p. 745). Šis ir laiks, kad bērni lielākoties uzsāk skolas gaitas un no neapzinātas mācīšanās rotaļājoties un eksperimentējot, pāriet uz mērķtiecīgu mācīšanos, pildot noteiktus uzdevumus, lai apgūtu noteiktas zināšanas, iemaņas un prasmes.

Dziedāšana ir apzināta darbība. Smadzenes dod atbilstošu nervu signālu balss mehānismam, tā attiecīgi iedarbinot visus balss muskuļus. Balss saites tiek nospriegotas atbilstoši iedomātajai frekvencei, pēc kuras tālāk tiek veikta papildus ieelpa, un ar izelpas gaisa plūsmu balss saites tiek ievibrētas. Jo augstāka ir iedomātā skaņa, jo spēcīgāk balss saites tiek nostieptas, jo intensīvāka gaisa plūsma ir nepieciešama skaņas radīšanā. Lai spētu radīt konkrētu iedomātu, vai priekšstatītu skaņas augstumu ir nepieciešama precīza tā uztvere, prasme to analizēt un nodot balss aparāta regulējošajiem nervu impulsiem, kuri attiecīgi sagatavo balss mehānismu.

Bērns sākotnēji mācās atdarinot, tādēļ jau mazotnē tas ir jāradina pie sev ērta un ārēji rezonējoša balss skanējuma, pareizas izrunas, harmoniska mūzikas valodas izteiksmes līdzekļu pielietojuma. Lai attīstītu prasmi analizēt, ir nepieciešams trenēt bērna uztveres spējas. Laima Lasmane pauž viedokli, ka “uztvere ir saistīta ar izpratni un emocionālām izjūtām par to, ko cilvēks spēj redzēt, dzirdēt, izjust. Uztvere ir pirmais etaps jebkuros domāšanas procesos” (Lasmane, 2012, 32). Skolotājam ir nepieciešams apzināties, kā bērns sākumskolas vecumposmā uztver skaņu un veic tās vokalizēšanu.

“Bērns atrod vēlamo skaņas augstumu un tad reproducē melodiju, bet dara to drīzāk neapzināti. [...] Bērna smadzenes veido saikni starp kustību un dzirdes analizatoriem. No sākuma šī saite ir ļoti vāja” (Davidova et al., 2017, p. 30). Ne visi bērni, kuri atnāk uz dziedāšanas nodarbībām septiņu līdz deviņu gadu vecumā ir apveltīti ar labu vokālo dzirdi, taču šo prasmi ir iespējams attīstīt. Šāda darbība neizdosies uzreiz diezgan sarežģītā skaņrades procesa dēļ. Anna Līduma norāda, ka “bērna dziedāšana balsī ir ārējās orientējošās darbības, kuru rezultāts ir iekšējās

dzirdes uztveres darbība. [...] Dziedāšana balsī palīdz izveido skaidrus dzirdes priekšstatus, kuri ar laiku sablīvējas, automatizējas un norisinās vienlaicīgi” (Līduma, 2015, p. 138).

Muzikalitātes attīstība katram cilvēkam ir individuāla gan dotību, gan laika robežās. "Nepieciešama īpaša skolotāja vērība un profesionālā pedagoģiskā darbība, lai skolēna muzikalitāte tiktu veicināta atbilstoši tā spējām un sākotnējās pieredzes līmenim" (Vilde, 2013, p. 6). Mācot dziedāšanu ir jāizprot, ka jebkāda radoša un pedagoģiskā darbība dos rezultātus. Anna Līduma norāda: "Pakāpeniski notiek pāreja no melodiskās dzirdes perceptīvā līmeņa uz muzikālo, jeb skaņaugstuma dzirdes līmeni. Muzikālās dzirdes attīstība notiek vienlaicīgi ar bērna balss aparāta un dziedātprasmes izkopšanu" (Līduma, 2015, p. 138). Solo dziedāšana bieži vien ir intonatīvi precīzāka, nekā dziedāšana unisonā. Atšķirību veicina abu dziedāšanas veidu specifika, jo vienā gadījumā ir nepieciešams apzināties melodijas strukturālo attīstību, kamēr otrā – saskaņot grupas skaņaugstumus. Solo dziedāšana straujāk attīsta intonatīvo dzirdi, taču arī bērniem, kuri dzied grupā – skaņas intonācija uzlabojās.

Jaunāko skolēnu vokālās darbības rezultātā īpaša izaugsme konstatēta tādos aspektos, kā: muzikālās atmiņas, muzikālās klausīšanās, dzirdētā analīzes, muzicēšanā iesaistīto prasmju pilnveidei, muzikālajā improvizācijā, interpretācijā. Ilze Vilde izdara secinājumus: "Attīstoties vienam komponentam tiek veicināti pārējie. Daudzveidīga muzikālā darbība mūzikas mācībās sekmē līdzsvarotu skolēna muzikalitātes raksturojošo attīstību" (Vilde, 2013, p. 25). Jāņem vērā, ka katra bērna attīstības situācija ir atšķirīga, tā sākotnēji iegūtās prasmes atkarībā no gan viņu "šūpulī ielikto talantu" veidā, gan atrodoties attiecīgajā vidē, pirms uzņemšanas mācību iestādē.

"Bez pieaugušo palīdzības bērna muzikālā attīstība var tikt kavēta, jo tā izjūtas, klausoties mūziku ir galvenokārt neverbālas, bērns nav spējīgs izteikt tās vārdos" (Mackēviča, 2001, p. 36). Lai veidotu labāku izpratni par mūziku, tās uzbūvi ir nepieciešams skolotājs, kurš apgūto teoriju palīdz savienot ar praksi. Tieši dēļ uztveres procesa sarežģītības nepieciešams ir samazināt iespējamās uzmanības diferenciacijas faktorus, un pēc iespējas vienkāršot mācību procesu, pakāpeniski izstrādājot atsevišķas komponentes un mācoties tās koordinēt un sinhronizēt darbībā.

Sākotnēji jaunākos skolas vecuma bērnus nosacīti var iedalīt divās grupās, kurā vieni no dabas izmanto galvas reģistru, bet otri – krūšu. Dziedot galvas reģistrā melodiju iespējams nodziedāt intonatīvi precīzāk visā konkrētā dziedātāja balss diapazonā, taču, ja par pamatu tiek izmantots krūšu reģistrs – intonācija ir kļūdaina, balss diapazons – šaurs. "Slikti koordinētas muskuļu darbības rezultāts parasti ir skaņas neprecīza intonēšana un bērnu (rūcēju) balss ierobežota diapazona princips" (Kraulis, 2003, p. 4, 6). No šīs tēzes var secināt, ka nav tādas definīcijas kā nemuzikalitāte, vai muzikālās dzirdes neesamība, bet gan nespēja

koordinēt dziedāšanā iesaistītos muskuļus. Ja cilvēks dzird un spēj diferencēt skaņas un skaņu augstumus, tātad viņam ir muzikālā dzirde.

Laima Lasmane izsaka pieņēmumu, ka “bērni, kuriem ir kļūdaina skaņu augstuma uztveres un reprodukcijas spēja jāiesaista arī citas uztveres maņas: redze, kustība, uzskates pielietojums. Vērojot un saprotot skaņu, koordinējot skanējumu ar roku zīmēm – daudzi skolēni uzlabo savas dzirdes spējas.” Šādiem bērniem var dot uzdevumu pavadīt dziedājumu ar vienkāršiem sitaminstrumentiem. Ļoti palīdz gan balss iemaņu apgūšanā, gan dziesmas teksta apgūšanā atainojošas kustības ar ķermeni. Bērniem, kuriem ir neattīstīta muzikālā dzirde labāk “runāt par skaņu noskaņām: vieglāk, gaišāk, priecīgāk, kā mazs kaķēns vai putniņš.” Bērniem ir spilgti attīstīta tēlainā domāšana, un tie ir lieliski imitētāji. “Mācot frāzi, melodiju kopā ar teksta izpratni, tā tēlu raksturojumu nepieciešams meklēt skaņu augstumu attiecībā ar skaņu rakstu” (Lasmane, 2012, p. 112).

Pētījumā analizētos darbos tiek apskatītas atsevišķas neprecīzas intonācijas cēloņu grupas: “fizioloģiskie (elpceļu slimības, elpošanas funkciju traucējumi, vokālā koordinācija, vokālā veselība, balss saišu disfunkcija, iedzimti vai iegūti dzirdes defekti); nervu sistēmas īpatnības (dzirdes un balss aparāta koordinācijas trūkums; elpošanas sistēmas pārvaldības problēmas dziedot); psiholoģiskie (skaņas augstuma uztvere, tonālā atmiņa, emocijas, attieksme, nespēja koncentrēties uzdevumam, neattīstīta atmiņa, vokālās pieredzes trūkums); organiskie (slimība, aizkavēta nobriešana); vides ietekme” (Davidova et al., 2017, p. 97; Lasmane, 2012, p. 111). Tātad var atrast vairākus iemeslus neprecīzai dzirdes un balss pārvaldības uztverei, kā arī katrs no tiem prasa atšķirīgu pieeju un problēmas risināšanas paņēmieni.

Secinājumi **Conclusions**

Bērniem muzikālās spējas parādās jau ļoti agrīnā vecumā. Visi bērni piedzimstot ir muzikāli apdāvināti, taču šīs spējas ir nepieciešams attīstīt dzīves laikā. Cilvēka dzirdi var iedalīt muzikālajā un fonemātiskajā. Ar muzikālo dzirdi saprot skaņaugsstumu, intonācijas, melodijas u.c. parametru saklausīšanu un analizēšanu. Ar fonemātisko dzirdi saprot vārdisko un tembrālo dzirdi. Muzikālā dzirde attīstās agrāk nekā fonemātiskā. Pirmajos dzīves gados abas dzirdes formas attīstās paralēli, taču, ja pastiprināti tiek apgūta valoda, skaņaugsstuma dzirde var zust.

Apkopojot informāciju par bērna dzirdes īpatnībām tiek secināts, ka lai arī bērnam no dabas ir dota gan muzikālā, gan fonemātiskā dzirde, tomēr pietrūkst aprakstītu metodisko paņēmieni, kuri palīdzētu abas šīs dzirdes sistēmas uzturēt, saglabāt un attīstīt pie noteikuma, ka bērns ir vesels un attīstās atbilstoši vispārpieņemtajiem normatīviem. Tiek pausts viedoklis, ka bērniem ir jāļauj

darboties mūzikā, taču ar kādiem tieši paņēmieniem un vingrinājumiem sākumskolā šīs darbības sekmēt – būtu nepieciešams izpētīt padziļināti.

Metodiskajā literatūrā nav vienprātības par bērna balss attīstības dabu, ko varētu skaidrot ar bērna atšķirīgo fizisko, garīgo un emocionālo attīstību, taču jau pirmsmutācijas perioda noslēgumā atsevišķi fiziskie un parametri jau ir tuvu pieauguša cilvēka rādījumiem.

Bērniem raksturīga ir falseta dziedāšanas maniere, jeb skaņveide tikai ar balss saišu maliņām, balsenei atrodoties augstā pozīcijā. Balsenes muskulatūra tikai pamazām nostiprinās. Zēnu un meiteņu balsis jaunākajās klasēs skan ļoti līdzīgi.

Bērniem iemaņas jāattīsta pakāpeniski, nepārslogojot nedz to stājas un elpas sistēmu, nedz balss aparātu, nedz nervu sistēmu. Svarīgi ir mācīt tādas paņēmienus, kuri veicina sekmīgu turpmāko attīstību vokālo iemaņu apgūšanā.

Būtu nepieciešams padziļināti izpētīt kā veidojas bērna balss sistēma septiņos, astoņos un deviņos gados, kādas ir atšķirības un kādas ir bērna balss aparāta attīstības stadijas un to ietekme uz dziedāšanu. Svarīgi būtu arī izprast vispārējās bērna fiziskās, mentālās un emocionālās iespējas sākumskolas vecumposmā, un saistībā ar vokālās mākslas apgūšanu un pilnveidošanu, no jauna iegūtās zināšanas un prasmes balstot uz jau iegūtajām.

Analizētie Latvijas balss pedagoģijas metodisko materiālu autori norāda, ka bērnam, jau uzsākot mācības skolā, atsevišķi fiziskie, mentālie un emocionālie rādījumi ir tuvu pieaugušā cilvēka normatīviem, bet sākumskolas noslēgumā bērniem jau ir ievērojami attīstīties fiziskais spēks un ātrums, tādēļ tieši sākumskolas posmā ļoti nozīmīgi ir attīstīt motorās iemaņas, pie kurām var pieskaitīt arī dziedāšanu.

Bērns vēl aizvien mācās atdarinot, tādēļ svarīgi ir rādīt tam attīstību veicinošus piemērus. Muzikālā attīstība bērnam individuāla, tādēļ skolotājam jāspēj izprast katra bērna tā brīža attīstības pakāpi, uz ko turpināt būvēt turpmākās iemaņas.

Jaunāko klašu skolēniem īpaša muzikālā izaugsme novērojama tādās disciplīnās kā: muzikālā klausīšanās, atmiņa, analīze, interpretācija un improvizācija. Muzikālā dzirde ir iedzimta, taču vides ietekmes rezultātā tā var pārstrukturizēties. Tikai ar pieaugušo palīdzību bērns var attīstīties mūzikā un iemācīties to apjaust. Bērniem ir jāpalīdz izprast, kā veidojas dzirdes un balss koordinācija un kā to attīstīt.

Dziedāšana ir apgūstama prasme. Bērniem ar kļūdainu vai nepilnīgu skaņaugstuma uztveri nepieciešams iesaistīt citas maņas. Taču bērna muzikālo iemaņu trūkumam var būt vairāk nekā viens ārējs vai iekšējs faktors, kura labošanai ir nepieciešama zinātnē balstīta, radoša pedagoģiskā darbība.

Veicot apskatu par bērna dzirdes un balss attīstības koordināciju, jāsecina, ka būtu nepieciešams izpētīt tās attīstību, atbilstoši gadiem, ņemot vērā straujo

bērnu augšanu tieši skolas jaunākajās klasēs. Skolotājus praksē bieži uztrauc bērna vispārējā prasmju attīstīšana pirms skolas gaitu uzsākšanas, kā arī balss aparāta pārmaiņas mutācijas laikā, kad vokālais aparāts ir ļoti jutīgs, taču būtiski ir bērnu dziedāšanas attīstības paņēmieni jaunākajās skolas klasēs, ņemot vērā, ka tiek apgūtas arī pirmās, profesionālās iemaņas, kuras būs nepieciešamas turpmākajā dziedāšanas mācīšanās procesā. Būtu nepieciešams strādāt pie metodikas izveidošanas laika posmā pirms pirmajām mutācijas pazīmēm.

Summary

Children's musical abilities can be observed already at a young age, when they are able to react to perceived sounds. All children are musically gifted since their birth, however it is necessary to develop these skills throughout their lives.

In children, when starting the school years, many physiological parameters are close to those of an adult, but during primary school, movement coordination and muscle strength are rapidly developing, which is a great base with which to develop skills, including singing.

A child in the primary school age period still learns using mimicking methods, so it is crucial to demonstrate promotional examples for a positive development.

There is no clear consensus among the authors of the literature on the nature of the child's voice development, which could be explained by the individual development of a child. It is characteristic for children have a falsetto-singing before mutation. The musculature in children only gradually strengthens, and there are no distinct gender differences in sound. During this time, it is preferred to develop the child comprehensively and acquire skills through a variety of pedagogical approaches, but this must be done gradually without putting too much pressure on the child. Children need assistance to understand how hearing and voice coordination is formed and how it can be developed. It needs to be understood that singing is an acquired skill, the difference is only in the initial abilities, interests and desire of the student to go into and actively participate in the learning process.

Literatūra References

- Apinis, P. (1998). *Anatomija, fizioloģija, patoloģijas pamati*. Rīga: SIA Nacionālais Medicīnas apgāds.
- Bičuka, M., Grasmane, S., & Pagraba, N. (2003). *Muzikālā audzināšana pirmsskolā*. Rīga: Raka.
- Brice, B. (2009). *Spēlējiet, spēlmanīši*. Rīga: Raka.
- Davidova, J., Čuang, M., Rauduvaite, A., & Zavadzka, G. (2017). *6-8 gadus vecu bērnu balss aparāta un muzikālās dzirdes koordinācijas veidošanās un attīstība dziedāšanas apguves procesā*. Daugavpils: Daugavpils Universitātes Akadēmiskais apgāds "Saule".
- Gailīte, I. (2005). *Darbs ar bērnu kori*. Rīga: SIA Izdevniecība Raka.
- Hedden, D. (2012). An Overview of Existing Research about Children's Singing and the Implications for Teaching Childrens to Sing. *National Association for Music Education*. XX(X) I-II, 1-11. <https://doi.org/10.1177/8755123312438516>
- Kraulis, H. (2003). *Mūsu klasē visi dzied*. Daugavpils: Saule.
- Lasmane, L. (2012). *Muzikālā audzināšana pirmsskolā*. Rīga: Raka.

- Līduma, A. (2015). *Bērns mūzikas skaņu pasaulē*. No (Špona A.) *Bērna sasniegumu veicināšana pirmsskolā*. 131-149 lpp. Rīga: Raka.
- Mackēviča, L. (2001). *Muzikālās audzināšanas psiholoģiskie aspekti*. Liepāja: Liepa.
- Miltiņa, I. (2005). *Skaņu izrunas traucējumi*. Rīga: Raka.
- Trinīte, B. (2006). *Balss un tās traucējumi*. Liepāja: Liepa.
- Tūbele, S. (2002). *Skolēna runas attīstības vērtēšana*. Rīga: Raka.
- Vilde, I. (2013). *Sākumskolēnu muzikalitātes attīstība mūzikas mācībās, promocijas darba kopsavilkums doktora grāda iegūšanai pedagoģijā, apakšnozarē: skolas pedagoģija*. Rīga: Latvijas Universitāte.

EXPLORING THE LITERATURE ON CONCEPTS OF TEACHER LEADERSHIP AND TEACHER-LEADER: IS THERE A DIFFERENCE?

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Abstract. *The purpose of the current paper is to explore the concepts of “teacher leadership” and “teacher-leader”. The current article highlights and compares the usage of the two concepts, explores the new perspectives for determination of teacher leadership within school environment. It draws from literature on teacher leadership and on-the-job leadership development to explore insights and issues on teacher leadership development, and it presents cases for theoretical determination of both concepts. The concept analysis method was implemented in order to collect the recent literature and explore the concepts of “teacher leadership” and “teacher-leader”. The novelty of the current research is the definition of peculiarities in usage of both terms. The results indicate that the concept of teacher leadership is regarded as a process and activity, while the concept of teacher-leader is mostly regarded as a component of teacher’s professional identity. The article concludes with implications for further theoretical research on teacher leadership.*

Keywords: *teacher leadership, teacher-leader, concept analysis.*

Introduction

The concept of teacher leadership implies formal and informal duties, such as professional development, coordination, traineeship, head teacher, and mentor (Katzenmeyer & Moller, 2009; Levin & Schrum, 2016; York-Barr & Duke, 2004). Most of studies on teacher leadership underline the need to broaden teachers’ leadership roles beyond the classroom. If the teacher wants to be a leader, they must communicate with learners on multiple levels, because the teacher leader is committed to their learners’ well-being both inside and outside

the classroom. There is a need to underline the impact of teachers as an important agents of teacher leadership (Grenda & Hackmann, 2014).

The concepts of teacher leadership and teacher-leader are being used interchangeably, as taken for granted. However, these are two distinct concepts with clear attributes and internal structures. Furthermore, the both concepts are often being used as “umbrella concepts” for related terms, such as “teacher authority”, “mentorship”, and “teacher agency”. Therefore, the concepts of “teacher leadership” and “teacher-leader” are vague and broad and have been overused in the scientific literature. Hence, there is a need to clarify a theoretical framework of both concepts in order to promote the common understanding among scholars.

The current research is aimed to distinguish the defining attributes of two concepts “teacher leadership” and “teacher-leader”. The both concepts had been broken into simpler elements in order to determine their internal structure and find interconnections. Therefore, the main research question was focused on the defining of both concepts: what main attributes of the concepts of teacher leadership/teacher-leader were defined within the recent empirical research?

Methodology

In order to answer the research questions, the research was comprised of two stages. The first stage included the systematic literature review, including literature selection, abstract review and article review. The second stage was focused on the “teacher leadership” and “teacher leader” concept analysis applying Walker and Avant (2005) methodology.

Stage 1. Conducting the literature review

The criteria of inclusion and exclusion were both inspired by pragmatical and conceptual issues related to the current research. According to Wenner and Campbell (2016), the criteria of literature selection for teacher leadership concept creation should be based on several practical criteria, which include the aspects of teacher leadership. The criteria were based on the working definition of teacher leadership, and, thus, included several principles of literature selection (Table 1).

The Taylor and Francis database was used to search for the relevant scientific literature using the defining words “teacher leadership” and “teacher-leader”. The search was limited to articles published in English in a period from 2009 to 2019. The search was not limited to titles of certain publishers, specific publishing journals or geographical location. The primary search provided 362 articles for “teacher leadership” and 485 articles for “teacher-leader”.

*Table 1 The inclusion and exclusion criteria for literature review
(based on Wenner and Campbell, 2016)*

Inclusive criteria	Exclusive criteria
Empirically based findings; literature must report the findings of empirical studies	Exclude purely descriptive pieces
Participants are public, private school teachers, who do not hold any administrative positions	Exclude studies about college-level teacher leaders or preservice teachers. Exclude studies about principals' or school administration's leadership
Teachers must be employed at school at the time of participation in the research; to be classroom teachers (primary, secondary school, subject teachers)	Exclude studies in which participants are no longer work as teachers (e.g., mentors with no teaching responsibilities)
Teacher leadership is a subject of the study	Exclude studies with peripherally included teacher leadership. Exclude studies early childhood, pre-school, vocational education
Articles published in the peer-reviewed journals. Open access journals, full-text articles.	Exclude studies without peer review

The next step implied the abstract review applying the inclusion/exclusion criteria, defined in the Table 1. As a result, 765 more articles were excluded from our literature review because they did not meet one or more of our criteria. Thus, based on the abstracts reviewed, the sample of 82 pieces of literature (approximately 20%) were included for full review, among them 45 articles for topic of “teacher leadership” and 37 for “teacher-leader”.

Stage 2. Concept analysis

The concept analysis methods have few directions: concept analysis as it appears as a part of terminological analysis, concept analysis methods utilized in business studies and in nursing science (Walker & Avant, 2005). The method of Walker and Avant (1983) is the most frequently utilized one and suitable for discussion about concepts “teacher leadership” and “teacher-leader”.

Walker and Avant (2005) highlighting 6 steps of concept analysis: choose a concept, purposes of analysis, identity all other parts of concept, determine the model, borderline, case define. The concept should be attractive to the researcher or scientist, it means it should be associated with his or her work. In general, the concept analysis is aimed to recognize the peculiarities of certain concept, to make the importance of a situated concept clearly comprehensible, to enrich an existing theory and to develop a main definition (Walker & Avant, 2005). The method concept analysis was implemented in order to explore the concepts of “teacher

leadership” and “teacher-leader” and define the peculiarities in usage of both terms.

Research results

Literature review: Attributes of teacher leadership concept

The literature review allowed to determine the defining indications of “teacher leadership” and “teacher-leader” concepts. In general teacher leadership can be viewed from two perspectives: individual and collective. Fairman and Mackenzie (2012) view both perspectives as stages of teacher leadership, stating that it starts at the individual level and expands schoolwide. According to the authors, at the beginning, the individual teachers act as leaders in their classrooms by reviewing and reflecting on own teaching practice, experimenting and conducting research. Later they share their findings and ideas with other colleagues, collaborating and contributing to school improvement. At the latest stage of teacher leadership, the teachers (group of teachers) go beyond the school and share their ideas with a broader society of different stakeholders (Fairman & Mackenzie, 2012). Thus, teacher leadership is can be exercised individually and collectively.

The collective view on teacher leadership rises from the distributed leadership theory and implies the notion of teacher leadership as a collective action. The number of researchers stress on the social nature of teacher leadership and its expression within the social interactions between teachers and their colleagues. Hairon, Goh, & Chua (2015) viewed a close relationship between teacher leadership and communication within the professional learning communities in terms of building collegial relationships, enhancing teacher learning (Hairon, Goh, & Chua, 2015), improving teaching and learning practices through discussion-based teaching (Brondyk & Stanulis, 2014).

Defining the teacher leadership, Hairon et al (2015) give the primacy to teachers’ influence on fellow teachers. Thus, “teacher leadership is the enactment of influence by teachers, individually or collectively, on school stakeholders but primarily fellow teachers towards shared goals pertaining to improvements in teaching and learning.” (p.178) Therefore, the core of teacher leadership is the intentionality of impact directed towards attainment of certain common goals. The researchers state that the teacher leadership is an intentional influence of teacher leaders on fellow teachers. Their study emphasizes the interest of conceptualizing the essence of leadership as an act of influence in achieving shared goals, stating that the intentionality is a core feature of teacher leadership (Hairon et al, 2015).

Teacher leadership is regarded as an activity rather than a title (Supovitz, 2017). Teacher leadership is viewed as a day-to-day activity, more than simply a prescription of a formal role, practiced within an interaction of teacher

leader and colleagues (Struyve, Hannes, Meredith, Vandecandelaere, Gielen, & De Fraine, 2018). Furthermore, the activity is aimed at school or classroom change, when teacher is seen as an active agent for school change and improvement (Forde & Dickson, 2017). Authors state that there was a shift in a paradigm of leadership from treating it as an exceptional superiority of individual leaders to the collective con-joint action, where power is exercised in different ways, depending on a context of organization (Forde & Dickson, 2017). In addition, authors underline the reciprocal nature of the teacher leadership action, the interdependence between leaders and their followers. Liljenberg (2016) provides the similar structure of teacher leadership construct, defining three perspectives: (1) coordinating, (2) learning-enhancing and (3) change-directed.

Teacher leadership requires individuals with specific knowledge of teaching and learning, experts of teaching in certain fields, aspiring to learn and develop as professionals (Brondyk, & Stanulis, 2014). Hairon et al. (2015) states that the positional influence (formal role) is less important than the possession of certain skills, related to facilitation, content subject, also teaching experience and coordinating the endeavors of other group members.

Literature review: Attributes of teacher-leader concept

Most of the literature related to the question “Who are teacher leaders?” specify that teacher-leaders have been teachers with important and essential teaching experience. They are known to be great teachers and are respected among colleagues and learners.

Teacher-leaders are often classroom teachers sharing their knowledge and expertise in different ways. Danielson (2006) mentions that teacher leadership is a set of skills practiced by teachers who teach students, but their influence extends beyond their own classrooms. Sometimes teacher-leaders are formally assigned to this role and may have an officially prescribed role of teacher-leader or another position that focuses on his or her expertise, such as data coach or mentor.

Teacher-leader is considered as a role taken by the individual teacher but not an assigned position. Sherrill (1999) regards teacher-leaders as teacher educators, teachers-in-residence, master teachers, mentors and lead teachers, while Crowther et al. (2002) viewed teacher-leaders as ones, who empower the school reform. Killian and Harrison (2006) defined ten roles of teacher leaders such as Resource Provider, Instructional Specialist, Curriculum Specialist, Classroom Supporter, Learning Facilitator, Mentor, School Leader, Data Coach and Learner.

Teachers have a better understanding of the school community needs comparing to the external experts (consultants) which can be invited to analyze and improve the school processes. In addition, external consultants and teaching experts are often lacking experience in education sphere or practice of public schools (Leana, 2013). Therefore, encouraging the local school teachers to participate in school leadership alters their perception of ownership when teachers

become part of the decision-making process. According to Donaldson (2001), each person owns a share of influence and responsibility, not just over one's individual job, but over school-wide concerns as well.

Antecedents and consequences: Teacher leadership

Teacher leadership might occur as an outcome of teacher involvement into the research activities or inquiry of own practice, called action research (Ryan et al., 2017). Teacher leadership derives from the individual initiative of a teacher and expands to the schoolwide collective action (Fairman & Mackenzie, 2012). Donaldson (2001) claimed about expanding teachers leadership experiences outside of the classroom as a one of school priorities in order to enable interaction among teachers and their knowledge exchange. Enabling teacher opportunities to exercise their leadership increases teacher's social capital.

Hairon et al. (2015) concluded that teacher leadership contributes to the establishment of professional learning communities by promotion of teacher learning and development, building collaborative relationships and empowering change in teaching practices of colleagues. In addition, TL enables trust, open communication and promotes an improvement within teachers' work (Hairon et al., 2015).

Antecedents and consequences: Teacher-leader

York-Barr and Duke (2004) highlight several factors which influence a teacher's preparation to accept roles and responsibilities of a teacher-leader. These factors involve teaching skills, personal educational philosophy, preparedness to share good practices with others, being interested in professional development, and having time resources to embrace the role of teacher-leader.

The individuals who work as teacher or teacher leaders at school, usually have great amount of teaching expertise. Possibilities for leadership grow out of high-level experience, because being successful maintains teachers' beliefs about their efficiency and the trust of colleagues and learners is necessary for leadership enactment (York-Barr & Duke, 2004).

Teacher leaders are revise as achievement accepting risks and responsibility (Wilson, 1993). However, the orientation of teacher leaders does not necessarily coincide with opinions and visions of other colleagues. LeBlanc and Shelton (1997) claimed that between teachers and teacher leaders often experienced a objection because their need for attainment and need for attachment. In addition, teacher-leaders sometimes experience tensions in their relationships with colleagues (Wilson, 1993).

Model and contrary cases of "teacher leadership" and "teacher-leader" concepts

The construction of the model case requires a real-life example in order to demonstrate all possible aspects and attributes of the central concept (Walker & Avant, 2005). These key attributes were addressed in order to seek for a real-life

example and illustrate the notions of teacher leadership and teacher-leader. The contrary case, conversely, requires showing the opposite side of the concept, what the concept is not. The following examples were taken from the real-life experiences of Lithuanian school teachers.

Model case of teacher leadership

Jolanta had been working as a teacher at the Primary school in Kaunas city. She had about four years of teaching experience working as a classroom teacher. Jolanta noticed that the members of school staff were friendly, however, the professional communication between teachers was quite poor. Therefore, she decided to make an initiative and establish "The teacher discussion club" (as she named it). Teachers were meeting several times per week and discussing different issues related to their professional practice and improvement of student achievement and well-being at school. The meetings occurred in time free from professional duties. During the meetings all teachers were required to present and share their successful experiences in order to promote colleagues' learning. Therefore, teachers were constantly improving her expertise in order to share with other teachers. Later, teachers started to discuss not only issues related to student learning, but issues related to school development and improvement.

Thus, the teacher leadership was triggered by the intentional influence of a single teacher and later developed into a collective effort. Teacher leadership manifested through interaction between members of teacher community aimed at achievement of common aims: improvement of student and teacher learning, school improvement and development, and assurance of student and teacher well-being at school. The activity had a volunteering character and teachers dedicated their personal time for it; thus, teacher leadership was driven by the internal commitment of teachers. Therefore, the current model case describes the model of teacher leadership.

Model case of teacher-leader

"Teacher-dominated classroom sounds boring and bleak, but I do understand that it is less chaotic, more easily planned, assessed, and controlled. In fact, in many classrooms, there is still an old-fashioned dynamic in which the teacher's voice and opinions dominate. Sadly, in some cases, the students are taught that they are not going to be successful until they concur with the teacher."

The current case was taken from the literature. The current study, conducted by York-Barr and Duke (2004) demonstrated that teachers had high levels of instructional expertise, collaboration, reflection, and a sense of empowerment. In other words, they became teacher leaders (York-Barr & Duke, 2004). Teachers claimed about bringing interpersonal skills and quality teaching in their classrooms. Promotion of learning among peers was also noticed by teachers.

Contrary case of teacher leadership

The teaching staff of one of the Secondary schools were required by the school administration to organize the meetings where they could discuss different professional issues. The teachers came for the first meeting and complained about how badly they are treated in the country. After they were suggested to gather one more time, most of teachers

refused, arguing that they are lacking time for personal lives. Thus, less and less teachers were participating in the meetings, and finally, this activity failed.

Although teacher leadership manifests itself through teacher activity, however, it must be driven by teacher's inner commitment. In this case, the activity was rather driven by the external force and power exercised by the school administration. There were no clear goals and vision established for the current activity, thus, it did not become engaging and motivating. The first meeting organization was quite well; however, the clear aims and shared objectives were not set up, therefore, the further meetings remained sporadic. Teachers were not united around one shared vision of school improvement, they rather viewed their personal interests and required incentives for this kind of activity. All these attributes contrast with a notion of teacher leadership described above.

Contrary case of teacher-leader

“Sadly, in some cases, the students are taught that they are not going to be successful until they concur with the teacher. There is one right answer, one correct perspective, one way to complete a task. Do what you are told. Be what we tell you to be”.

All the teacher-leader roles identified show that the function of teacher-leader widely applicable and diverse. In addition, all the acknowledged roles require that the teacher-leader collaborates with others in order to share the expertise, thus applying individual expertise to develop and strengthen the social capital of teacher community. In other words, the teacher leader invests and dedicated own time and efforts in order to maintain the school community and culture and evoke improvement. However, the teacher-leader is dependent on a context he/she is working within. One can become a leader within a supportive environment where group of teachers have general goals (Dika & Singh, 2002).

Conclusions

The conceptualization and examining of different instances of teacher leadership allows to conclude that the core attributes of this concept are internal commitment, intentional influence and social interactions. These characteristics and cases described above, define the concept of teacher leadership and allow the broader insight into practical application of theoretical construct. Teacher leadership may be practiced collectively or individually, though it implies joint actions between the group of school community. The intentional nature of teacher leadership implies the establishment of common goals and shared visions among agents, and those goals are directed towards school improvement and development. While teacher-leader is often are classroom teachers who share their expertise in various forms. Teacher-leader have an influence for other teachers and develop beyond their own classrooms to others or elsewhere. Sometimes

teacher-leaders are formally designated as such and may have the title of teacher-leader or another title that focuses on his or her expertise, such as data coach.

Acknowledgements

The research is supported by Research Council of Lithuania, project No. P-MIP-19-56, KOMOKO.

References

- Brondyk, S., & Stanulis, R. (2014). Teacher Leadership for Change. *Kappa Delta Pi Record*, 50(1), 13-17. DOI: 10.1080/00228958.2014.871675
- Crowther, F., Kaagen, S.S., Ferguson, M., & Si Hann, L. (2002). *Developing teacher leaders: How teacher leadership enhances school success*. Thousand Oaks, CA: Corwin Press.
- Danielson, C. (2006). *Teacher leadership that strengthens professional practice*. Alexandria VA: ASCD.
- Dika, S.L., & Singh, K. (2002). Applications of social capital in educational literature: A critical synthesis. *Review of Educational Research*, 72(1), 31-60. DOI: 10.3102/00346543072001031.
- Donaldson, L. (2001). *The contingency theory of organizations*. Thousand Oaks, CA: Sage.
- Fairman, J.C., & Mackenzie, S.V. (2012). Spheres of teacher leadership action for learning. *Professional Development in Education*, 38(2), 229-246. DOI:10.1080/19415257.2012.657865
- Forde, C., & Dickson, B. (2017). The Place of Leadership Development for Change Agency in Teacher Education Curricula for Diversity. In L. Florian & N. Pantić (Eds.), *Teacher Education for the Changing Demographics of Schooling, Inclusive Learning and Educational Equity* (pp. 83-99). Glasgow, UK: Springer International Publishing.
- Hairon, S., Goh, J.W.P., & Chua, K.C. (2015). Teacher leadership enactment in professional learning community contexts: towards a better understanding of the phenomenon. *School Leadership & Management*, 35(2), 163-182. DOI:10.1080/13632434.2014.992776
- Grenda, J.P., & Hackmann, D.G. (2014). Advantages and challenges of distributing leadership in middle-level schools. *NASSP Bulletin*, 98(1), 53-74.
- Katzenmeyer, M., & Moller, G. (2009). *Awakening the sleeping giant: Helping teachers develop as leaders* (3rd ed.). Thousand Oaks, CA: Corwin Press.
- Killion, J., & Harrison, C. (2006). *Taking the lead: New roles for teachers and school-based coaches*. Oxford, OH: National Staff Development Council.
- Leana, C. (2011). The missing link in school reform. *Stanford Social Innovation Review*. Retrieved from http://www.ssireview.org/articles/entry/the_missing_link_in_school_reform/
- LeBlanc, P.R., & Shelton, M.M. (1997). Teacher leadership: The needs of teachers. *Action in Teacher Education*, 19, 32-48.
- Liljenberg, M. (2016). Teacher leadership modes and practices in a Swedish context – a case study. *School Leadership & Management*, 36(1), 21-40. DOI: 10.1080/13632434.2016.1160209.

- Ryan, M., Taylor, M., Barone, A., Della Pesca, L., Durgana, S., Ostrowski, K., Piccirillo, T., & Pikaard, K. (2017). Teacher as Researcher, Teacher as Scholar, and Teacher as Leader. *The New Educator, 13*(2), 102-116. DOI: 10.1080/1547688X.2016.1144120
- Sherrill, J. (1999). Preparing teachers for leadership roles in the 21st century. *Theory into Practice, 38*(1), 56-61. DOI:10.1080/00405849909543831.
- Struyve, C., Hannes, K., Meredith, C., Vandecandelaere, M., Gielen, S., & De Fraine, B. (2018). Teacher Leadership in Practice: Mapping the Negotiation of the Position of the Special Educational Needs Coordinator in Schools. *Scandinavian Journal of Educational Research, 62*(5), 701-718. DOI: 10.1080/00313831.2017.1306798
- Supovitz, J.A. (2018). Teacher leaders' work with peers in a Quasi-formal teacher leadership model. *School Leadership & Management, 38*(1), 53-79. DOI: 10.1080/13632434.2017.1389718
- Wilson, M. (1993). The search for teacher leaders. *Educational Leadership, 50*(6), 24–27.
- York-Barr, J., & Duke, K. (2004). What Do We Know about Teacher Leadership? Findings from Two Decades of Scholarship. *Review of Educational Research, 74*(3) 255–316. DOI: 10.3102/00346543074003255

THE VALUE AND TOPICALITY OF FEEDBACK IN IMPROVING THE LEARNING PROCESS

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Abstract. *Feedback delivery is an integral part of the learning process, which provides an effective teaching and learning process. Although students are primarily targeted to get a mark, there are a number of strategies that can be used to maximise students' involvement in the learning process, including providing effective feedback. Purposeful use of feedback through the pedagogical process contributes to a more active involvement of students by developing metacognitive skills (Nicol & Draper, 2008). It is important to encourage students, in the learning process and outside it, to ensure reflection on feedback comments and to give preliminary assessment (Taras, 2003). The aim of the article is to update the importance of feedback in the pedagogical process by identifying theoretical regularity in the interpretation of the concept of feedback, as well as undertaking empirical research to clarify students' views on feedback and the effectiveness of its application in the learning process.*

Keywords: *feedback, learning process, student, teacher.*

Introduction

In the 21st century, employers want to see in their businesses employees who are able to recognize opportunities, identify problems, choose solutions that are unprecedented, create innovative products. Social skills, the ability to critically evaluate information, use knowledge, desire and lifelong learning are particularly demanded. A knowledge-based society is being developed worldwide and a new economic model based on knowledge and known as a knowledge-based economy is being implemented (UNESCO, 2005). The Lisbon strategy underlines that education and research have the greatest impact on growth and employment (The European Council, 2000). In order to achieve the educational goal, the learning process should provide feedback that supports and regulates learning. Feedback is needed for both students and teachers to improve the work of both students and teachers.

The object of the present study is feedback provided to students in secondary school, classes 6-8. The research is aimed to analyse feedback and its use in school from the theoretical and practical perspectives. Research goals include:

- 1) defining the role of feedback provided to students in school at primary level;
- 2) discussing features of effective feedback provided to students. The purpose of the study was to explore student perceptions of feedback. Participants consisted of 69 students from classes 6-8. The research methods used in the study include:
 - 1) literature analysis which was used to establish the role of feedback and different approaches to it, as well as its use at school;
 - 2) empirical – data extraction method (survey), data processing and analysis were used to investigate relationships between feedback, teaching, assessment and students` learning in school.

Analysis of the concept of feedback and the importance of its effectiveness

Feedback is one of the preconditions for successful cooperation in the pedagogical environment, and it is an important part of the formative evaluation process. The main question for feedback is how to improve student learning through the information the teacher provides, which allows students both to reactivate and consolidate prior knowledge as well as focus in important aspects what they are learning (Boud & Molloy, 2013). Systematic evaluation provides answers to teachers and students on questions: *What to learn? What is achieved and what is not? What to do next?* (Thompson, 2007; Timperley, 2007; Draper, 2008). Education researchers A. Kluger and A. DeNisi, it should be noted that feedback is defined as „actions taken by an external agent to provide information regarding some aspects of one’s task performance” (Kluger & DeNisi, 1996), thereby, by highlighting the importance of feedback in the evaluation process, most of the performance relates to learning, achievements or attitudes about what is being taught. Feedback is made up of constructive criticism and advice, it can also be manifested as behaviour. Feedback is thought-out and targeted information provided by the teacher to the student about his or her own actions and aspects of understanding (Hattie & Timperley, 2007), thereby also promoting the informed evaluation of the student itself in order to achieve better learning achievements in the long term.

By studying the nature of feedback, the authors of the article raise questions about the types of feedback and how feedback interacts with the teaching and learning process. Feedback allows students not only to understand how they have performed the task and explain the assessment they have obtained, but also to provide guidance on how to improve their abilities, i.e., students learn to monitor,

manage and take responsibility for their training (Nichol, 2007). In addition, it should be noted that feedback should be accurate and reasonable, not just correction of errors, marking or grading or one-word comment (e.g. “looking promising”) or writing negative equivalents (e.g. “not too keen”), or just editorial or grammatical corrections. Education researchers G. Gibbs and C. Simpson affirm that feedback can be used to „correct errors, develop understanding through explanations, generate more learning by suggesting further specific study tasks, promote the development of generic skills by focusing on evidence of the use of skills rather than on the content, promote meta-cognition by encouraging students’ reflection and awareness of learning processes involved in the assignment and encourage students to continue studying” (Gibbs & Simpson, 2004). Feedback may be either summarizing if it provides an explanation for marks or a format to help students to continue learning.

To sum up the theoretical literature analyzed above highlight that feedback is a targeted and premeditated critical learning process that is structured through the teacher to help students to learn and provide students with information that allows them to identify what kind of knowledge and skills they have acquired and what they need to learn through identifying future goals.

To provide feedback that students can understand and use productively is a certain challenge for all teachers. Jonsson uncovered five reasons why students may not engage with their feedback:

- it may not be useful,
- it may be insufficiently detailed or individualized,
- it may be too authoritative in tone,
- students may not know suitable implementation strategies,
- students may not understand the terminology used in feedback (Jonsson, 2013).

Effective and pedagogically based feedback is a contribution of the teacher to the learning process of students and has the positive impact on the results of the learning process. The new education content framework in Latvia (Skola2030) also emphasize the necessity for the effective feedback in the learning process. For example, international education expert G. Wiggins notes the most important feedback components. Feedback:

- „refers to the goal – effective feedback is possible if the performer has a goal, he takes action to achieve it and receives information on his actions towards achieving the goal;
- is visible and clear – any useful feedback system includes not only a reference to a clear goal, but also clearly visible results related to the goal;
- is actionable – effective feedback is concrete, specific and useful; it gives actionable information;

- is user-friendly – even if feedback is specific and accurate in the eyes of experts, it is not helpful if the user does not understand it and takes it personally;
- is timely – feedback should not only be received from a teacher or even from people at all. Technology is one powerful tool – part of the power of computer-assisted learning is unlimited, timely feedback and opportunities to use it;
- is ongoing – our performance depends on not only receiving feedback but also having opportunities to use it;
- is consistent – performers can only adjust their performance successfully if the information fed back to them is stable, accurate, and trustworthy, at the same time, teachers must have the same opinion on what work of good quality is” (Wiggins, 2017).

Effective feedback is the information on the progress of a student towards a learning goal to achieve a positive result, feedback should be:

- informative and supportive to promote a positive attitude towards learning;
- timely, allow to use feedback to inform about learning and work;
- frequently and specifically enough to help students learn and work (Boud & Associates, 2010).

Providing effective feedback is complicated: the relation between form, timing, and effectiveness of feedback is complex and variable (Price, Handley, Millar, & O’Donovan, 2010). In general, for feedback to be effective it is essential students have positive perceptions about teacher feedback. Van der Schaaf et al. have showed that students who have feedback conversations with their teacher perceive teacher feedback as more useful (Van der Schaaf, Baartman, Prins, Oosterbaan, & Schaap, 2011). Education researchers J. Hattie, H. Timperley (2007) and P. Black, D. Wiliam (2009) have developed models that explain the effective use of feedback. Both approaches agree that feedback is aimed at achieving changes in the education of students, so that the understanding and performance of students are consistent with the specific learning goals. Both models are based on three similar basic elements to be addressed in the feedback process (Table 1).

*Table 1 Comparison of the feedback models (Black & Wiliam, 2009)
(Hattie & Timperley, 2007)*

Model of Hattie and Timperley	Model of Black and Wiliam
Where am I going?	Where the learner is going?
How am I going?	Where the learner is right now?
Where to next?	How to get there?

Both models offer a view that effective feedback processes produce two main results: (I) teachers use and adapt effective learning strategies to help students succeed in areas that need attention; (II) students are changing their learning activities in order to achieve learning goals more effectively.

P. Black, D. Wiliam in their set out five framework strategies for a formative assessment or feedback. They are:

- clarification, exchanging and understanding of learning goals and achievement criteria;
- activities as proof of the training process;
- provide feedback that leads the student forward;
- students as teaching tools for each other;
- students as the managers of their own learning process (Black & Wiliam, 2009).

P. Black, D. Wiliam place emphasis on self-regulation of students, which also corresponds to feedback levels developed in the study „*The Power of Feedback*” (2007) by J. Hattie, H. Timperley (Table 2).

Table 2 *Feedback levels and their impacts* (Black & Wiliam, 2009)

Level	Description	Impact
Task	How well the tasks are understood and executed	Useful
Process	The main process required for understanding/fulfilling tasks	Powerful
Self-regulation	Self-monitoring, management and regulating activities	Powerful
Self-level	Personal assessment and impact (usually positive) on the student	Ineffective

To sum up the previously analysed education researchers' J. Hattie & H. Timperley (2007) and P. Black & D. Wiliam (2009) models, it can be concluded that effective feedback consists of:

- a goal – feedback should be identified and it has to help to continuously advance the understanding of the student or the ability to carry out the task towards the learning goal;
- a focus – feedback should answer one or more of these questions to the student (and teacher): *Where do I go? How do I go? Where to next?;*
- a level – feedback can be provided in one or more of the four levels:
 - the training activity – how well the task is understood or performed;
 - the learning process – what the student should do to perform the task;
 - self-directed learning – planning and self-monitoring;

- the student as an individual person – personal characteristics of student;
- a result – the changes made as a result of feedback could be:
 - bigger student activity;
 - using of strategies more effectively;
 - improving the autonomy, self-assessment and self-management of students;
 - to provide more appropriate and specific goals;
 - teachers adapt teaching strategies to meet students' needs.

Although students are primarily targeted to get a mark, there are a number of strategies that can be used to maximise students' involvement in the process, including providing effective feedback. The education researcher, D. Nicol, recommends splitting the tasks between stages and providing feedback, which is essential for the success of future phases. In addition, it is recommended that students should be asked to document how they have used feedback to move to the next phase of training. This strategy provides additional benefits through the development of students' metacognitive skills and a more active involvement of students in the process (Nicol, 2007). On the other hand, the researcher, M. Taras, recommends encouraging students to reflect on feedback comments and to give a preliminary assessment, while encouraging students to talk about their work and potentially earn higher marks. It is important to note that each teacher should listen to their students and accept the learning feedback (Murphy, 2000), thereby focusing on how students learn, receive feedback and analyse it (Phelps, 2000).

Student-focused feedback provides guidance on the learning process to the student, and the teacher pays attention to the decision, contribution and needs of the student. Teachers, using different tools, learning experience, help the student to improve performance. Learning experience is important as well as students motivating (Schmitt, Hu, & Bachrach, 2008). A student-based approach means that the student is in the centre, thereby it is important to identify the previous knowledge, skills and attitudes of the student in the background of feedback, areas where the student has experienced difficulties, to carefully consider appropriate teaching activities, to advise and compare results, to set goals (Rowntree, 1994). Perhaps the problem is that students see feedback as isolated from other aspects of the teaching and learning process and believe that feedback is mainly needed by the teacher (Taras, 2003).

It can be concluded that by providing feedback to students, the lack of skills is analysed with a view to improving these skills, a constructive approach to learning is aimed at achieving awareness. Cooperation with the involvement of students and students in feedback is essential. When students receive feedback, the first step in the feedback process consists of perceiving the feedback, before

even accepting or acting upon it (de Kleijn, Mainhard, Meijer, Brekelmans, & Pilot, 2013).

Clarification of students' views on the importance of feedback

In order to clarify the opinion of students on feedback and the effectiveness of its application in the training process, a survey was conducted in one of Latvia's Secondary School in autumn 2019. There were 69 respondents in the survey, studying at the classes 6 – 8.

The survey findings show that feedback to students is provided, but it does not provide full information on their achievements. Among girls dominate the view that teachers do not provide feedback that motivate them, while boys consider that providing feedback is not necessary.

41 respondent (59.42%) wrote that their teachers did not give them a feedback which motivates, that is, teachers did not explain where and why students made mistakes, what to do to improve their performance, while 24 respondents (34.78%) agreed that teachers have given them motivated feedback, but 4 respondents (5.8%) did not answer the question.

Feedback comments should be detailed, constructive and motivating. This type of feedback contributes to learning, reduces misunderstandings and improves student achievements. Positive feedback should show the strengths of the student and motivate to improve achievements that are not good enough.

8 respondents (11.59%) claimed that they had not received feedback from teachers in time and 12 respondents (17.39%) had received feedback after a long time, while the majority of respondents – 45 (65.22%) received feedback timely, but 4 respondents (5.8%) did not answer the question.

Timely feedback is effective feedback while delays in providing feedback reduce the chance for students to understand their mistakes and improve the performance (Hattie & Timperley, 2007). Corrective feedback is essential in the learning process as it enables learners to understand whether their attempts to improve learning and experience have contributed to improvements (Hattie & Timperley, 2007). The students indicated that in the most cases the feedback comments received were not taken into account because they did not give any indication on how to correct the errors. Teachers have given a mark but have not made comments that would justify why this mark in that case. It is clear from the above that students wait for informational and sufficient comments. If feedback comments are informative, they will help the students to understand their errors and how to correct them.

Respondents agreed that they are not given sufficient time or are not given the opportunity to provide feedback on tasks. During the lessons, teachers tend to “embrace the learning program” and mostly disregard feedback as a form of

support strategy. Teachers who use effective feedback help students to objectively assess their abilities and teach them to use their strengths and to compensate disadvantages and promote internal motivation. Teachers should be encouraged to provide feedback on comments made by teachers. Students' feedback should be analysed in order to introduce the necessary changes and to improve feedback as a teaching and learning strategy. Feedback should always be provided in a time, as learning requires determined efforts, timely feedback will help the student acquire knowledge and skills.

Conclusions

1. Feedback is a targeted and premeditated critical learning process that is structured through the teacher to help students learn and provide students with information that allows them to identify what knowledge and skills they have acquired and what they need to learn by identifying future learning developments.
2. In recent years feedback has been talked about and written in the context of competency-based approach. As feedback effectiveness is variable, studies are needed on how to provide feedback to students. There are relatively less tools to assess the frequency, types and impact of feedback. There are a number of conditions required for feedback and which has a positive impact.
3. In order to make progress in the learning process, attention should be paid to what students learn, how they learn and how teachers impact this process, so that feedback plays a particular role in the learning process. The feedback process should include clear expectations for learning and performance of students, clarification on specific criteria for assessing students' achievements, performance-enhancing measures and a common understanding of "quality".
4. Feedback should become an integral part of the teaching process, teachers should encourage students to provide feedback on both their and teacher work. It would be advisable for teachers to analyse feedback results in order to improve the teaching and learning process.
5. The results of the survey show that students are willing to receive feedback, which would explain what has been achieved and help them to improve their performance, thereby reinforcing theoretical research on the meaning and effectiveness of feedback, by developing methodological recommendations for teachers in the multiplicity of feedback links in the learning process to encourage the growth of the teaching and learning process.

References

- Black, P., & Wiliam. D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability*, 21(1), 5-31.
- Boud and Associates. (2010). Assessment 2020: Seven propositions for assessment reform in higher education. Sydney: Australian Learning and Teaching Council. Retrieved from https://ltr.edu.au/resources/Assessment%202020_final.pdf
- Boud, D., & Molloy, E. (2013). Rethinking models of feedback for learning: the challenge of design. *Assessment and evaluation in Higher Education*, 38(6), 698 – 712.
- de Kleijn, R.A.M., Mainhard, M.T., Meijer, P.C., Brekelmans, M., & Pilot, A. (2013). Master's thesis projects: Student perceptions of supervisor feedback. *Assessment and Evaluation in Higher Education*, 38(8), 1012–1026.
- Gibbs, G., & Simpson, C. (2005). Conditions Under Which Assessment Supports Students' Learning. *Learning and Teaching in Higher Education*, 1, 3-31.
- Hattie, J., & Timperley, H. (2007). The Power of Feedback. *Review of Educational Research*. 77(1), 81-112.
- Jonsson, A. (2013). Facilitating productive use of feedback in higher education. *Active Learning in Higher Education*, 14, 63–76. doi:10.1177/ 1469787412467125
- Kluger, A., & DeNisi, A. (1996). The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin*, 119(2) 254-284.
- Murphy, S. (2000). A sociocultural perspective on teacher response: Is there a student in the room? *Assessing Writing*, 7(1), 79-90.
- Nicol, D., & Draper, S. (2008). *Redesigning written feedback to students when class sizes are large*. Paper presented at the Improving University Teachers Conference, 29 July, Glasgow.
- Nicol, D. (2007). Principles of good assessment and feedback: Theory and practice. *Proceedings of the REAP International Online Conference on Assessment Design for Learner Responsibility*.
- Phelps, L. (2000). Cyrano's nose: Variations on the theme of response. *Assessing Writing*, 7(1), 91-110.
- Price, M., Handley, K., Millar, J., & O'Donovan, B. (2010). Feedback: All that effort, but what is the effect? *Assessment & Evaluation in Higher Education*, 35(3), 277–289.
- Rowntree, D. (1994). *Preparing Materials in Open, Distance and Flexible Learning: An Action Guide for Teachers and Trainers*. London: Kogan Page.
- Schmitt, M., Hu, C., & Bachrach, S. (2008). Course Evaluation and Assessment: Examples of a Learner-Centered Approach. *Gerontology & Geriatrics Education*, 29(3), 290-300.
- Taras, M. (2003). To feedback or not to feedback in student self-assessment. *Journal Assessment and Evaluation in Higher Education*, 28(5), 549-565.
- The European Council. (2000). Presidency conclusions. Lisbon European Council.
- UNESCO. (2005). Towards knowledge societies. UNESCO Publishing. Retrieved from <http://unesdoc.unesco.org/images/0014/001418/141843e.pdf>
- Van der Schaaf, M.F., Baartman, L.K.J., Prins, F.J., Oosterbaan, A., & Schaap, H. (2011). Feedback dialogues that stimulate students' reflective thinking. *Scandinavian Journal of Educational Research*, 57(3), 227–245.
- Wiggins, G. (2017). *Septiņas efektīvas atgriezeniskās saites pazīmes*. Pieejams <https://www.skola2030.lv/lv/jaunumi/blogs/septinas-efektivas-atgriezeniskas-saites-pazimes>

CHANGES IN SCHOOL ANXIETY AND EMOTIONAL SELF-REGULATION OF AN ADOLESCENCE EXPERIMENTAL GROUP FOLLOWING THE ABKT-B PROGRAMME

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***Abstract.** The purpose of this study was to adapt the experimental programme MBCT-C (Randy J. Semple & Jennifer Lee's programme "Mindfulness-Based Cognitive Therapy for Anxious Children", 2011) in early adolescents and compare the changes in school anxiety and emotional regulation indicators before and after in the experimental and control group. The necessity for intervention with respect to school anxiety and emotional regulation among children with emotional regulation and school anxiety issues in the early adolescence group was indicated by research into problems connected with youth behaviour and difficulties in regulating emotions. The study analysed the results of six 6th grade students (12-13 years old) using the following instruments: The Emotion Questionnaire (Rydell, Berlin, & Bohlin, 2003, adapted by Grīvza, Brūdere-Ruska, & Raikova, 2014); the School Anxiety Questionnaire (Beeman N. Phillips, 1970, translated by Zalcmane, 2004), the Parent Evaluation Questionnaire (Semple & Lee, 2011) and the Children Evaluation Questionnaire (Semple & Lee, 2011) that have been used in research as assessment instruments. Testing was performed in two stages: before intervention and after 12 intervention sessions. The experimental group showed an improvement in all school anxiety results compared to the control group, but the school anxiety results of control group pupils deteriorated. Emotional regulation indicators for both groups decreased, but the main impact of the experiment was demonstrating that after 12 intervention sessions the level of school anxiety dropped, while scores related to emotional awareness compared to the control group increased.*

***Keywords:** mindfulness, MBCT-C (ABKT-B), emotional regulation, school anxiety, early adolescence.*

Introduction

The MBCT-C programme (based on Mindfulness-Based Cognitive Therapy for Anxious Children (Semple & Jennifer, 2011) helps to explain how symptoms of anxiety can manifest in thoughts, feelings, bodily sensations and behaviour. One of the main goals of the programme is to help adolescents become more aware of their thoughts, feelings and bodily sensations as separate, yet interrelated

phenomena that work together to shape their perception of day-to-day experiences. The programme intends to help adolescents improve their ability to describe internal and external developments by reducing anxiety, avoiding spontaneous, impulsive behaviour, and improving the ability to regulate their emotions (Semple & Lee, 2011). Intervention was performed within the framework of this study by translating and approving the experimental MBCT-C programme within a group of early adolescents, comparing changes in school anxiety and emotional regulation scores before, during, and after the experiment.

The need for school anxiety and emotional regulation interventions for children experiencing difficulties in regulating emotions and school anxiety was indicated by a study on problems related to student behaviour and emotional regulation difficulties in the early adolescence group. A total of 12 tests were conducted to test the hypothesis that school anxiety among pupils would decrease, and emotional awareness indicators would improve after the intervention programme. The results of six 6th grade students (12 to 13 years old) were analysed within the study. The study used the Emotion Questionnaire (The Emotion Questionnaire; Rydell, Berlin, & Bohlin, 2003; adapted by Grīvza, Brūdere-Ruska, & Raikova, 2014), B.N. Phillips School Anxiety Questionnaire (Beeman N. Phillips, 1970, translated by Zalcmane, 2004), Parent Evaluation Questionnaire (Semple & Lee, 2011), Children Questionnaire (Semple & Lee, 2011).

Adolescent school anxiety and emotional control difficulties

Fear of tests and general learning difficulties cause serious emotional problems for pupils, such as increased anxiety, depression and mood swings. Studies show that anxiety caused by tests has a significant negative impact on a person's health and emotional state. Stress management mechanisms used by pupils play an important role in coping with stress. Studies show that students with high test anxiety score lower than students with low anxiety levels, and lower test scores can also be observed in situations where there is a high chance that the pupil will be assessed (Spielberg & Vagg, 1995). Anxiety related to performance at school or satisfying the expectations or demands of parents and teachers can be so common that academic performance has deteriorated and, as a result, anxiety has increased (Škuškovnika & Tiltiņa-Kapele, 2014). Anxious children generally show a low level of understanding of how to regulate their emotions (Daleiden & Vasey, 1997). Adolescents with a low understanding of the diversity of emotions tend to be more anxious (Daleiden & Vasey, 1997).

Emotional regulation is vital, because as children start studying in school, they face high expectations regarding their ability to regulate their emotions and behaviour and to develop positive relationships with their peers, thus these skills

enable them to learn from each other and handle school tasks (Hartas, 2011). Emotion regulation, empathy and the ability to deal with anxiety are considered essential components of child development (Trentacosta, Izard, Mostow, & Fine, 2006). High emotionality of fear and an inability to regulate fear may lead to internalised behaviour problems, while high anger emotionality and inability to regulate positive emotions may lead to externalised behaviour problems (Rydell, Berlin, & Bohin, 2003). The ability of children to acknowledge and regulate their emotions is particularly important in interpersonal relationships; it influences their behaviour in school so that others can understand the child better (Mavriveli et al., 2009). Common signs of difficulties caused by school anxiety are lowered learning outcomes, followed by low self-esteem, which leads to doubt, uncertainty about one's ability and decreased motivation to learn, causing anger, fear, aggression (Abramova, 2003).

The concept of emotion regulation

Emotion regulation is the ability of a person to understand and accept his or her emotional experience, to manage and control negative emotions, and to be productive in times of crisis or distress (Spielberg, 1999; Krohne, 2003; Gross & Thompson, 2006, etc.).

People with good emotion regulation abilities are capable of controlling impulsive behaviour, which helps them build social relationships, behave in an appropriate manner, be empathetic, deal with problems and cope with difficulties (Landy, 2009).

Emotion regulation, empathy and the ability to deal with anxious emotions are considered essential components of child development (Trentacosta, Izard, Mostow, & Fine, 2006). A study on children's emotion regulation found that high emotionality of fear and an inability to regulate fear may lead to internalised behaviour problems (the child becomes anxious and/or depressed, closes down and complains about physical health problems such as pain, dizziness, indigestion, etc.), while high anger emotionality and an inability to regulate positive emotions may lead to externalised behaviour problems (the child is provocative, impulsive, hyperactive) (Rydell, Berlin, & Bohin, 2003).

Emotion regulation is an essential skill which is vital for developing positive relationships with peers, maintaining good relationships and improving social skills (Blair et al., 2015). The child's ability to regulate his or her inner emotions determines their future socio-emotional development. This study shows individual differences in their development. The ability to effectively regulate emotions offers children greater opportunities to actively and positively participate in social interactions that help develop collaboration, communication, and self-confidence (Blair et al., 2015).

R.D. Lane (2000) says that emotion regulation is the ability to recognise and describe one's own and others' emotions, and to distinguish one's emotions from others' emotions by naming and describing different types of emotional experiences (Bajgar et al., 2005).

Description of the school anxiety and emotion regulation correction programme

MBCT-C is adapted to school-age children and pays attention to a number of developmental features (Semple & Lee, 2011).

The main goal of the programme is to improve attention and concentration, promote self-regulation of emotions and practice awareness. Practising awareness helps you manage stressful situations and offers other ways to respond to events. Practising awareness lets one understand how thoughts and feelings affect our experience. Developing thoughts, feelings and bodily sensations through awareness practices helps a person feel like they are present. As children become more self-aware and aware of their surroundings, they often choose to respond to stressful situations with greater understanding and emotional stability (Semple & Lee, 2011).

Awareness-based cognitive therapy for children is designed as a twelve-week programme to reduce symptoms of anxiety and regulate emotions. During the practice, the child learns to be present and not worry about the past or future. By being more aware, the child can find other ways of reacting to or behaving in anxious and stressful situations. This freedom of choice creates a sense of release, which in turn helps children to respond appropriately to autopilot situations. MBCT-C helps develop and understand the relationship between thoughts and feelings, including anxious thoughts and feelings. MBCT-C techniques include simple breathing exercises, practices oriented at the five senses (smell, taste, touch, vision, hearing), and body scanning practices. It helps children become aware of how anxiety symptoms manifest themselves in thoughts, feelings, sensations and behaviour (Semple & Lee, 2011).

MBCT-C is a specifically developed programme for children, adapted from two awareness programmes aimed at adults. These programmes are based on many years of psychology research, which confirm their effectiveness and usefulness. It is a part of the Mindfulness-Based Stress Reduction programme, developed in 1979 by John Kabat-Zinn and his colleagues at the Stress Reduction and Relaxation Program at the University of Massachusetts Medical Center, which is the oldest and largest such institution in the world. MBCT helps control stress-related disorders and is effective against a variety of psychological disorders. The programme lasts eight weeks and includes daily homework (Kabat-Zinn, 1994) and conscious cognitive therapy. This programme was created and

developed by Zindel Segal, Mark Williams and John Teasdale. MBCT is based on numerous psychology studies and is designed to prevent the risk of recurring episodes of depression. It helps adults see patterns in their daily behaviour and thoughts, identifying bad moods and negative thoughts. The programme lasts for eight weeks and involves daily homework (Williams, Teasdale, Segal, & Kabat-Zinn, 2007)

MBCT-C (Semple & Lee, 2011) consists of weekly 90-minute sessions. Frequent repetition of practice reinforces the effect. Each session of the children's programme starts off with a short meditation session, followed by a review of the previous week's session, and then the work and exercises performed at home are discussed in a group. The programme teaches the child to practice understanding his or her daily experiences and provides a variety of meditation practices, including breath awareness, body awareness (body scanning) and motion awareness (simple yoga postures). These exercises are discussed after each experience by focusing on the thoughts, feelings, and sensation.

The methods used within the MBCT-C programme are designed to be participatory and interactive, offering a variety of experiences. Experimental learning exercises focus on understanding in a specific sensory way, such as conscious vision, hearing, sensation, taste and smell. The MBCT-C programme is also designed in a way that makes the child's parents an integral part of the programme. Family involvement in treatment has been shown to improve study outcomes, as children spend more time with their families than adults outside the home (Kaslow & Racusin, 1994).

Several studies suggest that MBCT can significantly reduce relapse rates in patients with a history of three or more episodes of depression (Eisendrath et al., 2008; Kenny & Williams, 2007; Kingston, Dooleys, Betes, Lawlor, & Malone, 2007; Kuyken et al., 2008; Ma & Teasdale, 2004; Ree & Craigie, 2007; Teasdale et al., 2000; Williams, Duggan, Williams, Teasdale, Segal, & Soulsby, 2000). MBCT has been shown to provide protection against depressive relapse with pharmacotherapy (Segal et al., 2010). Studies were conducted using MBCT to treat patients with eating disorders (Baer, Fischer, & Huss, 2005), generalised anxiety disorder (Evans et al., 2008), treatment-resistant depression (Eisendrath et al., 2008), anxiety (Finucane & Mercer, 2006), bipolar disorder (Williams et al., 2008), anxiety and insomnia (Yook et al., 2008), and primary insomnia (Heidenreich, Tuin, Pflug, Michal, & Michalak, 2006).

Studies on MBCT programmes

A number of studies suggest that meditation techniques can be helpful in reducing anxiety symptoms in school-age children (Chang & Hiebert, 1989; Dacey & Fiore, 2000; Fish, 1988; Humphrey, 1988; Rozman, 1976). However,

there are few published studies demonstrating the usefulness and effectiveness of child awareness practices. Linden (1973) studied the impact of meditation practice in school on adolescent cognitive and affective aspects. Linden hypothesised that meditation practice can help adolescents learn to concentrate and change their sensory states by deliberately shifting attention. The results of the study showed that adolescents who completed 18 weeks of meditation practice were less anxious about getting tested.

Semple, Reid & Miller (2005) conducted a study to test the usefulness of practising child awareness during the learning process. A 6-week study was conducted involving five anxious children aged 10 to 12 years. The results of the study showed that the programme was child-friendly and could be implemented in the school environment. The children were able to understand the concept of awareness, to use the exercises and practices learned in the programme, and to integrate awareness into their daily lives. The authors concluded that the awareness intervention programme is effective in reducing anxiety in children.

There is an extensive body of literature on adult awareness, but there are only a few studies on how to use awareness-based therapy in children.

Mindfulness-Based Cognitive Therapy for Children (MBCT-C) is based on the assumption that it is better for children to be more aware of their thoughts, feelings and body sensations. The MBCT-C programme is aimed at helping children distinguish between reasoning and describing to develop the ability to describe internal and external events without giving in to spontaneous, impulsive behaviour triggered by an experience. By practising mindfulness on a regular basis, the child can change his or her usual reactions and actions in response to events and promote greater awareness regarding how to respond (or not to respond) to events with greater awareness. Understanding emotion regulation can enhance a child's ability to respond to anxious thoughts, accept strong emotions, and manage unpredictable situations (Semple & Lee, 2011).

According to Beck (1976), MBCT-C helps a child identify and recognise bias, recognise that thoughts influence emotions and behaviours, distance themselves from illusions, and develop more realistic ways of self-expression, while De Silva (1985) argues that consciousness-based methods promote behavioural change.

The programme is aimed at changing thoughts, emotions, behaviour. Misinterpretation of events and reliving stressful situations in one's head play a large role in anxiety situations (Piacentini & Bergman, 2001).

Anxious children usually display a poor understanding of the variability of emotions and their regulation (Daleiden & Vasey, 1997). Particularly anxious children sometimes have difficulty distinguishing their emotions from reality (Barlow, 2002).

In recent years, there has been growing interest in innovative intervention methods for children that encourage the use of meditation practices, increasing awareness of thoughts, feelings, and bodily sensations (Segal, Willams, & Teasdale, 2002).

A number of studies suggest that meditation techniques can be helpful in reducing anxiety symptoms in school-age children (Chang & Hiebert, 1989; Dacey & Fiore, 2000; Fish, 1988; Humphrey, 1988; Rozman, 1976; Smith & Wolmack, 1987).

Study procedure

Within the analysis of changes in pupil emotion regulation and school anxiety indicators, we compared indicators in the experimental and control group. The indicators were measured in two steps: T1 at the start of the intervention programme, T2 at the end of the intervention programme after 12 intervention sessions.

To provide more individualised attention to children, the group consisted of six to eight participants. Latvian-speaking children aged 12 to 13, or 6th grade students, participated in the study. Relevance was determined by age, class, gender, difficulties caused by emotion regulation and school anxiety. The programme was selected based on its availability and the prevalence of school anxiety problems, which was determined by the children's need for psychological support.

All parents of children in the sixth grade ($n = 21$) were involved and informed at the start of the programme. Parents were asked to sign the consent form and return it with information on whether they would be interested in participating in the study. A total of 12 consent forms were returned. Six children withdrew from the first assessment, five due to time conflicts with other activities ($n = 5$), while one child was excluded because of age. In the end, 6 children were included in the experimental group.

In order to participate in the study, participants had to attend and participate in at least 80% of the sessions, which meant attending 10 or more of these sessions over a period of 12 weeks.

Group participants ($n=6$) were selected by age, class, gender, difficulties caused by emotion regulation and school anxiety.

School anxiety indicators. Cronbach's alpha for school anxiety scores: general anxiety at school = 0.70, frustration of need for success = 0.78, fear of self-expression = 0.74, fear of knowledge test = 0.73, fear of not meeting the expectations of others = 0.74, low physiological resistance to stress = 0.80, problems and fears teachers = 0.79, total alarm level = 0.78 (Zalcmane, 2004). The results indicate statistically significant differences between pre- and post-

experiment school anxiety indicators and indicate the potential effectiveness of the intervention on school anxiety scores – the experimental group’s school anxiety scores improved compared to the control group, while the results of the control group worsened (see Table 1).

Table 1 Results of the t-Test for school anxiety intensity in control and experimental groups before intervention (T1) and after 12 intervention sessions (T2)

Variables		Control group total (n=6)		Experimental group total (n=6)		t	p	Effect size d'
		M	SD	M	SD			
General anxiety in school	T1	8.00	4.42	7.83	6.11	0.54	0.96	0.03
	T2	11.00	3.16	4.50	5.21	2.61*	0.03	1.65
Frustration caused by the need to succeed	T1	2.83	1.47	2.67	1.37	0.20	0.84	0.13
	T2	4.83	1.72	2.17	1.33	3.00*	0.01	1.90
Fear of self-expression	T1	2.33	1.37	2.17	0.75	0.26	0.80	0.17
	T2	3.50	0.84	2.83	1.47	0.96	0.36	0.61
Fear of knowledge testing	T1	1.83	0.98	2.00	1.67	0.21	0.84	0.13
	T2	3.83	0.75	1.00	1.10	5.20*	0.00	3.30
Fear of not meeting expectations of other people	T1	2.33	1.21	2.00	1.10	0.50	0.63	0.32
	T2	3.00	0.89	1.33	0.82	0.37*	0.01	2.13
Low physiological resistance to stress	T1	1.33	1.03	1.50	1.05	0.28	0.79	0.18
	T2	1.33	1.03	0.83	0.75	0.96	0.36	0.61
Problems and fears in relationships with teachers	T1	2.67	1.21	3.17	1.60	0.61	0.56	0.39
	T2	4.00	1.26	1.67	1.03	3.50*	0.01	2.21
Total anxiety	T1	17.16	5.98	17.83	9.24	0.15	0.89	0.09
	T2	23.50	5.12	12.83	8.01	2.74*	0.02	1.74

Note. Legend: M is the arithmetic mean, SD is the standard deviation, t is the student’s t-criterion value for independent groups, T1 is the result at the start of the intervention programme, T2 is the result after 12 intervention sessions. * p<0.05, ** p<0.01, d' – effect size (Cohen, 1988).

The results in Table 1 indicate that all school anxiety scores were similar for the two groups before the intervention and did not show statistically significant differences. However, after the intervention, both the total anxiety level and other anxiety scores for the experimental and control groups showed statistically significant differences.

Therefore, it can be concluded that an intervention programme helps reduce school anxiety levels or prevents the scores from worsening, as observed in the control group.

Emotion regulation indicators. Authors' Surveys for Kronbach's Alpha Emotion Control Indicators; anger = 0.79, fear = 0.72, and positive emotion/excitement = 0.69 (Rydell, Berlin, & Bohlin, 2003). The results in Table 2 indicate that all emotion regulation scores were similar for the experimental and control groups before the intervention (T1), and no statistically significant differences were observed between the groups. Significant differences between the experimental and control group emotion regulation scores were observed following the intervention (T2).

Table 2 Results of the t-Test for emotion regulation in control and experimental groups before intervention (T1) and after 12 intervention sessions (T2)

Variables		Control group total (n=6)		Experimental group total (n=6)		t	P	Effect size d'
		M	SD	M	SD			
Anger-emotion regulation	T1	2.72	0.82	2.11	0.62	1.45	0.18	0.92
	T2	2.38	0.80	1.14	0.34	2.26*	0.03	1.68
Fear-emotion regulation	T1	2.22	0.58	2.00	0.92	0.50	0.63	0.32
	T2	1.88	0.54	1.44	0.50	1.47	0.17	0.93
Excitement-emotion regulation	T1	2.55	0.40	2.00	0.92	1.36	0.21	0.86
	T2	2.38	0.38	1.33	0.56	3.80**	0.00	2.40
Total emotion regulation	T1	2.50	0.52	2.03	0.69	1.31	0.22	0.83
	T2	2.22	0.49	1.40	0.38	3.20**	0.01	2.03

Note. Legend: M is the arithmetic mean, SD is the standard deviation, t is the student's t-criterion value for independent groups, T1 is the result at the start of the intervention programme, T2 is the result after 12 intervention sessions. *p<0.05, ** p<0.01, d' – effect size (Cohen, 1988).

Theoretical studies show that anxious children usually display a poor understanding of the variability of emotions and their regulation (Daleiden & Vasey, 1997). Particularly anxious children sometimes have difficulty distinguishing their emotions from reality (Barlow, 2002).

Pupil survey following intervention. The participant's questionnaire assesses the pupil's overall experience with the programme. Participant assessment of the programme demonstrates the usefulness and effectiveness of the programme based on a number of positive responses received about the programme.

These results are supported by the study described in the theoretical part which indicates that meditation practices influence cognitive and affective aspects in adolescents, helping them learn how to concentrate and change sensory states by deliberately shifting attention (Linden, 1973).

Awareness-based intervention programmes help early adolescent students develop and manage responses to stress and anxiety situations without attempting to control those events (Baer, 2003).

Parent survey following intervention. The parent survey measures parents' experience with the programme and their perception of any behavioural changes in their children. Parents' positive assessment of the programme demonstrates the usefulness and effectiveness of the programme based on a number of responses received.

The results are also supported by the study described in the theoretical part which suggests that awareness-based intervention programmes can reduce the internalisation of adolescent problems (Lee, Semple, Rosa, & Miller, 2006; Zylowska et al., 2008).

Discussion

Having conducted the study, the author concludes that the MBCT-C intervention programme (based on Randy J. Semple and Jennifer Lee's *Mindfulness-Based Cognitive Therapy for Anxious Children*, 2011) helps adolescents learn to regulate their emotions and reduce school anxiety levels, or proactively helps students prevent deterioration of school anxiety indicators, as observed in the control group.

These results are also supported by a study reviewed in the theoretical section, which indicates that mindfulness-based intervention programs help early adolescent students manage reactions in stress and anxiety situations (Baer, 2003).

A limitation of the study was the relatively small study samples that do not represent the population as a whole.

The authors believe that it is important to use a science and research-based programme that is appropriate for students in connection with school anxiety and emotion regulation. Thus, the contribution of this study to Latvia's psychology field is the approbation of a new intervention programme, its summary and description.

References

- Abramova, G.(2003). *Prakticeskaja psihologija*. Moskva: Akadem Projekt.
Baer, R.A., Fischer, S., & Huss, D.B. (2005). Mindfulness-based cognitive therapy applied to binge eating: A case study. *Cognitive and Behavioral Practice*, 12, 351-358.

- Bajgar, J., Chiarrochi, J., Lane, R., & Deane, F.P. (2005). Development of the Levels of Emotional Awareness Scale for Children (LEAS-C). *British Journal of Developmental Psychology*, 23, 569-586.
- Beck, A.T. (1976). *Cognitive therapy and the emotional disorders*. NY: International Universities Press.
- Blair, B.L., Perry, N.B., O'Brein, M., Calkins, S.D., Keane, S.P., Shanahan, L. (2015). Identifying Developmental Cascades among Differentiated Dimensions of Social Competence and Emotion Regulation. *Developmental Psychology*, 51, 8, 1062-1073.
- Chang, J., & Hiebert, B. (1989). Relaxation procedures with children: A review. *Medical Psychotherapy*, 2, 163-176.
- Dacey, J.S., & Fiore, L.B. (2000). *Your anxious child*. San Francisco: Jossey-Bass.
- Daleiden, E.L., & Vasey, M.W. (1997). An information-processing perspective on childhood anxiety. *Clinical Psychology Review*, 17, 407-429.
- De Silva, P. (1985). Early Buddhist and modern behavioral strategies for the control of unwanted intrusive cognitions. *Psychology Record*, 35, 437-443.
- Eisendrath, S.J., Delucchi, K., Bitner, R., Fenimore, P., Smit, M., & McLane, M. (2008). Mindfulness-based cognitive therapy for treatment-resistant depression: A pilot study. *Psychotherapy and Psychosomatics*, 77, 319-320.
- Evans, S., Ferrando, S., Findler, M., Stowell, C., Smart, C., & Haglin, D. (2008). Mindfulness-based cognitive therapy for generalized anxiety disorder. *Journal of Anxiety Disorders*, 22, 716-721.
- Finucane, A., & Mercer, S.W. (2006). An exploratory mixed methods study of the acceptability and effectiveness of mindfulness-based cognitive therapy for patients with active depression and anxiety in primary care. *BMC Psychiatry*, 6.
- Fish, M.C. (1988). Relaxation training for childhood disorders. In C.E. Schaefer (Ed.), *Innovative interventions in child and adolescent therapy* (pp. 160-192). NY: Wiley.
- Flook, L., Smalley, S.L., Kitil, M.J., Galla, B.M., Kaiser, Greenland, S., Locke, J., Ishijima, E., & Kasari, C. (2015). Effects of Mindful Awareness Practices on Executive Functions in Elementary School Children. *Journal of Applied School Psychology*, 26(1), 70-95.
- Gross, J.J., & Thompson, R.A. (2006). Emotion regulation: Conceptual foundations. In J. Gross (Ed.), *Handbook of emotion regulation*. New York.
- Hartas, D. (December, 2011). The ecology of young children's behaviour and social competence; child characteristics, socio-economic factors and parenting. *Oxford Review of Education*, 37(6), 763-783.
- Heidenreich, T., Tuin, I., Pflug, B., Michal, M., & Michalak, J. (2006). Mindfulness-based cognitive therapy for persistent insomnia: A pilot study. *Psychotherapy and Psychosomatics*, 75, 188-189.
- Humphrey, J.H. (1988). *Teaching children to relax*. Springfield, IL: Charles C Thomas.
- Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation for everyday life*. New York: Hyperion.
- Kaslow, N.J., & Racusin, G.R. (1994). Family therapy for depression in young people. In W.M. Reynolds & H.F.J ohnston (Eds.), *Issues in clinical child psychology. Handbook of depression in children and adolescents* (pp. 345-363). New York, NY, US: Plenum Press.
- Kenny, M.A., & Williams, J.M.G. (2007). Treatment-resistant depressed patients show a good response to mindfulness-based cognitive therapy. *Behaviour Research and Therapy*, 45, 617-625.

- Kingston, T., Dooley, B., Bates, A., Lawlor, E., & Malone, K. (2007). Mindfulness-based cognitive therapy for residual depressive symptoms. *Psychology and Psychotherapy: Theory, Research and Practice, 80*, 193-203.
- Klatt, M., Harpster, K., Browne, E., White, S., & Case-Smith, J. (2013). Feasibility and preliminary outcomes for Move-Into-Learning: An arts-based mindfulness classroom intervention. *The Journal of Positive Psychology*.
- Krohne, H.W. (2003). Individual differences in emotional reactions and coping. In R.J. Davidson, K.R. Scherer, H.H. Goldsmith (Eds.), *Handbook of affective sciences* (pp. 698-725). New York: Oxford University Press.
- Kuyken, W., Byford, S., Taylor, R.S., Holden, E., Barrett, B., Evans, A., et al. (2008). Mindfulness-based cognitive therapy to prevent relapse in recurrent depression. *Journal of Consulting and Clinical Psychology, 76*, 966-978.
- Landy, S. (2009). *Pathways to Competence. Encouraging Healthy Social and Emotional Development in Young Children*. Paul H. Brookes Publishing, Baltimore, Maryland.
- Lane, R.D. (2000). Levels of Emotional Awareness: Neurobiological, psychological and social perspectives. In R. Bar-On & J.Parker (Eds.), *Handbook of emotional intelligence. Theory, development, assessment and application at home, school, and in the workplace* (pp. 171-191). San Francisco: Jossey Bass.
- Linden, W. (1973). Practicing of meditation by school children and their levels of field dependence-independence, anxiety. *Journal of Consulting and Clinical Psychology, 41*.
- Ma, H.S., & Teasdale, J.D. (2004). Mindfulness-based cognitive therapy for depression: Replication and exploration of differential relapse prevention effects. *Journal of Consulting and Clinical Psychology, 72*, 31-40.
- Mavroveli, S., Petrides, K.V., & Sangareau, Y. (2009). Exploring the relationships between trait emotional intelligence and objective socio-emotional outcomes in childhood. *British Journal of Educational Psychology, 79*.
- Napoli, M., Krech, P.R., & Holley, L.C. (2005). Mindfulness Training for Elementary School Students. *Journal of Applied School Psychology, 21*.
- Ree, M.J., & Craigie, M.A. (2007). Outcomes following mindfulness-based cognitive therapy in a heterogeneous sample of adult outpatients. *Behaviour Change, 24*, 70-86.
- Rozman, D. (1976). *Meditating with children: A workbook on new age educational methods using meditation*. Boulder Creek, CA: U Trees Press.
- Rydell, A.M., Berlin, L., & Bohlin, G. (2003). Emotionality, Emotion Regulation, and Adaptation Children. *Emotion, 3*(1), 30-47.
- Schonert-Reichl, K.A., & Lawlor, M.S. (2010). The Effects of a Mindfulness-Based Education Program on Pre- and Early Adolescents' Well-Being and Social and Emotional Competence. *Mindfulness, 1*, 137-151.
- Semple, R.J., Reid, E.F.G., & Miller, L.F. (2005). Treating anxiety with mindfulness: An open trial of mindfulness training for anxious children. *Journal of Cognitive Psychotherapy, 19*, 387-400.
- Semple, R.J., & Lee, J. (2011). *Mindfulness-based cognitive therapy for anxious children: A manual for treating childhood anxiety*. Oakland, CA: New Harbinger.
- Semple, R.J., Lee, J., & Miller, L. (2006). Mindfulness-based cognitive therapy for children. In R. Baer (Ed.). *Mindfulness-based treatment approaches: Clinician's guide to evidence base and applications* (pp. 143-166). San Diego, CA: Elsevier.
- Southam-Gerow, M.A., & Kendall, P.C. (2000). A preliminary study of the emotion understanding of youths referred for treatment of anxiety disorders. *Journal of Clinical Child Psychology, 29*, 319-327.

- Spielberger, C.D., & Vagg, P. (1995). Test Anxiety: a transactional process model. In C.D. Spielberger, P. Vagg (Eds.). *Test Anxiety. Theory, Assessment, and Treatment*. New York: Taylor & Francis.
- Škuškoviņa, D., Tiltiņa-Kapele, I., & Dudkina, A. (2014). *Trauksme un agresija. Korekcijas iespējas*. Zinātne.
- Teasdale, J.D., Segal, Z.V., Willams, J.M.G., Redgeway, V.A., Soulsby, J.M., & Lau, M. (2000). Prevention of relapse/recurrence in major depression of mindfulness-based cognitive therapy. *Journal of Consulting and Clinical Psychology*, 79.
- Trentacosta, C.J., Izard, C.E., Mostow, A.J., & Fine, S.E. (2006). Children's Emotion and Attentional Competence in Early Elementary School. *School Psychology Quarterly*, 21(2), 148-170.
- Williams, J.M.G., Alatiq, Y., Crane, C., Barhofer, T., Fennell, M.J.V., Duggan, D.S., et al. (2008). Mindfulness-based cognitive therapy (MBCT) in bipolar disorder: Preliminary evaluation of immediate effects on between-episode functioning. *Journal of Affective Disorders*, 107, 275-279.
- Williams, J.M.G., Duggan, D.S., Crane, C., & Fennell, M.J.V. (2006). Mindfulness-based cognitive therapy for prevention of recurrence of suicidal behaviour. *Journal of Clinical Psychology*, 62, 201-210.
- Williams, J.M.G., Teasdale, J.D., Segal, Z.V., & Soulsby, J. (2007). Mindfulness-based cognitive therapy reduces overgeneral autobiographical memory in formerly depressed patients. *Journal of Abnormal Psychology*, 109.
- Yook, K., Lee, S.-H., Ryu, M., Kim, K.-H., Choi, T.K., et al. (2008). Usefulness of mindfulness-based cognitive therapy for treating insomnia in patients with anxiety disorders: A pilot study. *Journal of Nervous and Mental Disease*, 196, 501-503.
- Zylowska, L., Ackermann, D.L., Yang, M.H., Futrell, J.L., Horton, N.L., Hale, S., et al. (2007). Mindfulness meditation training in adults and adolescents with ADHD. A feasibility study. *Journal of Attention Disorders*.

THE FLEXIBILITY OF CURRICULUM FOR PERSONALISED LEARNING

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Abstract. *The paper discusses two main approaches to personalised learning through humanistic and functionalist approaches and tries to identify the shared areas. The paper argues that these areas are related to the development of a flexible curriculum and are focused on learner's needs and potentials, learner's ownership of the learning process, recognition of learner's pace and assessing personal progress. The paper is based on literature review, trying to systemise current theoretical and practical approaches to personalised learning.*

Keywords: *personalised learning, learner-centred pedagogy, curriculum.*

Introduction

Personalised learning is typically defined as a strategy to respond to the diversity of learners and to actualize their opportunities in the most appropriate form to achieve their learning goals. The idea of personalised learning has become particularly actualised in the recent years. Although there is an increasing interest on personalised learning, the scientific literature is limited in providing models of its implementation and thus, this phenomenon still remains under-researched. Practices are rather scarce which could be explained by the fact that personalised learning as a concept is not very clearly defined. The difficulty of defining personalisation arises from its varied implementation in educational practice.

Most definitions of personalised learning are complex and reveal the main components of personalisation. Understanding and revealing diverse aspects of personalisation in education will help to identify it from the related teaching strategies, mainly individualisation. In personalised learning approach it is important to seek interaction, cooperation and involvement of each learner, however, it needs further research how much flexibility in curriculum should be ensured to address these needs.

The paper aims to investigate personalised learning practices, mainly focusing on general education level. For reaching this aim, the following objectives were defined:

- 1) Discuss variations of the concept of personalised learning through humanistic and functionalist approaches.
- 2) Identify shared attributes of personalised learning which contribute to the development of flexible curriculum.

The paper is based on literature review, trying to systemise current theoretical and practical approaches to personalised learning. We referred to holistic and functionalist perspectives as proposed by Mincu (2012a; 2012b) to analyse different characteristics of personalised learning. This allowed us to define attributes of flexible curriculum which helps practical implementation of personalised learning models.

Literature review

Nowadays different concepts are used for the personalisation of education: personalised, individualised, tailored, self-regulated learning. Somehow, they are familiar and simultaneously, represent diverse conceptualizations. However, how we could know, which one reflects properly the aim of personalised learning? Which one reflects the concept from its essence? Watkins (2012) express this misunderstanding in the following quotation:

One more recent development creates a further hijack of personalised learning and is indicated in the view of this term which is emerging in the UK. Taking as an indicator of the 100,000 UK web pages, which use the term:

- 36% are associated with 'individual';
- 35% are associated with ICT/web/e-learning;
- 17% mention the classroom, mostly in passing. (Watkins, 2012, p. 7)

Still today we find these approaches to the concept and the confusion has not been solved. A research done by Monica E. Mincu (2012a) for the collection of articles called *Personalisation of Education in contexts, Policy Critique and theories of personal improvement*, gives scope to an almost recent situation in the study and the uses of this concept in different countries. Her work summits with her article doing a mapping of the different conceptualisations and practices of personalised learning. The use of the term in her research centres on the word personalisation, what is not a reduction, otherwise is a border concept that joins different combinations and describes the theories in their essence. It signifies that using the words education, learning, teaching, instruction together to 'personalised' concept, automatically refers to conceptualisations and strategies of implementation. In the article *Mapping meanings of personalisation*, Mincu (2012b) attempts to do an outline of the uses of the concept and the theoretical background managed by the authors. The analysis done gives, as a result, a conceptual diagram of categories for the use of the concept 'personalisation'. Among seven authors, she noticed several recurrent terms, which are

dichotomised, combined or used as synonymous. This categorisation shows the diverse applications of the concept and the strategies that they intend. Mincu (2012a) reflects these matches:

- Personalisation versus individualisation;
- Individualisation and socialisation;
- Individualisation = personalisation;
- Individualised instruction and personalised learning.

In her study, Mincu (2012b) finds other keywords, which frame units of study. One of them is the conception of personalisation as a universal approach or as a pedagogical strategy targeted for particular pupils (Mincu, 2012b). This perception refers to the inclusion of pupils with disabilities in the mainstream of the school and defines the paradigm of teaching in/for diversity. Other keywords found in the different studies are the result of the logical or coherent implementation of the different conceptualisations and the fulfilling of the needs of education in the current times. To underline the study of the concept is important to use such kind of categories to define the lines of research and the frame for clear argumentations.

Analysing the concept of personalised learning, it is still needed a background of its history and the evolution of the concept. To situate the beginning of the term, it is necessary to classify two more categories demarcated by Mincu (2012b): humanist and functionalist. Making a broad distinction, the humanistic perspective talks about a person-centred perspective, and the functionalist, a learner-centred one. Both perceptions offer changes in education, both focus the attention on the learners, and both concentrate in the fulfilment of their needs. Nevertheless, the differences arise from the key values that structure the diverse applications.

The child-centred or learner-centred pedagogy is simultaneously focused on each individual and in the process of learning. It suggests the shift between teacher-centred education, to the full awareness of the learner. Chocarro, González-Torres and Sobrino (2007) make a comparative description of these two pedagogic perspectives. While the learner is the subject who learns in both propositions, the concept of learning differs. In the teacher-centred context, learning is the acquisition of knowledge, attitudes and strategies by the learner. In the learner-centred pedagogy, learning is the internal construction of knowledge by the learner. Another important differentiation is the definition of learning process goals, strategies and contexts. In the first perspective, it is the school curriculum, which indicates the outlines, while in the second approach it is radically the learner (Chocarro et al., 2007). The last feature is the main category which leads to a conceptualisation of personalised learning because the centre is in the learner's voice and his or her capacity of decision above the process of

learning. Co-production, co-learning, learners' ownership of the learning process are concepts, which arise with the flourish of this approach. The knot that connects learner-centred and personalised learning bases on the importance given to the learner and his responsibility in the learning process. However, they are not synonyms because one precedes the other. Personalised learning appears because of the shift made by the learner-centred pedagogy.

Returning to the functionalist aspect, there should be remarked a difference within learner's voice and learner's choice. It could be the main distinction, and somehow, a fake shift from learner-centred to personalised learning. Emphasizing the learner's choice rather than voice, we find the broad scope of a modern conception of personalised learning as a product of marketisation of the school. The word choice refers to many aspects: learner as a consumer, school efficacy, user-centric education, modernisation, etc. (Hartley, 2008). These terms relate to a proposition, which concentrates on the learner's needs, however, in the aim to satisfy and create an atmosphere of learning *just for me, just by me*. In this perspective, there is no pedagogical theory and the goal is the development of schooling (Mincu, 2012b).

Another characteristic of functionalism is the pragmatic overview, which sees personalisation as an individualistic performance that tries to reach school targets, special needs groups. This way of personalisation appears to find heterogeneity teaching solutions and an inclusive view of education. **Personalised assessment, flexible curriculum and the use of ICT means are the main elements of this perspective.** This part of functionalism includes a pedagogical theory or strategy that includes different methods for personal assessment. In this case, we talk about functionalism from the use of the word as a perspective of functional; reminding what has a utilitarian purpose.

Humanist approach to personalised learning allows **to connect the personal world of the learner and the way it shapes the process of learning.** In the year 2017, UNESCO published a document entitled 'Personalised Learning' explaining the main features of this educational perspective:

'for an education to be meaningful, it needs to be personal: we cannot learn well if we do not see the relevance of what we are learning and how it applies to our personal situations'.

This outlook gives the idea to deep on a theory, which puts the centre in the person and its personal situation in the frame of learning processes. He or she, together with the teacher, with classmates, in a school environment, construct one's way of learning, being the owner of the process.

A humanist approach of personalisation of learning focuses on the idea of educating the whole person and the personal development. The learner has to develop cognitive abilities and concurrently, other dimensions of his personality. Therefore, the personal improvement leads him to better academic achievements.

This point of view shaped by a philosophical tradition mainly stands on the ideas of personalism. Personalism is the philosophical theory, which keynote is the person. The human person surpasses all the other objects of knowledge and nature beings. This theory affirms that the human being is creative, and it implies that his actions make him a unique self (Mounier, 1989).

Singularity is a basis for the personalised learning strategy because it helps to identify the singular needs and the potentials of each learner. The idea of education *one size fits for all*, changed with the child-centred pedagogy, and the focus on the learner improved the level of consideration to each pupil. Personalisation expects to bring into focus each person among a group, and then he or she is not any more *one among others* (Camps-Bansell, 2018). This proposition mainly recognises the uniqueness of individual persons and the development of their life. It signifies that there are not exactly equal persons and, consequently, the treatment with each one should be particular. The total actuality, the whole world of a person, should not be identified by rules, by common standards; willingly it has to be studied individually, considering each person.

The faculty to make decisions is a key concept in personalism. In the field of education, it refers to the personal development of the learners. Considering treating learner as a person, the authors affirm that he constructs his personality with his decisions and acts. Not shaped by the outside, but it arises from himself, and education awakes it (Peters, 1977; Mounier, 1989). Therefore, the goals of education do not address just knowledge, but furthermore, the needs to develop other dimensions of the personality as the affections, the will, the behaviour, and socialisation. Learning is not just a collection of practical knowledge, which is going to be useful in the practical world. Learning is seen as the way of development of the learner as a person who needs the tools to work and those tools are not only knowledge but also an educated, fulfilled personality.

Flexibility of curriculum: the shared points in different conceptualisations

Even though there are dichotomies within the different insights of personalisation, there are some repeated features which affects the elements of curriculum making it flexible enough to address the following challenges:

- Consideration of learner's needs and potentials;
- Learner's ownership of the learning process;
- Recognition of learner's pace;
- Assessment of a personal progress.

The individual attention to the learner is an essential characteristic of child-centred learning. Working in the classroom is necessary to observe the different ways of working, recognizing the diverse methods of learning. The awareness of

each pupil's needs helps them to feel understood, and to reach the academic achievements. The principal stands of recognition are observation and hearing the learner's voice: What catches his attention? Which environment does he need? What topics does he find interesting? These questions at one moment demarked the definition of child-centred education, though the difference is on using *they* (about the pupils) or *he-she* (about one pupil). The personalised learning pedagogy addresses these issues concerning one learner individually, instead of the whole group together as makes the child-centred approach.

Considering the voice of learners, curriculum development is a collaborative process between teachers and pupils. It is a dynamic creation attending the needs of students and their abilities for each subject.

The literature referred to personalised learning, frequently mentions the co-creation of knowledge as a core aspect of its pedagogy. The importance of co-creation bases on the fact that learners have the capability of decision making. As the learner can decide, he is responsible for his acts and can collaborate in the process of learning. Education is a process where two persons assume the task to learn and cooperate to achieve that goal (Carbajo-López, 2004). Collaboration requires engagement sense from the student and support from the teacher (Kaminskiene & Khetsuriani, 2019).

The feature of decision making, as is mentioned, implies responsibility, and it is what configures ownership and autonomy. Both mentioned characteristics presuppose the capacity to modify the circumstances around the learner as, his curriculum (Camps-Bansell, 2018).

The groups of schooling do not guarantee homogeneity. Indeed, it is a characteristic not found in the classrooms. Each pupil has one's learning strategies, modes of work and pace for solving different tasks. Regarding differences within the same age, related to skills, personal development, cognitive achievements, it is impossible to look forward to uniformity. Moreover, it is not desirable to think that teachers tend to standardise and allow stereotypes in education under the concept of *one size fits for all* (Bernardo et al., 2011). Therefore, the application of pedagogical methods respecting the different paces and learning strategies is the core of personalisation of education. Educational institutions should promote adaptability for each pupil in terms of dynamism and interactive learning (Bernardo et al., 2011) and to stimulate and reinforce personal improvement, it is necessary flexibility for the particular circumstances of each learner.

One of the key features of personalized learning is the flexibility of various teaching / learning strategies that allow the implementation of a personalised learning plan. It also encourages learners to take responsibility for and sustain their learning. The scientific literature suggests that being able to design and implement a personal plan has a positive effect on learner motivation (Nethoc,

2017). Learners are motivated to succeed in their learning - they face their own choices and decisions. The school and the teacher do not determine the content and pace of learning, so the learner is expected to be responsible for managing learning - the more the learner demonstrates their motivation and the self-regulation it exerts, the more they are given learning autonomy (Campbell et al., 2007).

In personalised learning assessment is organised when the teacher and the learner formulate clear criteria detailing the outcomes and demonstrating the quality of the assignment (Zmuda, Curtis, & Ullman, 2015). The learner should understand these criteria so that he / she can clearly organise the learning. However, developing a variety of assessment criteria descriptions based on subject-specific outcomes and interdisciplinary key competences to assess each student's personal learning experience poses a real challenge for the teacher. Such descriptors are necessary to ensure that the assessment is informative and reveals personal learning in the area of subject-specific outcomes and, if included, of interdisciplinary key competences. It is important that all learners have a continuous record of the learning process in a form of their choice, such as activity diaries, feedback from peers and similar. The assessment evidences allow learners to see progress in implementing the development plan. Progress is one of the most important elements of assessment (Zmuda, Curtis, & Ullman, 2015). The practice of personalised learning gives priority to formative assessment that is multifaceted and opens up the whole process of personal learning (Zmuda, Curtis, & Ullman, 2015). However, it is also advisable to apply summative assessment at the end (Karmeshu, Raman, & Nedungadi, 2012) in order to benchmark learning outcomes defined in the curriculum.

Conclusions

Different researchers link personalised learning with individualised learning, while others, on the contrary, try to mark a borderline between them. Two approaches, the humanistic and the functionalist, both focus on the learners and both concentrate on fulfilling their needs. However, they also have distinct differences. In humanistic perspective personalised learning it is the learner who together with the teacher, with classmates construct personal way of learning. Personalisation of learning focuses on the idea of educating the whole person and the personal development. The learner has to develop cognitive abilities and concurrently, other dimensions of his personality. In functionalist approach, personalised learning is associated with co-production, co-learning, learners' ownership of the learning process. Personalised assessment, flexible curriculum and the use of ICT means are the main elements of this perspective.

Notwithstanding different approaches, they also share common characteristics, which were defined as follow: consideration of learner's needs and potentials; learner's ownership of the learning process; recognition of learner's pace; assessment of personal progress. These attributes change practices in implementation of the curriculum and thus, contribute to its flexibility, which allows fulfilling diverse learning needs.

References

- Bernardo, J., Javaloyes, J.J., Calderero, J.F., Muñoz, M.M., & Castellanos, A. (2011). *Educación personalizada: principios, técnicas y recursos*. Madrid: Síntesis.
- Campbell, R.J., Robinson, W., Neelands, J., Hewston, R., & Mazzoli, L. (2010). Personalised learning: ambiguities in theory and practice. *British Journal of Educational Studies*, 55, 135-154.
- Camps-Bansell, J. (2018). *Educación personalizada y diferenciada*. Madrid: Digital Reasons.
- López, F.C. (2004). La comunicación entre el profesor-tutor y los alumnos. Reflexiones sobre la tutoría en los centros estatales españoles. *ESE: Estudios Sobre Educación*, 7, 129-142.
- Chocarro, E., González-Torres, M., & Sobrino, Á. (2007). Nuevas orientaciones en la formación del profesorado para una enseñanza centrada en la promoción del aprendizaje autorregulado de los alumnos. *Estudios sobre Educación*, 12. DOI:10.17770/sie2019vol2.3708
- Hartley, D. (2008). Education, markets and the pedagogy of personalisation. *British Journal of Educational Studies*, 56(4), 365-381.
- International Bureau of Education. Training Tools for Curriculum Development (2017). *Training Tools for Curriculum Development: Personalized Learning*. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000250057/PDF/250057eng.pdf.multi.page=1andzoom=auto,-16,842>.
- Kaminskienė, L., & Khetsuriani, N. (2019). Co-creation of learning as an engaging practice. *Society, Integration, Education: proceedings of the international scientific conference*, 2, 191-199. Rēzekne: Rēzeknes Tehnoloģiju akadēmija.
- Karmeshu, Raman, R. & Nedungadi, P. (2012). Modelling diffusion of a personalized learning framework. *Education Tech Research Dew*, 60, 585-600.
- Mincu, M.E. (2012a). Mapping meanings of personalisation. In *Personalisation of Education in Contexts*. Brill Sense. DOI:10.2753/EUE1056-4934410103
- Mincu, M.E. (2012b). Editorial Introduction. In *Personalisation of Education in Contexts: Policy critique and theories of personal improvement*. Rotterdam: Sense Publishers. DOI:10.2753/EUE1056-4934410103
- Mounier, E. (1989). *Personalism*. University of Notre Dame Press.
- Netcoh, S. (2017). Balancing freedom and limitations: A case study of choice provision in a personalized learning class. *Teaching and Teacher Education*, 66, 383-392. Retrieved from <https://www.sciencedirect-com.ezproxy.vdu.lt:2443/science/article/pii/S0742051X16302748>
- Peters, R.S. (1977). *Education and the Education of Teachers*. Routledge and Kegan Paul.
- Watkins, C. (2012). Personalisation and the Classroom Context. In *Personalisation of Education in Contexts* (pp.1-18). Rotterdam: Sense Publishers.
- Zmuda, A., Curtis, G., & Ullman, D. (2015). Learning personalized. *The Evolution of the Contemporary Classroom*. San Francisco: Jossey-Bass.

LATVIJAS SKOLĒNU KOMPETENCE UN IESAISTĪŠANĀS LASĪŠANĀ PISA 2018 REZULTĀTU SKATĪJUMĀ

Reading Competence and Engagement of Latvian Students in the View of OECD PISA 2018 Results

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Abstract. *Students' reading competence determines the achievements of learners in all areas of school education as well as in their further education, professional activity and life. The results of the OECD Program for International Student Assessment - OECD PISA 2018 confirm the need to improve reading competence in Latvia (OECD, 2019). The aim of the study is to analyze the achievement of Latvia's fifteen-year-old students in OECD PISA 2018 and the previous international program cycles in relation to students' reading engagement and its changes. Reading engagement significantly influences not only students' reading competence but are in themselves one of the goals of modern education (Guthrie & Wigfield, 2000; Guthrie, Klauda, & Ho, 2013). The study will use the OECD PISA international databases for statistical analysis the data of Latvia and other countries for comparisons with OECD averages, and especially with the attitudes and achievements of Estonian and Finnish students. The analysis of the first results shows that the promotion of reading engagement among Latvian students, especially boys, is one of the factors for increasing reading competence.*

Keywords: *engagement in reading, OECD PISA 2018, reading competence.*

Ievads

Introduction

Skolēna sasniegtais lasīšanas kompetences līmenis nosaka viņa sasniegumus visās skolā apgūstamajās jomās un arī turpmākajā izglītībā, profesionālajā darbībā un dzīvē. Savukārt, skolēna lasīšanas kompetence attīstās ciešā savstarpējā ietekmē ar viņa iesaistīšanos lasīšanā. Pētījuma mērķis ir analizēt jaunākos datus par skolēnu iesaistīšanos lasīšanā (reading engagement), tās izmaiņu tendences un lasīšanas kompetences un iesaistīšanās lasīšanā savstarpējo ietekmi, izmantojot

Latvijas, Igaunijas un Somijas piecpadsmitgadīgo skolēnu rezultātus OECD PISA 2018 (Organisation of Economic Co-operation and Development Programme for International Student Assessment 2018) un OECD PISA 2009 ciklā. Pētījuma jautājumi: 1) Kāda ir skolēnu iesaistīšanās lasīšanā atbilstoši jaunākajiem PISA 2018 datiem un kādas ir tās izmaiņu tendences salīdzinājumā ar PISA 2009 rezultātiem? 2) Kāda ir skolēnu lasīšanas kompetences un iesaistīšanās lasīšanā savstarpējā ietekme PISA 2018 un PISA 2009 pētījumos? Jaunākā pētījuma – PISA 2018 salīdzinājumam izvēlēts PISA 2009 cikls, jo arī tajā galvenā satura joma bija lasīšana. Igaunija un Somija salīdzinājumam izvēlētas kā valstis ar ļoti augstiem skolēnu sasniegumiem OECD PISA programmā, kuras abas ir mūsu reģiona valstis. Igaunija ir Latvijas kaimiņvalsts, ar kuru mūs saista būtībā kopīga izglītības sistēma zināmā vēstures posmā līdz mūsu valstu neatkarības atgūšanai 1991.gadā. Pašreiz visu trīs valstu un izglītības sistēmu attīstība norit ES un OECD organizāciju ietvaros.

Pētījumā izmantotās metodes: literatūras analīze, skolēnu sasniegumu PISA 2019 un PISA 2009 lasīšanas testā un viņu aptaujas anketās izteikto viedokļu par savu iesaistīšanos lasīšanā analīze dažādos aspektos, izmantojot aprakstošās statistikas metodes.

Pētījuma teorētiskais pamatojums un rezultāti *Theoretical background and results of the research*

Terminu “lasīšanas kompetence” šī raksta autori lieto OECD PISA programmā definētajā nozīmē – tā ir tekstu izpratne, izmantošana un izvērtēšana, lai sasniegtu savus mērķus, pilnveidotu savas zināšanas un potenciālu un piedalītos sabiedrības dzīvē (OECD, 2009; OECD, 2017). OECD PISA publikācijās angļu valodā joprojām tiek lietots termins “reading literacy”, lai gan vairākos darbos ir analizēta un pamatota nepieciešamība pārejai uz terminu “reading competence” (“konverģence uz terminu kompetence” – raksta D.S. Rychen un L.H. Salganik (Rychen & Salganik, 2003; OECD, 2018). OECD PISA īstenotāji Latvijā jau kopš OECD PISA pirmā cikla – PISA 2000 pamatoja un sāka lietot terminu “lasīšanas kompetence” (līdztekus ar terminiem “matemātikas kompetence” un “dabaszinātņu kompetence”) (Kangro & Geske, 2001; Geske, Grīnfelds, Kangro, Kiseļova, & Mihno, 2015). Savukārt, D. Namsone un Z. Oliņa raksta, ka “pieejamajā literatūrā latviešu valodā termins *reading literacy* (angl.) tiek tulkots kā lasītprasme, lasīšanas kompetence vai tekstpratība, ko var uzskatīt par sinonīmiem” (Namsone & Oliņa, 2018, 66.lpp.). Lasīšanas kompetences mērīšanai OECD PISA programmā tiek izstrādāti un izmantoti testi, kuros skolēnu sasniegumi tiek izteikti punktos attiecīgajā skalā. Viena no OECD PISA programmas pamatīpašībām ir rezultātu salīdzināmība atkārtotos ciklos, kas tiek nodrošināta ar zināmas daļas testa uzdevumu

atkārtošanu un attiecīgu datu apstrādi (Geske, Grīnfelds, Kangro, Kiseļova, & Mihno, 2015).

OECD PISA pētījumu programmā kā viens no būtiskiem ar skolēnu lasīšanas kompetenci saistītiem faktoriem tiek pētīta viņu iesaistīšanās lasīšanā (engagement in reading), kura, savukārt, ietver gan ar lasīšanas motivācijas elementiem, gan ar lasīšanas paradumiem saistītus aspektus (OECD, 2009; Guthrie, Klauda, & Ho, 2013). Šāda pieeja ir gan teorētiski pamatota (Ryan & Deci, 2000), gan balstās uz PISA 2000, PISA 2009 un PISA 2018 ietvaros veiktajiem mērījumiem, kuri liecina par lasīšanas kompetences un iesaistīšanās lasīšanā relatīvi ciešo savstarpējo ietekmi katrā no pētījuma dalībvalstīm. PISA 2018 teorētiskajā ietvarstruktūrā, savukārt, ir definēts, ka iesaistīšanās lasīšanā OECD PISA kontekstā nozīmē motivāciju lasīt un tā sastāv no emocionālajām un uzvedības pazīmēm, kas ietver interesi par lasīšanu, kontroles sajūtu (iespēju izvēlēties to, ko lasa), iesaistīšanos lasīšanas sociālajā dimensijā un daudzveidīgu un biežu lasīšanas praksi (OECD, 2017). OECD PISA programmas ietvaros iesaistīšanās lasīšanā tiek mērīta ar aptaujas jautājumiem un to grupām par skolēnu interesi lasīt savam priekam vai pildot skolas uzdevumus, par to, cik ilgi skolēni lasa savam priekam, ko viņi lasa, vai runā par izlasīto ar citiem cilvēkiem un tml. Turpmāk šajā rakstā veiktajā OECD PISA pētījumu datu analīzē un to interpretācijā tiks lietota OECD pieeja attiecībā uz skolēnu iesaistīšanos lasīšanā un skolēnu lasīšanas kompetences jēdzieniem, kas, protams, neizslēdz nedaudz atšķirīgu pieeju un terminoloģijas nianse zemāk aplūkotojos citos teorētiskajos avotos.

Skolēnu iesaistīšanās lasīšanā un motivācija lasīt ir komplekss jautājums, “izglītības fenomens” (Guthrie & Coddington, 2009), jo mūsdienu izglītībā un kultūrā lasīšanai ir nozīmīga loma un “pēdējos gados aizvien vairāk tiek novērtēta lasītprasmes loma sabiedrības ekonomiskajā attīstībā” (Lazdiņa, 2019); lasīti tiek žurnāli un avīzes, visdažādākie dokumenti un grāmatas, ne tikai daiļliteratūra, e-grāmatas, SMS, e-pasti, čati, blogi, tvīti u.c. Vairāki pētnieki lasīšanas kompetenci tieši saista ar cilvēku ienākumiem un spēju strādāt noteiktās profesijās (Kirsch, Braun, Yamamoto, & Sum, 2007), lasīšanas kompetence daudzējādā veidā ietekmē skolēna sekmes ne tikai dzimtajā valodā un literatūrā, bet arī svešvalodās, ģeogrāfijā, ekonomikā, vēsturē, matemātikā, bioloģijā, fizikā, ķīmijā un daudzos citos priekšmetos.

Lasīšanas motivāciju var definēt kā varbūtību iesaistīties lasīšanā vai izvēlēties lasīt. Iesaistīšanās perspektīva ir saistīta ar motivāciju, un tai ir spēcīga ietekme uz praksi (Gambrell, 2011b). Skolēnu motivācija lasīt un skolēnu iesaistīšanās lasīšanā ir daudzšķautnaina, jo skolēni kā indivīdi ir dažādi un viņu intereses ir ļoti daudzveidīgas, viņi var vēlēties lasīt dzeju, dziesmu tekstus, vēsturiskus pētījumus un tekstus, biogrāfijas, stāstus, romānus, zinātniskās fantastikas sacerējumus ne tikai dzimtajā, bet arī svešvalodās. Tā kā plašs interešu

un zināšanu spektrs ir saistīts ar lasīšanu, varam pieņemt, ka motivācija ir neatņemama lasīšanas interešu veicināšanas sastāvdaļa (Guthrie & Coddington, 2009) un vienam indivīdam var būt vairākas motivācijas lasīt kādu literāro darbu, lietišķo tekstu vai avotu. Lasīšanas motivācija ir indivīda personīgie mērķi, vērtības un uzskati attiecībā uz lasīšanas tēmām, procesiem un rezultātiem (Guthrie & Wigfield's, 2000). Skolēna motivācija lasīt ir cieši saistīta ar viņa sasniegumiem (Wang & Guthrie, 2004), savukārt panākumus guvušie skolēni daudz labprātāk un aktīvāk iesaistās lasīšanā, strādā vairāk, neatlaidīgāk pārvar grūtības un sasniedz augstāku lasītprasmes līmeni.

Lai veicinātu skolēnus vairāk iesaistīties lasīšanā, pētnieki uzsver, ka skolēnam jānodod iespēja izvēlēties, ko lasīt, kā lasīt un kādam mērķim lasīt. Ja skolēni tekstu novērtē kā ļoti interesantu, tad viņi to vērtē pozitīvāk un precīzāk uztver lielāku teksta daļu nekā tad, ja teksts tiek uzskatīts par mazāk interesantu, pat tad, ja tiek pārbaudītas iepriekšējās zināšanas. Savukārt dažādu klašu skolēni izteikušies, ka ir maz skolas mācību grāmatu, pat skolas bibliotēkas grāmatu, kuras viņi izvēlētos lasīt pēc pašu iniciatīvas (Guthrie & Coddington, 2009).

Skolēnu iesaistīšanās lasīšanā nozīmīga loma ir skolotājiem, skolēnu vecākiem un klases biedriem. Starptautiskā lasītprasmes asociācija – International Literacy Association (ILS) apkopo jaunāko pētījumu rezultātus par lasītprasmi un publicē zinātnieku izstrādātos ieteikumus lasītprasmes veicināšanai, piemēram, skolēnu iesaistīšanās lasīšanā ir ievērojama augstāka, ja lasāmie teksti un ar tiem saistītie uzdevumi ir saistīti ar viņu pašu dzīvi; skolēniem var dot nelielus uzdevumus, piemēram, rakstīt 3 minūšu "lasīšanas dienasgrāmatu", kurā viņi reflektē, kā izlasītais ir saistīts ar viņu dzīvi. Skolēniem ir daudz augstāka motivācija lasīt, ja viņi paši var izvēlēties, ko un kā lasīt, tai skaitā "reālās dzīves" dokumentus, tekstus viedierīcēs utt. (Gambrell, 2011b). Lai sasniegtu labus/augstus rezultātus lasīšanā, nozīmīgs ir laiks, ko skolēni pavada lasot – jo vairāk un ilgāk skolēni lasa, jo augstāki ir viņu sasniegumi lasītprasēm, teksta detalizētā izpratnē, teksta interpretācijā, teksta pārnestās un simboliskās nozīmes izpratnē. Skolēniem ir arī ļoti svarīgi, ka viņi par izlasīto var apspriesties ar saviem vienaudžiem, diskutēt par problēmām, kuras skartas grāmatās, izteikt savu viedokli, kā arī savas grāmatas aizlienēt draugiem un pēc tam runāt par izlasīto. Tāpat nozīmīgi ir tas, ka skolēni vēlas un izvēlas lasīt sarežģītas grāmatas un ir pateicīgi skolotājam par sniegto palīdzību šādu tekstu "atšifrēšanā"; viņi drīzāk neizvēlas grāmatas, kuras klases grāmatplauktā ir marķētas ar atzīmi "viegli lasāmas". Skolēniem nozīmīgas ir skolotāja uzslavas un nelieli apbalvojumi par veiksmīgi izpildītu uzdevumu, kas saistīts ar sarežģītas grāmatas lasīšanu (Gambrell, 2011b). "Ja mēs vēlamies, lai skolēni novērtētu lasīšanu un akadēmisko vidi, mums jābūt pietiekami gudriem, lai veidotu tādu mācību vidi, kurā tiktu nodota vēsts, ka lasīšana un mācīšanās ir vislabākā balva (Gambrell, 2011a).

PISA pētījumu dalībnieki ir 15 gadus veci skolēni (PISA 2018 tie ir 2002. gadā dzimuši skolēni). PISA 2018 statistiskajā izlasē no Latvijas piedalījās 5303 skolēni, no Igaunijas - 5316 skolēni un no Somijas – 5649 skolēni (OECD, 2019a). PISA 2018 un PISA 2009 pamatpētījuma dati tika savākti attiecīgi 2018. gadā un 2009. gadā.

Latvijas, Igaunijas un Somijas skolēnu vidējie sasniegumi PISA 2018 un PISA 2009 pētījumā attēloti 1. tabulā (OECD, 2019a). Igaunijas sasniegumi OECD PISA programmā lasīšanas un citās jomās pieaug, Somijas sasniegumi samazinās, taču abu šo valstu vidējo sasniegumu līmenis ir ievērojami virs OECD valstu vidējā līmeņa. Igaunijas skolēnu lasīšanas kompetence PISA 2018 pētījumā jau ir labākā ES un OECD valstu vidū. Latvijas skolēnu sasniegumi ir OECD valstu vidējā līmenī vai nedaudz zemāk.

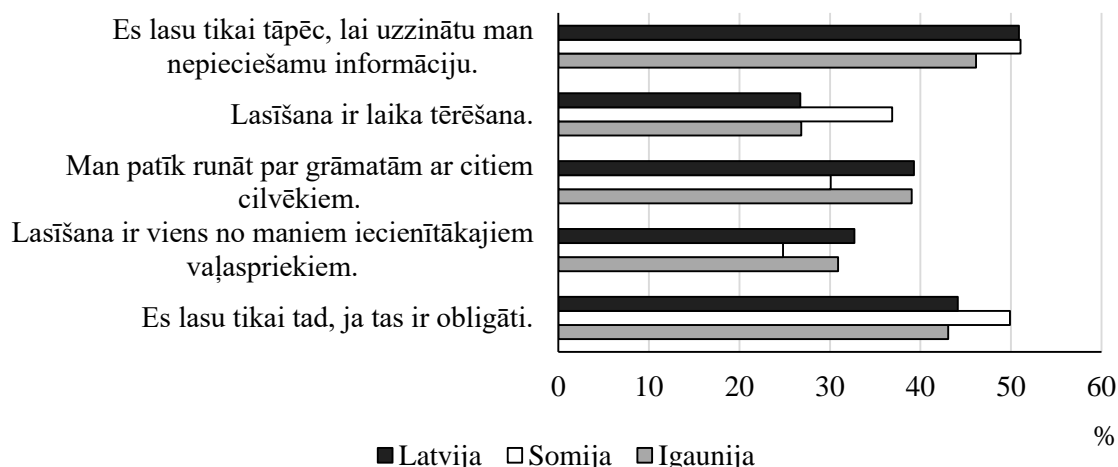
*1.tabula. Skolēnu vidējie sasniegumi lasīšanā (OECD, 2019a)
Table 1 Students' average reading achievement (OECD, 2019a)*

Valsts*	PISA 2009	PISA 2018
Igaunija	501	523
Somija	536	520
OECD valstu vidējie sasniegumi	491	487
Latvija	484	479

*Valstis tabulā sakārtotas dilstošā secībā pēcskolēnu sasniegumiem PISA 2018 pētījumā

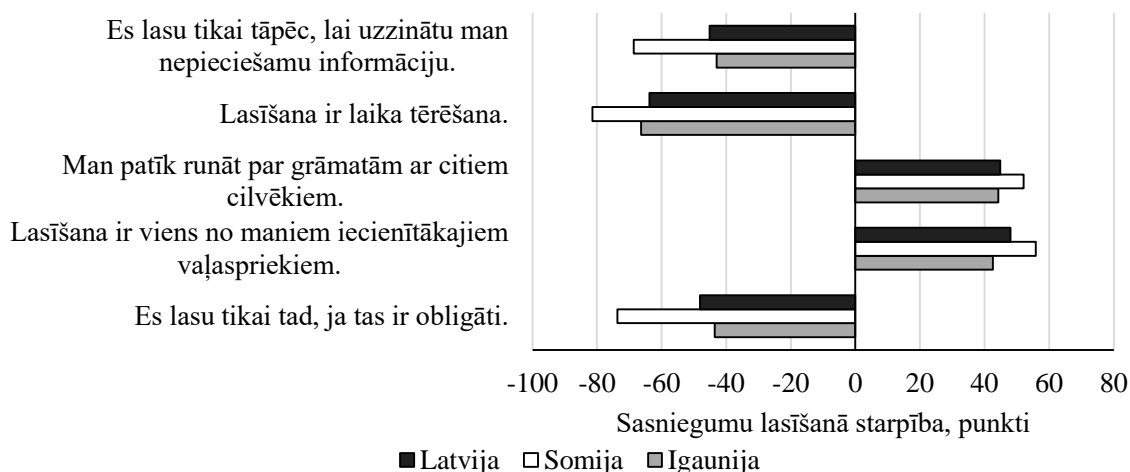
Piecpadsmit gadus veco skolēnu iesaistīšanos lasīšanā labi parāda PISA 2018 aptaujas jautājumu grupa, atbildes uz kuru parādītas 1. attēlā. Pozitīvas atbildes uz aptaujas jautājumu “Lasīšana ir viens no maniem iecienītākajiem vaļaspriekiem” sniedz tikai viena ceturtdaļa skolēnu Somijā (25%) un aptuveni trešdaļa skolēnu Latvijā (33%) un Igaunijā (31%). Turpretī pat 37% skolēnu Somijā un 27% skolēnu Latvijā un Igaunijā uzskata, ka lasīšana ir laika tērēšana. Kopumā šī jautājumu grupa parāda, ka Somijas skolēniem ir negatīvāks viedoklis par iesaistīšanos lasīšanā savam priekam nekā Latvijas un Igaunijas skolēniem, kuru attieksmes pret lasīšanu savam priekam ir aptuveni vienādas.

Salīdzinot 1. attēlā redzamās skolēnu attieksmes PISA 2018 pētījumā ar PISA 2009 rezultātiem, iegūstam, ka Somijā ir ievērojami samazinājies to skolēnu relatīvais skaits, kuriem lasīšana ir vaļasprieks (no 34% līdz 25%), toties pieaudzis to skolēnu skaits, kuri lasa kad tas ir obligāti (no 34% līdz 50%) vai ir nepieciešama informācija (no 36% līdz 51%). Iespējams, Somijas vidējo sasniegumu lasīšanā samazinājums PISA 2018, salīdzinot ar PISA 2009, ir saistīts ar šo ievērojamo motivācijas kritumu. Latvijas un Igaunijas skolēniem šīs attieksmes tajā pašā periodā – tātad aptuveni pēdējo 10 gadu laikā ir mainījušās relatīvi nedaudz. Vidēji OECD valstīs skolēnu skaits, kuri lasa tikai tad, ja tas ir obligāti, ir pieaudzis no 40% 2009. gadā līdz 49% 2018.gadā.



1.attēls. *Skolēnu iesaistīšanās lasīšanā savam priekam* (atbilžu “pilnīgi piekrītu” un “piekrītu” skaits procentos PISA 2018 Latvijā, Somijā un Igaunijā)
 Figure 1 *Students’ engagement in reading for fun* (percentage of answers “strongly agree” and “agree” in PISA 2018 in Latvia, Finland and Estonia)

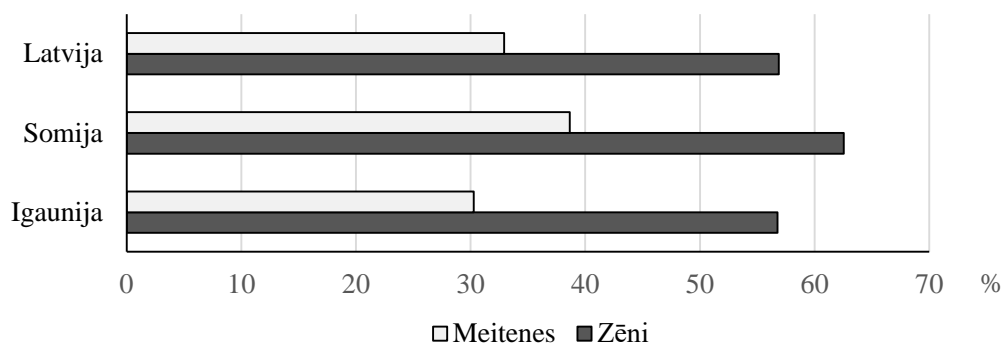
Skolēniem, kuriem lasīšana ir viens no iecienītākajiem vaļaspriekiem un kuriem patīk runāt par grāmatām ar citiem cilvēkiem sasniegumi PISA 2018 testā ir daudz augstāki (par 43 līdz 56 punktiem, standartnovirzes sasniegumu datiem Latvijā, Igaunijā un Somijā attiecīgi ir 90, 93 un 100 punkti), salīdzinot ar viņu vienaudžu, kuri nepiekrīt šiem apgalvojumiem, sasniegumiem (2. att.).



2.attēls. *Sasniegumu lasīšanā starpība starp tiem skolēniem, kuri atbildējuši piekrītoši (“pilnīgi piekrītu” un “piekrītu”) un noliedzoši (“pilnīgi nepiekrītu” un “nepiekrītu”) uz attēlā redzamajiem jautājumiem* (PISA 2018 Latvijā, Somijā un Igaunijā)
 Figure 2 *The difference in reading achievement between those students who answered positive (“strongly agree” and “agree”) and negative (“strongly disagree” and “disagree”) to the questions shown in the figure* (PISA 2018 in Latvia, Finland and Estonia)

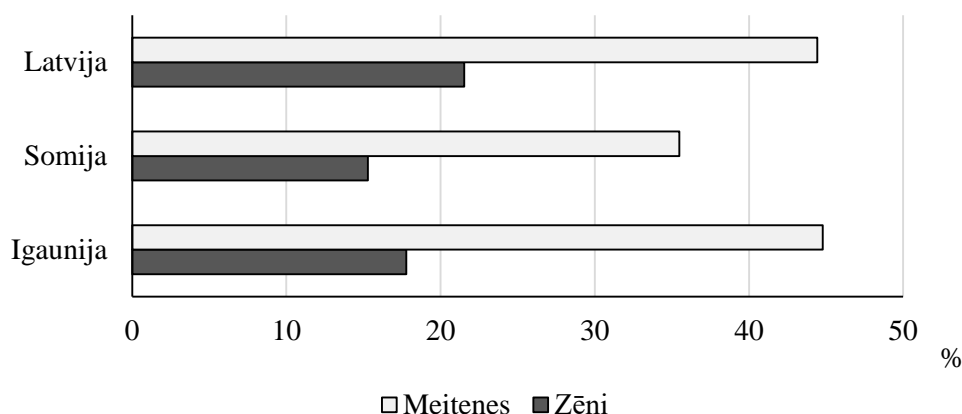
Turpretī, ja skolēni lasa tikai tad, kad tas ir obligāti, vai lai uzzinātu nepieciešamo informāciju un ja viņi uzskata, ka lasīšana ir laika tērēšana, tad viņu sasniegumi ir par 43-81 punktiem zemāki. Kā redzams 2. attēlā, viskrasāk šīs atšķirības ietekmē Somijas skolēnu sasniegumus, Latvijā un Igaunijā sasniegumu atšķirības ir nedaudz mazākas un praktiski vienādas. Tātad lasīšana savam priekam ir ļoti cieši pozitīvi saistīta ar sasniegumiem PISA lasīšanas testā, savukārt, lasīšana tikai it kā “piespiedu kārtā” ir saistīta ar ievērojami zemākiem sasniegumiem. Protams, šeit nevaram runāt par tiešu cēloņsakarību – iesaistīšanās lasīšanā veicina sasniegumus mācībās, savukārt, augstāki sasniegumi paaugstina iesaistīšanos lasīšanā. Salīdzinot šajā aspektā PISA 2018 un PISA 2009 rezultātus, varam secināt, ka iesaistīšanās lasīšanā saistība ar skolēnu sasniegumiem lasīšanas testā būtībā nemaz nav mainījies un tās skaitliskās vērtības ir aptuveni vienādas 2009. gadā un 2018. gadā katrā no aplūkotajām trim valstīm (2.att.).

Kā liecina OECD PISA un arī IEA PIRLS (International Association for Evaluation of Educational Achievement, Progress in International Reading Literacy Study) starptautiskie pētījumi, meiteņu lasīšanas sasniegumi ir ievērojami augstāki nekā zēniem gan sākumskolas, gan pamatskolas izglītības pakāpēs visās pētījumu dalībvalstīs (OECD, 2019b; OECD, 2010; Mullis, Martin, Foy, & Hooper, 2017). Piemēram, PISA 2018 pētījumā lasīšanas sasniegumos meitenes pārspēj zēnus par 52 punktiem Somijā, par 33 punktiem Latvijā un par 31 punktu – Igaunijā. PISA 2018 pētījuma rezultāti parāda (3.att. un 4.att.), ka meitenes daudz vairāk vēlas lasīt savam priekam, savukārt, zēni vairāk lasa tikai tad, kad tas ir obligāti. Ievērojot 2. attēlā parādīto sakarību, ir saprotams, ka daudz augstāka vēlme lasīt savam priekam lielā mērā nosaka arī meiteņu augstākus sasniegumus lasīšanas testā salīdzinājumā ar zēniem.



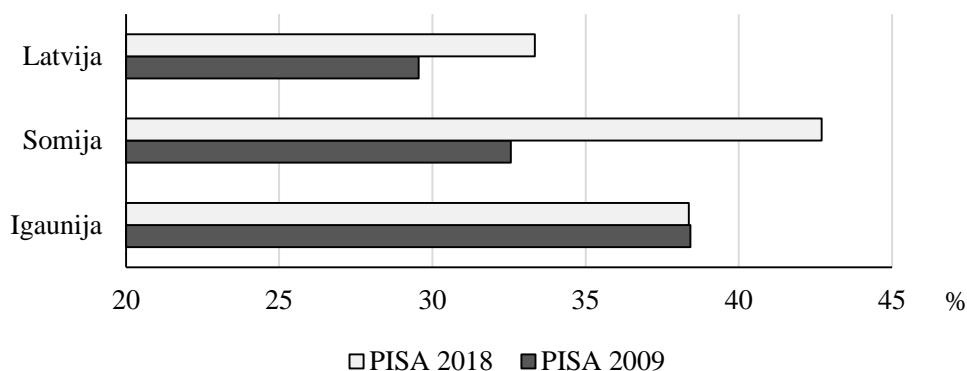
3.attēls. Meiteņu un zēnu relatīvais skaits, kuri piekrīt “Es lasu tikai tad, ja tas ir obligāti” (PISA 2018 Latvijā, Somijā un Igaunijā)

Figure 3 Relative number of girls and boys who agree to "I only read if I have to" (PISA 2018 in Latvia, Finland and Estonia)



4.attēls. Meiteņu un zēnu relatīvais skaits, kuri piekrīt apgalvojumam “Lasīšana ir viens no maniem iecienītākajiem vaļaspriekiem” (PISA 2018 Latvijā, Somijā un Igaunijā)
 Figure 4 The relative number of girls and boys who agree that "Reading is one of my favorite hobbies" (PISA 2018 in Latvia, Finland and Estonia)

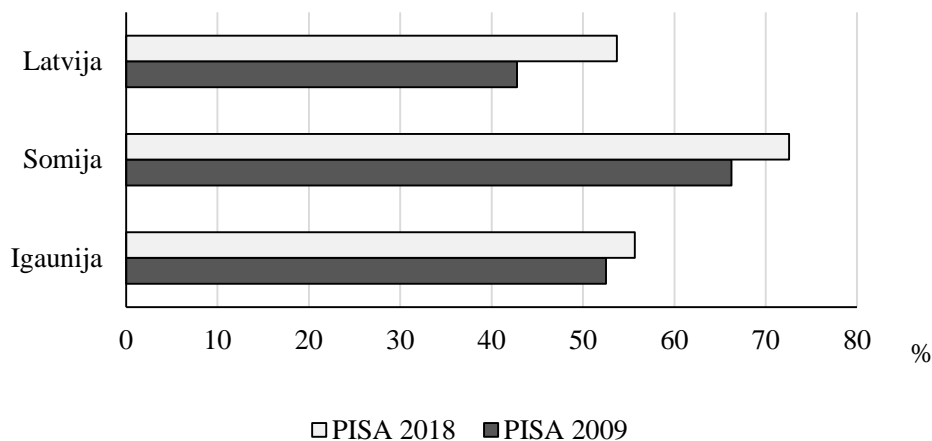
Jautājumu grupā “Aptuveni cik ilgi tu parasti lasi sava prieka pēc?” (ņemot vērā visāda veida lasīšanu) relatīvi liels skaits skolēnu izvēlas atbildi “Es nelasu sava prieka pēc” (5.att.). Pie kam šis skaits ievērojami pieaug Somijā – no 33% 2009. gadā līdz 43% 2018. gadā, nedaudz – arī Latvijā (no 30% uz 33%) un tas paliek nemainīgi augsts Igaunijā – 38% (5.att.).



5.attēls. Skolēnu relatīvais skaits, kuri piekrīt apgalvojumam “Es nelasu sava prieka pēc” (PISA 2009 un PISA 2018)
 Figure 5 Relative number of students who agree with the statement "I do not read for fun" (PISA 2009 and PISA 2018)

Sasniegumi PISA testā ir daudz augstāki skolēniem, kuri lasa sava prieka pēc 30 minūtes dienā un vairāk, salīdzinājumā ar skolēniem, kuri nemaz nelasa sava prieka pēc (6.att.). Skolēnu, kuri lasa sava prieka pēc, pārkums lasīšanas testā ir

lielāks PISA 2018 pētījumā, salīdzinot ar PISA 2009, un Somijas gadījumā tas sasniedz pat 73 punktus (6.att.).



6.attēls. Sasniegumu starpība punktos PISA lasīšanas testā skolēniem, kuri lasa 30 minūtes dienā un vairāk un to skolēnu sasniegumiem, kuri nemaz nelasa sava prieka pēc (PISA 2009 un PISA 2018)

Figure 6 Difference in PISA reading scores between students reading 30 minutes per day and more and students not reading for fun at all (PISA 2009 and PISA 2018)

Būtiski atzīmēt, ka pozitīva savstarpēja ietekme starp iesaistīšanos lasīšanā un sasniegumiem lasīšanā ir vērojama praktiski katrā atsevišķā PISA pētījuma dalībvalstī (OECD, 2010; Geske, Grīnfelds, Kangro, & Kiseļova, 2010), tātad gan valstīs ar augstiem, gan zemiem skolēnu vidējiem sasniegumiem, taču nav vērojama korelācija starp iesaistīšanos lasīšanā un vidējiem sasniegumiem starpvalstu līmenī. Tātad tikai iesaistīšanās lasīšanā faktors vien vēl negarantē augstu skolēnu vidējo sasniegumu līmeni starpvalstu salīdzinājumā.

PISA 2018 un PISA 2009 rezultātu salīdzinājums parāda arī skolēnu lasīšanas paradumu līdzīgas izmaiņas gan šajā darbā analizētajās valstīs, gan OECD vidēji. Tā, piemēram, Latvijā skolēnu vidū ir samazinājusies žurnālu, laikrakstu un e-pastu lasīšana, bet pieaugusi “čatošana” tiešsaistē, savukārt, nemainīga palikusi ziņu lasīšana (84%) un praktiskas informācijas meklēšana (80%) tiešsaistē un arī daiļliteratūras (romānu, noveļu, stāstu) lasīšana (30%).

Secinājumi Conclusions

1. Rakstā aplūkoti literatūras avoti un OECD PISA pētījuma cikli parāda, ka skolēnu iesaistīšanās lasīšanā ir komplekss jautājums, kura nozīme mūsdienu izglītībā, kultūrā un galu galā arī valstu ekonomiskajā attīstībā ir ļoti liela, jo

- tā ir saistīta ne tikai ar skolēnu sasniegumiem mācībās, bet arī ar viņu spēju dzīves gaitā sekmīgi strādāt noteiktās profesijās un viņu ienākumiem. Tāpēc lasīšanas kompetences un iesaistīšanās lasīšanā sekmēšana nepārtraukti ir arī pētnieku un skolotāju uzmanības lokā un tām ir veltīti daudzi zinātniski darbi un ikdienas pedagoģiskais darbs.
2. OECD PISA 2018 pētījuma jaunākie rezultāti Latvijā, Igaunijā un Somijā pārlicinoši parāda, ka ievērojami augstāka lasīšanas kompetence (t.i. sasniegumi PISA 2018 lasīšanas testā) ir tiem skolēniem, kuri ir vairāk iesaistījušies lasīšanā (lasa savam priekam, lasa vairāk u.c.), salīdzinājumā ar skolēniem, kuri lasa tikai tad, ja tas ir obligāti, un uzskata, ka lasīšana ir laika tērēšana. Minētās sakarības ir līdzīgas PISA 2009 pētījumā konstatētajām.
 3. Meiteņu iesaistīšanās lasīšanā ir ievērojami augstāka nekā zēniem un tā lielā mērā ir saistīta ar meiteņu augstāku kompetenci lasīšanā.
 4. Skolēnu, it sevišķi zēnu, iesaistīšanās lasīšanā var būt viens no izglītības kvalitātes un tieši lasīšanas kompetences paaugstināšanas faktoriem.
 5. Pēdējo 10 gadu laikā skolēnu iesaistīšanās lasīšanā ir ievērojami samazinājusies Somijā, ar ko, iespējams, daļēji ir saistīta lasīšanas vidējo sasniegumu samazināšanās Somijā. Toties Latvijā un Igaunijā šīs skolēnu attieksmes attiecībā uz lasīšanu ir savstarpēji visai līdzīgas un tajās nav būtisku izmaiņu 10 gadu laikā, kas nosaka nepieciešamību turpināt pētījumus par vēl citu faktoru ietekmi uz lasīšanas kompetences vidējo līmeni un izmaiņu tendencēm Latvijā, Igaunijā un Somijā.

Summary

The paper analyses students' reading engagement and its connection with their reading competence using the literature sources and the results of 15-years old students of Latvia, Estonia and Finland in OECD PISA 2018 and OECD PISA 2009 reading test and their opinions about their engagement in reading. The present study is based on the comparative analysis of the cognitive data and students' survey data of PISA 2018 and PISA 2009, using the OECD PISA international data bases.

Estonia and Finland have been chosen for the comparison as countries with very high students' achievement in the OECD PISA programme, both as countries of our region which, like Latvia, are also EU and the OECD countries. Estonia is also Latvia's neighbouring country with which we are connected actually through a common education system in a certain stage of history until regaining the independence of our countries in 1991.

Key conclusions gained from the study:

1. Students' reading engagement is a complex issue the importance of which in today's education, culture and in the end also in the economic development of countries is very huge because it is connected not only with students' achievement in learning but also with their ability to work successfully all through their life in concrete professions and their income. Therefore the development of the reading engagement and the reading competence has continuously been in the attention of

- researchers and teachers and many scientific researches and everyday pedagogical work are devoted to it.
2. The latest results of the OECD PISA 2018 in Latvia, Estonia and Finland convincingly show that the reading competence (i.e., results in PISA 2018 reading test) is considerably higher to those students who read for fun in comparison with those students who read only when it is compulsory and who consider that reading is the waste of time. The above mentioned relationships are analogical to those stated in the PISA 2009 study.
 3. The girls' enjoyment in reading is considerably higher than that of the boys and it is largely connected with the girls' higher competence in reading.
 4. The promotion of students', especially boys' reading engagement can be one of the factors for increasing the quality of education and the reading competence, in particular.
 5. During the last 10 years the reading for pleasure and finding enjoyment in reading has decreased significantly in Finland which probably could be partly connected with decreasing of the average reading achievement in OECD PISA studies in Finland. But in Latvia and Estonia these attitudes of students to reading are quite similar to each other and there have not been significant changes over the last 10 years which determines the necessity to continue the studies about the impact of also other factors on the average level of the reading competence and the change trends in Latvia, Estonia and Finland.

Literatūra References

- Gambrell, L.B. (2011a). *Motivation in the school reading curriculum*. Retrieved from <https://rdlg579.files.wordpress.com/2015/06/motivation-in-the-school-reading-curriculum-gambrell-copy.pdf>
- Gambrell, L.B. (2011b). Seven Rules of Engagement: What's Most Important to Know About Motivation to Read. In *The Reading Teacher*, 65(3) (November 2011), 172-178.
- Geske, A., Grīnfelds, A., Kangro, A., & Kiseļova R. (2010). *Ko skolēni zina un prot – kompetence lasīšanā, matemātikā un dabaszinātnēs. Latvija OECD valstu Starptautiskajā skolēnu novērtēšanas programmā*. Rīga: Latvijas Universitāte.
- Geske, A., Grīnfelds, A., Kangro, A., Kiseļova, R., & Mihno, L. (2015). *Izglītības kvalitāte starptautiskā salīdzinājumā. Latvija OECD valstu Starptautiskajā skolēnu novērtēšanas programmā*. Monogrāfiju sērija *Izglītības pētniecība Latvijā*. Nr. 7. A. Kangro redakcijā. Rīga: Latvijas Universitāte.
- Guthrie, J., & Wigfield, A. (2000). Engagement and motivation in reading. In Kamil, M. et al. (Eds.), *Handbook of reading research* (pp. 403-424). Lawrence Erlbaum Associates, Mahwah, NJ.
- Guthrie, J.T., & Coddington, C.S. (2009). Reading Motivation. In Wigfield, A., Wentzel, K.R. (Eds.), *Handbook of motivation at school*. New York, NY; London: Routledge.
- Guthrie, J., Klauda, S., & Ho, A. (2013). Modeling the relationships among reading instruction, motivation, engagement, and achievement for adolescents, *Reading Research Quarterly*, 48(1), 9-26. DOI: <http://dx.doi.org/10.1002/rrq.035>.
- Hidi, S.E., & Renninger, K.A. (2019). Introduction: Motivation and Its Relation to Learning. In Renninger K.A., Hidi S.E. (Eds.), *The Cambridge Handbook of Motivation and Learning*. Cambridge: Cambridge University Press.

- Kangro, A., & Geske, A. (2001). *Zināšanas un prasmes dzīvei. Latvija OECD valstu Starptautiskajā skolēnu novērtēšanas programmā 1998.-2001.* Rīga: Mācību grāmata.
- Kirsch, I., Braun, H., Yamamoto, K., & Sum, A. (2007). *America's perfect storm: Three forces changing our nation's future.* Retrieved from https://www.ets.org/Media/Education_Topics/pdf/AmericasPefectStorm.pdf
- Lazdiņa, S. (2019). In *Auziņš, A. Labai lasītprasmei – visu iesaistīto pušu saskanīgu kopdarbu!* Pieejams <https://skola2030.lv/lv/jaunumi/blogs/labai-lasitprasmei-visu-iesaistito-pusu-saskanigu-kopdarbu>
- Mullis, I.V.S., Martin, M.O., Foy, P., & Hooper, M. (2017). *PIRLS 2016 International Results in Reading.* Retrieved from Boston College, TIMSS & PIRLS International Study Center website. Retrieved from <http://timssandpirls.bc.edu/pirls2016/international-results/>
- Namsone, D., & Oliņa Z. (2018). Kā vērtē kompleksu sniegumu In D.Namsone (Ed.), *Mācīšanās lietpratībai.* Kolektīvā monogrāfija. Pieejams <https://www.siic.lu.lv/skolam/petnieciba/monografija-macisanas-lietpratibai/>
- OECD. (2009). *PISA 2009 Assessment Framework. Key competencies in reading, mathematics and science.* OECD Publishing, Paris.
- OECD. (2010). *PISA 2009 Results: Learning to Learn – Student Engagement, Strategies and Practices (Volume III).* OECD Publishing, Paris.
- OECD. (2017). *PISA for Development Assessment and Analytical Framework: Reading, Mathematics and Science, Preliminary Version,* OECD Publishing, Paris.
- OECD. (2018). *The Future of Education and Skills 2030.* OECD Publishing, Paris.
- OECD. (2019a). *PISA 2018 Results (Volume I): What Students Know and Can Do,* PISA, OECD Publishing, Paris. DOI: <https://doi.org/10.1787/5f07c754-en>.
- OECD. (2019b). *PISA 2018 Results (Volume II): Where All Students Can Succeed,* PISA, OECD Publishing, Paris. DOI: <https://doi.org/10.1787/b5fd1b8f-en>.
- Ryan, R.M., & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.
- Rychen, D.S., & Salganik, L.H. (2003). A holistic model of competence. In D.S. Rychen, L.H. and Salganik (Eds.), *Key Competencies for a Successful Life and a Well-Functioning Society* (p. 53). Göttingen: Hogrefe&Huber.
- Wang, J.H., & Guthrie, J.T. (2004). Modeling the effects of intrinsic motivation, extrinsic motivation, amount of reading, and past reading achievement on text comprehension between U.S. and Chinese students. *In Reading Research Quarterly*, 39, 162-186.

SKOLĒNU GATAVĪBA KARJERAS PAŠVADĪBAI

The Readiness of Students for Career Self-Management

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Abstract. Nowadays, several of the global challenges we are facing include the fast pace of life and rapidly occurring changes, therefore when interacting with this changeable life environment it is important for the young people to self-develop, self-manage, as well as be themselves in charge of their personal change and career management. This article studies the latest scientific trends, providing scientific justification to the student readiness for their career self-management. In the process of developing this justification, it was essential to understand the criteria and indicators for the student readiness for their career self-management, in order for the young people to be able to self-assess the said readiness during their entire lifetime. Therefore the aim of the study was to develop the theoretical foundations for the term “student readiness for career self-management” within the context of general secondary education, including both criteria and indicators for the assessment which could in its turn become a methodological foundation for developing methodology for the readiness for career self-management. As a result of this study, the theoretical findings from the scientific literature on the essence and readiness for career self-management were gathered, examined, analysed, systemized and evaluated.

Keywords: general education, readiness for career self-management, students.

Ievads

Introduction

Mūsdienu globalizācijas un ceturtais industriālās revolūcijas laikmetā kā būtiska nepieciešamība iezīmējas jautājums par izaugsmi un konkurētspēju strauji mainīgajā izglītības un darba vidē. Lai sasniegtu vienu no Apvienoto Nāciju Organizācijas Ilgtspējīgas attīstības mērķiem (Transforming our world ..., 2015) par kvalitatīvu izglītību, kuru iegūstot var apgūt tādas zināšanas, prasmes un kompetences, kuras sekmē veiksmīgu iekļaušanos darba tirgū un produktīvu nodarbinātību. Skolu jauniešiem aktualizējams tas, ka mūsdienu dzīvē pārmaiņas ir nepārtraukts process, tāpēc mijiedarbībā ar šo mainīgo pasauli svarīgi pašattīstīties, mainīties tai līdzīgi un pašam uzņemties atbildību un vadīt visu savu dzīvi.

Šāds skatījums uz globālajām norisēm pasaulē un savā personīgajā dzīvē nodrošina ilgtspējīgu ekonomikas izaugsmi un sekmē ikviena cilvēka, tai skaitā jauniešu, pārliecību par mūžizglītības nepieciešamību un karjeras attīstību visas dzīves garumā. Tas ikviena jaunieša karjerā paver iespēju, sabalansējot savu formālo un neformālo izglītību, darbu, ģimeni, brīvo laiku, garīgo attīstību ar savas dzīves vērtībām, vajadzībām un iespējām, sasniegt savus mērķus dažādās dzīves jomās. Kā norādīts 2019. gada Pasaules ekonomikas foruma “Globālās konkurētspējas ziņojumā 2019”, tad jaunās ekonomikas un sabiedrības nākotnes veidošanā globālās konkurētspējas kontekstā kā viena no trim būtiskām jomām ir izglītība, prasmes un darbs. Šīs jomas mērķtiecīga attīstība spēj sasniegt izaugsmes un ilgtspējības mērķus (The Global Competitiveness Report ..., 2019), nodrošinot veiksmīgu cilvēka karjeru visas dzīves laikā.

Tā kā mūsdienās kā viens no globālās pasaules izaicinājumiem ir ātrs dzīves temps un straujās pārmaiņas, tāpēc mijiedarbībā ar šo mainīgo dzīves vidi jauniešiem svarīgi pašattīstīties, pašrealizēties, kā arī pašiem mainīties un vadīt savu karjeru.

Jēdziens *karjeras pašvadība* tiek atklāts jaunākajos pētījumos sociālo zinātņu, t.sk. izglītības zinātņu jomās, to analizējot jauno karjeras teoriju kontekstā (Coetzee, 2019; Ireland & Lent, 2018; Jung & Takeuchi, 2017; Krouwel, van Luijn, & Zweekhorst, 2019; Secundo et al., 2019; Lent, Morris, Penn, & Ireland, 2019; Tims & Akkermans, 2020).

Cilvēka *gatavība karjeras pašvadībai* visas dzīves laikā ir saistīta ar konkrētā laika izglītības un darba vides prasībām, kuras savukārt ietekmē globālās pasaules pārmaiņas dažādās cilvēkdarbības jomās konkrētajos sociāli ekonomiskajos apstākļos. To atklāj mūsdienu tendences šajā jomā, kas apzinātas dažādos zinātniskajos pētījumos. Gatavība darbībai kā jēdziens tiek skatīts dažādos kontekstos, aptverot daudzo cilvēka dzīvesdarbības aspektus dažādos dzīves posmos, tai skaitā skolas laikā, atklājot to kā mūsdienu aktualitāti daudzdimensionālā skatījumā (Brown, 2017; Daugol & Sherstha, 2019; Mitin et al., 2018; Paradnike, Endriulaitiene, & Bandzevičiene, 2017).

Pētījuma mērķis: izstrādāt jēdziena *skolēnu gatavība karjeras pašvadībai* teorētisko pamatojumu vispārējās vidējās izglītības kontekstā, kurā ir iekļauti arī izvērtēšanas kritēriji un rādītāji, kas kļūtu par metodoloģisko bāzi gatavības karjeras pašvadībai izvērtēšanas metodikas izveidei.

Pētījuma rezultātā tiek apzinātas, apkopotas, analizētas, sistematizētas un izvērtētas zinātniskajā literatūrā paustās atziņas par karjeras pašvadības būtību un gatavību tai.

Materiāli un metodes ***Material and Methods***

Pamatojot jēdzienu *skolēnu gatavība karjeras pašvadībai*, ir veikts teorētiskais pētījums vairākos virzienos:

- 1) jēdziena *gatavība darbībai* pamatojums,
- 2) jēdziena *karjeras pašvadība* pamatojums,
- 3) gatavības jēdziens dažādu aktivitāšu kontekstā,
- 4) skolēnu gatavības karjeras pašvadībai kritēriju un rādītāju noteikšana.

Pētījuma metodes: zinātniskās literatūras studēšana, analīze un izvērtēšana, kā arī autoru personīgās pedagoģiskās pieredzes refleksija.

Karjeras pašvadība daudzaspēktu skatījumā ***Career Self-Management from the Multi-Aspect Viewpoint***

Karjeras pašvadība zinātniskajā literatūrā tiek pamatota un raksturota, sākot no 20. gs. beigām, turpinot pētījumus arī 21. gs. sākumā. Īpaši tas aktualizējies pēdējā desmitgadē, kad mūsdienu jaunākajos pētījumos, skatot dažādas karjeras vadības stratēģijas, to analizējot jauno karjeras teoriju kontekstā un aprakstot tā nozīmīgumu dažādos cilvēka dzīves posmos visa mūža garumā, kā arī paplašinot jēdziena konceptuālo izpratni (Brown, 2017; Daugol & Sherstha, 2019; Mitin et al., 2018), šajā pārmaiņu un globālo izaicinājumu laikā tiek uzsvērtā personības pašattīstības nozīmība un nepieciešamība vadīt pašam savu dzīvi dažādās cilvēkdarbības jomās.

Ir daudz nozīmīgu pētījumu par karjeras pašvadību, kuros tiek definēts šis jēdziens un veidoti karjeras pašvadības modeļi (Akkermans, Brenninkmeijer, Huibers, & Blonk, 2013; Briscoe, Hall, & Frautschy DeMuth, 2006; Chiaburu, Baker, & Pitariu, 2006; Francis-Smythe, Haase, Thomas, & Steele, 2013; King, 2004; Kossek, Roberts, Fisher, & DeMarr, 1998; Kuijpers & Scheerens, 2006; Lent & Brown, 2013; Paradnike et al., 2017; Sturges, 2008), kuri ietver dažādas ar karjeru saistītas kompetences, rīcību, attieksmes un vērtības.

Karjeras pašvadība aptver karjeras izpēti, savu karjeras mērķu izvirzīšanu un īstenošanu, ietverot darbības, kas palīdz cilvēkam uzlabot karjeras iespējas nākotnē un karjeras izaugsmi (Greenhaus & Callanan, 1994; King, 2001; 2004; Noe, 1996; Pinto & Taveira, 2013).

Karjeras pašvadībai ir pieaugoša nozīme mūsdienu izglītības un darba pasaulē. Vairāki pētnieki karjeras pašvadības kontekstā runā par personības patstāvīgumu un atbildību, par savas darbības plānošanas un rezultātu pārraudzīšanas nepieciešamību, tāpat arī par būtiskām 21.gs. prasmēm, kuras augsti novērtē darba devēji – par radošumu, par individuālu lēmumu pieņemšanu, kā arī par būtiskiem jautājumiem indivīdu karjeras attīstībā, t.sk.

karjeras panākumu nozīmību un apmierinātību ar savu karjeru, profesionālo identitāti (Ahmed, Sajid, Nesheen, & Sajid, 2015; King, 2001; 2004; Yu, 2013).

Karjeras izvēle notiek nemitīgi mainīgā vidē, tāpēc mūsdienās būtiski apgūt karjeras pašvadības, t.sk. mūžilgas pašvirzītās jeb pašvadītās, mācīšanās prasmes, ietverot cilvēkresursu, sociālo un psiholoģisko karjeras resursu apzināšanu (DiRenzo, 2010; Luthans & Youssef, 2004; Smith, 2014).

Karjeras pašvadības procesā ir būtiski apzināt savas zināšanas, prasmes, kompetences, spējas, pieredzi, veidot attiecības, kuras var palīdzēt sasniegt sev vēlamos rezultātus, izzināt un izprast sevi, kā arī mijiedarbībā ar mainīgo apkārtējo vidi, t.sk. darba vidi, saskatīt attīstības un pašrealizācijas daudzveidīgās iespējas (Arthur, Inkson, & Pringle, 1999; Paradnike et al., 2017; Smith, 2014). Tas viss kopā rada konkurētspējīgu potenciālu, kurš jauniešiem var noderēt viņa karjeras virzībā, lai, izvēloties atbilstošas darbības, īstenotu savu karjeras mērķi. Skolēniem, kuriem piemīt konkrētā laikā darba tirgū nepieciešamās prasmes, kuras viņi jau skolas laikā ir mērķtiecīgi apzinājuši un attīstījuši, lai uzlabotu savu spēju elastīgi un dinamiski konkurēt mainīgajā darba tirgū un lai pielāgotos pārmaiņām.

Karjeras izvēle ir saistīta ar skolēnu pašizziņu, pašaktualizāciju, pašrealizāciju, ar nākotnes mērķu izvirzīšanu saskaņā ar personības attieksmēm, vērtībām un motivāciju. Vidējās izglītības skolēnu karjeras pašvadība ir saistīta ar savas karjeras, t.sk. profesionālās virzības, izpratni, ar prasmi pieņemt mērķtiecīgu karjeras lēmumus un tos realizēt aktīvā dzīvesdarbībā. Svarīgi, lai skolēni nonāk pie atziņas, ka izglītības un darba vide ir mainīga, tāpēc būtiski ir izprast un pieņemt šīs pārmaiņas, saskatīt dažādas alternatīvas un jaunas izvēles, ko nosaka lēmumu pieņemšanas prasme, kas ir viens no karjeras pašvadības aspektiem. Skolēni, mācoties pašvadīt savu karjeru, sāk izprast mūžizglītības un nepārtrauktas profesionālās pašnoteikšanās un pašattīstības nepieciešamību, izvērtējot savas zināšanas, prasmes, kompetences: *ko es zinu, protu, spēju*) un savas vajadzības: *ko es vēlos*. Skolēniem ir jāzina arī darba tirgus prasības, tas attiecas arī uz pieprasītākajām profesijām: *ko sabiedrībai, tās ekonomikai un darba tirgum vajag* (Klimov, 2004; Yu, 2013).

Lai karjeras pašvadības process noritētu veiksmīgi, cilvēkam ir jābūt gatavam šim procesam (Pinto & Taveira, 2013; Raabe, Frese, & Beehr, 2007). Cilvēka gatavību izglītoties, attīstīties un mainīties visa mūža garumā var saistīt ar viņa *gatavību mūžilgai karjeras pašvadībai*.

Skolēnu gatavības karjeras pašvadībai būtība, kritēriji un rādītāji
The Essence, Criteria and Indicators to the Student Readiness for
Career Self-Management

Nav vienota zinātniskā skatījuma uz *gatavību karjeras pašvadībai*, t.sk. *gatavību profesionāli pašnoteikties un nepārtraukti pašattīstīties*, jo pastāv dažādi šī jēdziena interpretējumi.

Teorētiskajos pētījumos jēdziens *gatavība* kaut kādai darbībai tiek pamatots:

- kā process (Malikova & Prokopenko, 2011; Stabiņš, 1998);
- kā rezultāts (Ananina, 2006);
- gan kā process, iezīmējot profesionālās izvēles posmus, gan kā rezultāts (Brown & McPartland, 2005; Imakaev, Gadzhieva, Vihman, & Popov, 2015; Miķelsone, 2008; Miller & Brown, 2005; Shibankova, 2008; Van Esbroeck, Tibos, & Zaman, 2005).

Daudzi zinātnieki raksta par atsevišķiem *gatavības* veidiem:

- *psiholoģisko gatavību* uzsākt vai veikt kādu darbību (Ananina, 2006; Aron, 2015; Besklubnaja, 2013; Malikova & Prokopenko, 2011; Retivyh, 2013; Shibankova, 2008);
- *funkcionālo jeb praktisko gatavību* (Ananina, 2006; Besklubnaja, 2013);
- *integratīvo gatavību* (Besklubnaja, 2013);
- *gatavību profesionālajai darbībai* (Katane & Baltusite, 2007), kur svarīga gan *psiholoģiskā*, gan *kompetencēs balstītā gatavība*, kas ir viens kopveselums (Baltusite & Katane, 2014; Baltušīte, 2013).

Daudzos pētījumos *gatavība* karjeras pašvadībai saistīta gan ar ārējiem, t.sk. sociālās vides, faktoriem, gan ar iekšējiem, t.i., personības izziņas, motivācijas, gribas un emocionālajiem faktoriem (Aron, 2015; Besklubnaja, 2013; Cvetkova, 2005; Chistjakova, 2007; Kalinina, 2007; Pavlova, 2005; Malikova & Prokopenko, 2011; Merkulova, 2010; Zeer, 2005). Izziņas, motivācijas, gribas un emocionālo komponentu veidošanās tiek atklāta psiholoģiski pedagoģiskā atbalsta kompleksā īstenošanas procesā un kļūst par psiholoģiskās *gatavības attīstības* līmeņa rādītājiem. *Gatavību* ietekmē subjektīvie (personības izpausmes) un objektīvie komponenti (sociālā vide). Personības aktīva subjektīvā darbība un tās attieksme pret dažādu sociālo kontekstu iedarbību iezīmē virkni aspektu, kuri saistīti ar personības *gatavību* karjeras pašvadībai un karjeras izvēlei noteiktā dzīves periodā, un tie kā personības *gatavības* karjeras pašvadībai kritēriji iedalāmi vairākās tematiskajās grupās: personības patstāvība un informētība, izglītības un darba vides izpratne, lēmumu pieņemšana un pozitīva attieksme pret karjeras izvēles nepieciešamību (Sokolova, 2015).

21.gadsimta Krievijas zinātnieku pētījumos dominē atziņas, kurās līdztekus jēdzienam *profesionālā pašnoteikšanās* tiek runāts par paša vadītu karjeras izaugsmes/attīstības procesu, par savu atbildību paša izvēlētajās darbības un pieņemtā lēmuma rezultātu. Tātad secināms, ka, kaut arī jēdziens *karjeras pašvadība* netiek minēts, tomēr kontekstuāli tā būtība tajos ir saskatāma. Rietumu zinātnieku, tajā skaitā Latvijas, pētījumos (Brown & McPartland, 2005; Hirschi & Läge, 2007a; Hirschi & Läge, 2007b; Baltusite & Katane, 2014; Baltušīte, 2013; Katane & Baltusite, 2007; Linde, 2003; Miķelsone, 2008; Miller & Brown, 2005; Savickas, 1984, 2001; Super, 1990; VanEsbroeck et al., 2005) jēdziena gatavība izpratne saistīta ar karjeras brieduma un karjeras pašvadības, t.sk. karjeras izvēles, jautājumiem.

Balstoties uz 20.gs. pētījumiem, kuri veikti pārsvarā Krievijā un Latvijā, Ņ. Linde (Linde, 2003) pētījusi vidusskolēnu gatavību pašrealizācijai, runājot par patstāvību un pašnoteikšanos kā vērtībām, ko var īstenot mērķtiecīgi organizētā mācību procesā, aktivizējot skolēna iniciatīvu un pašattīstību. Kā minējusi pētniece, viens no kritērijiem, kurš nosaka cilvēka gatavību kaut kam, ir *personības brieduma līmenis*, kas tiek pamatots gan Amerikas, gan Vācijas, gan Latvijas pētnieku darbos. Ņ. Linde akcentē *profesionālās pašnoteikšanās gatavības* nozīmību vidusskolas jauniešiem, kas ir viens no personības brieduma rādītājiem, akcentējot arī personības patstāvīguma lomu gatavības pašrealizācijai attīstībā. Tādējādi karjeras pašvadībā tiek akcentēti būtiskākie atslēgas vārdi: motivācija, patstāvīga izvēle, atbildība, mērķtiecīga lēmuma pieņemšana, paattīstība, pašrealizācija u.c.

Teorētisko pētījumu rezultātā izkristalizējušies vairāki skolēnu gatavības karjeras pašvadībai kritēriji un rādītāji vispārējās vidējās izglītības kontekstā. Tie varētu kļūt par metodoloģisko bāzi gatavības karjeras pašvadībai izvērtēšanas metodikas izveidei (1.tab.).

1.tabula. Personības gatavības karjeras pašvadībai kritēriji un rādītāji (Autoru veidota)
Table 1 Criteria and Indicators of Personality Readiness for Career Self-Management
(Created by the authors)

№	Kritēriji	Rādītāji
1.	Personības patstāvīgums un virzība uz pašizziņu un pašvadību (Besklubnaja, 2013; Malikova & Prokopenko, 2011; Sokolova, 2015)	<ul style="list-style-type: none"> ▪ Attīstītas intereses un virzība uz dažādiem darbības veidiem, kuri saistīti ar nākotnes profesiju; ▪ attīstīti profesionālie nodomi; ▪ savu spēju adekvāts pašnovērtējums attiecībā pret dažādiem darbības veidiem; ▪ prasme sasniegt izvirzīto mērķi; ▪ pašvadības prasme.
2.	Personības informētība un lietpratība (informācija un resursi)	<ul style="list-style-type: none"> ▪ Lietpratīgs un jēgpilns zināšanu lietojums, veicot elementāras darbības praksē;

№	Kritēriji	Rādītāji
	(Besklubnaja, 2013; Malikova & Prokopenko, 2011; Sokolova, 2015)	<ul style="list-style-type: none"> ▪ adekvāts pašvērtējums, ▪ spēja saskatīt saikni starp profesionālajām un mācību interesēm.
3.	Mijiedarbība ar izglītības un darba vidi: karjeras iespēju izpēte (Besklubnaja, 2013; Sokolova, 2015)	<ul style="list-style-type: none"> ▪ Zināšanas par profesiju pasauli un to dinamiku (sociālvēsturiskā pieeja profesijām); ▪ spēja sabalansēt savas intereses un spējas ar profesiju pasauli; ▪ zināšanas par profesijām, profesionālās darbības specifiku.
4.	Karjeras plānošana un lemtspēja (Besklubnaja, 2013; Hirschi & Läge, 2007a; Hirschi & Läge, 2007b; Imakaev et al., 2015; Malikova & Prokopenko, 2011; Savickas, 1984, 2001; Sokolova, 2015; Super, 1990)	<ul style="list-style-type: none"> ▪ Noteikta patstāvība, spriedumu neatkarība par saviem profesionālajiem nodomiem, argumentācija, kam dot priekšroku profesijas izvēlē; ▪ prasme iezīmēt savus nākotnes plānus, izglītības un profesionālā plāna veidošana; ▪ prasme noformēt pētnieciskās un izziņas darbības kopsavilkuma datus; ▪ prasme veikt alternatīvo profesiju salīdzinošo analīzi; ▪ apmierinātība ar savu izvēli; ▪ spēja pieņemt pamatotu karjeras lēmumu vajadzīgajā brīdī.
5.	Personības profesionālā virzība (t.sk. pozitīvas attieksmes motivācija un personības aktīva darbība) un pašizziņa (Aron, 2015; Besklubnaja, 2013; Hirschi & Läge, 2007a; Retivyh, 2013; Sokolova, 2015)	<ul style="list-style-type: none"> ▪ Aktīva tiekšanās iepazīt, izziņāt sevi; ▪ aktīvi darbīgas pozīcijas ieņemšana; ▪ personības profesionālā ieinteresētība; ▪ iekšēju nepieciešamība izglītoties, apgūstot profesiju un pārvaldot to pilnībā; ▪ profesionālā identitāte.

I. Arons (Aron, 2015) uzskata, ka psiholoģiskās gatavības veidošanās ir prioritārais virziens veiksmīgas profesionālās pašnoteikšanās īstenošanai, kuras pamatā ir J. Kļimova (Klimov, 2004) profesionālās pašnoteikšanās struktūra: gribu, varu, vajag. Šī struktūra vēlākajos pētījumos tiek konkretizēta, kurā kā būtiski psiholoģiskās gatavības komponenti tiek ietverti kognitīvie, darbības, motivācijas un personības aspekti. Vairāki pētnieki (Chistjakova, 2005; Cvetkova, 2005; Kalinina, 2007; Pavlova, 2005; Shibankova, 2008; Zeer, 2005), kuri izziņājuši psiholoģiskās gatavības struktūru, komponentus, kas nosaka tās saturu, kā būtisku faktoru min tieši motivācijas komponentu.

Daudzu zinātnieku pētījumu ceļā gūtās atziņas, kas paustas vairākās publikācijās (Ananina, 2006; Besklubnaja, 2013; Imakaev et al., 2015; Malikova & Prokopenko, 2011; Retivyh, 2013; Sokolova, 2015), pauž karjeras

pašvadības, t.sk. profesionālās pašnoteikšanās, principus. Skolēnu gatavība karjeras pašvadībai, pirmām kārtām, nozīmē:

- 1) skolēnu gatavība izvēlēties nākamo profesiju,
- 2) gatavība nepārtraukti mācīties, pašattīstīties un mainīties mijiedarbībā ar mainīgo vidi,
- 3) gatavība plānot un pašnoteikt savu dzīvi,
- 4) gatavība pieņemt svarīgus, atbildīgus lēmumus, t.sk. gatavība uzņemt atbildību par šo lēmumu sekām karjeras pašvadības procesā.

Tā kā šobrīd izglītības vidē aktuāla ir kompetenču pieejas īstenošana, tad svarīgi ir atzīmēt, ka, piemēram, M. Retevihs (Retivyh, 2013) profesionālās pašnoteikšanās gatavību skata mūsdienu jauniešu galveno kompetenču aspektā līdztekus sociālajām, daudz kultūru, komunikatīvajām, informācijas, profesionālajām, kognitīvajām u.c. kompetencēm. M. Retevihs uzskata, ka profesionālā pašnoteikšanās skatāma kā daļa no cilvēka dzīves pašnoteikšanās, aptverot visus viņa dzīvesdarbības un dzīves posmus.

D. Sokolovas profesionālās izvēles gatavības novērtēšanas pētījumos (Sokolova, 2015; Sokolova & Senicheva, 2015) minēti faktori, kuri raksturo personības briedumu un profesijas izvēles gatavības līmeni, ko nosaka tādi kritēriji kā autonomija, informētība, orientācija laikā, lēmumu pieņemšana, emocionālā attieksme pret profesijas izvēles situāciju. Tieši šie kritēriji ir saistīti ar personības gatavību karjeras pašvadībai. Kā minējusi D. Sokolova (Sokolova, 2015), skolēnu gatavība apgūt nākotnes profesiju un gatavība patstāvīgai darba dzīvei ir atkarīga no tā, cik precīzi vecāko klašu skolēni prātis iezīmēt savus nākotnes plānus, kāds būs viņu psiholoģiskais briedums. Jau mācību procesā ir redzama saikne starp profesionālajām un mācību interesēm. Šajā procesā skolēnam rodas vajadzība izprast pašam sevi un pasauli sev apkārt, meklējot un atrodot notiekošajā jēgu. Vecāko klašu skolēniem galvenais kļūst savas dzīves ceļa pašnoteikšanās, tai skaitā profesionālās pašnoteikšanās, uzdevums. Šajā situācijā atslēgas vārds ir gatavība – tas ir galvenais brīdis, kad cilvēks ir gatavs patstāvīgai dzīves ceļa, karjeras, profesijas izvēlei.

Gatavība karjeras pašvadībai nodrošina cilvēka personības individuālo īpatnību, interešu, vērtību, virzības noteikšanu un atklāšanu. Indivīdam pašam ir izveidojusies attieksme pret noteiktu profesionālo, darba vidi, viņš ir gatavs profesionāli pašrealizēties noteiktā dzīves jomā. Gatavs karjeras pašvadībai – gatavs uzņemt atbildību par savu nākotni, izprast sevi un zināt, kā virzīties tālāk, prast izvēlēties un pieņemt lēmumu.

Tā kā vairākos pētījumos (Arthur, Khapova, & Wilderom, 2005; Pinto & Taveira, 2013; Chin & Shen, 2015; Vertsberger & Gati, 2015; Zakaria, Yamin, & Maarof, 2017) tiek akcentēta stratēģiskas karjeras attīstības veicināšanas nepieciešamība (karjeras vadība), kas tiktu īstenota strukturētā,

sistēmiskā un specializētā karjeras atbalstā, vispārējās vidējās izglītības vidē ir pilnveidojams tāds karjeras attīstības atbalsts, kurš veicinātu skolēnu gatavību karjeras pašvadībai.

Mūsdienu mainīgajos izglītības vides un darba tirgus apstākļos karjeras pašvadībai ir arvien lielāka nozīme, jo tā nosaka cilvēka apmierinātību ar viņa karjeras sasniegumiem visa mūža garumā. Gatavība mainīties, gatavība pielāgoties un iekļauties mainīgā vidē, attīstīt savus individuālos resursus, izglītoties visas dzīves laikā, gatavība plānot un veidot savu dzīvi, spēja apkārtējā mainīgā vidē saskatīt savas profesionālās attīstības, karjeras izaugsmes iespējas, nodrošinot savu konkurētspēju, t.sk. pieprasītību un nodarbinātību darba tirgū: tās ir veiksmīgas karjeras pašvadības priekšnoteikumi, dažādās izpausmes, kā arī pašvadības procesa rezultāti, kas nosaka cilvēka dzīvi gan šobrīd, gan nākotnē.

Secinājumi Conclusions

Karjeras pašvadība zinātniskajā literatūrā tiek pamatota un raksturota, sākot no 20. gs. beigām, turpinot pētījumus arī 21. gs. sākumā. Īpaši tas aktualizējies pēdējā desmitgadē, kad mūsdienu jaunākajos pētījumos, skatot dažādas karjeras vadības stratēģijas, to analizējot jauno karjeras teoriju kontekstā un aprakstot tā nozīmīgumu dažādos cilvēka dzīves posmos visa mūža garumā, kā arī paplašinot jēdziena konceptuālo izpratni.

Karjeras pašvadība mūsdienās tiek skatīta jēdziena *karjera* plašās nozīmes interpretācijas kontekstā, ieskaitot, profesionālo pašnoteikšanos, izglītību u.c. dzīvesdarbības jomas. Jēdziens konceptuāli aptver karjeras izpēti, savu karjeras mērķu izvirzīšanu un īstenošanu, ietverot darbības, kas palīdz cilvēkam profesionāli pašattīstīties, saskatīt savas karjeras izaugsmes iespējas tuvākā un tālākā nākotnē, tāpēc patstāvīgai, atbildīgai, mērķtiecīgai un plānotai dzīvesdarbībai, kas balstīta uz sevis un apkārtējās pasaules izzināšanu, izpratni un mijattiecībām, ir pieaugoša nozīme strauji mainīgajā izglītības un darba pasaulē.

Pastāv dažādi jēdziena *gatavība darbībai* interpretējumi, nav vienota skatījuma jēdziena zinātniskajā pamatojumā, kā rezultātā tiek izdalīti vairāki gatavības veidi.

Skolēna *gatavība karjeras pašvadībai* tiek skatīta vairākos aspektos: pašizziņa, karjeras izvēles patstāvīgums, mērķtiecīga lēmumu pieņemšana un to īstenošana, spēja saskaņot *varu, vēlos, vajag*, kas izriet no personības priekšstatiem par sevi, izglītības un darba vidi, no spējas saskaņot un līdzsvarot savu attīstības potenciālu ar savām vajadzībām, nākotnes mērķiem, kā arī

iespējām, ko piedāvā sociāli ekonomiskā, darba tirgus un konkrēto profesiju vide.

Analizējot un sistematizējot dažādu autoru pētījumos paustās atziņas par gatavības karjeras pašvadībai būtību, ir izkristalizējušies kritēriji, kas varētu kļūt par rādītājiem skolēnu mērķtiecīgai un patstāvīgai karjeras izvēlei vispārējās vidējās izglītības kontekstā. Personības gatavību karjeras pašvadībai raksturo tādi kritēriji kā personības patstāvīgums, profesionālā pašnotaikšanās, pašizzīņa un pašattīstība, personības informētība un lietpratība, mijiedarbība ar mainīgo izglītības un darba vidi, t.sk. karjeras iespēju izpēte, karjeras plānošana un spēja pieņemt lēmumus u.c.

Skolēnu gatavība karjeras pašvadībai, pirmām kārtām, izpaužas psiholoģiskajā un kompetencēs balstītajā gatavībā pašiem patstāvīgi un atbildīgi veidot un tālāk attīstīt savu karjeru visa mūža garumā.

Mūsdienu mainīgajos izglītības vides un darba tirgus apstākļos karjeras pašvadībai ir arvien lielāka nozīme, jo tā nosaka cilvēka pašrealizāciju un apmierinātību ar karjeru visa mūža garumā. Gatavība mainīties, gatavība pielāgoties un iekļauties mainīgā vidē, attīstīt savus individuālos resursus, izglītoties visas dzīves laikā, gatavība plānot un veidot savu dzīvi, spēja apkārtējā mainīgā vidē saskatīt savas profesionālās attīstības, karjeras izaugsmes iespējas, nodrošinot savu konkurētspēju, t.sk. pieprasītību un nodarbinātību darba tirgū: tās ir veiksmīgas karjeras pašvadības priekšnoteikumi, dažādās izpausmes, kā arī pašvadības procesa rezultāti, kas nosaka cilvēka dzīvi gan šobrīd, gan nākotnē.

Skolās ir nepieciešama stratēģiskas karjeras attīstības veicināšana un vadība, kas tiktu īstenota strukturētā, sistēmiskā un specializētā karjeras atbalstā. Vispārējās vidējās izglītības vidē ir pilnveidojams tāds karjeras attīstības atbalsts, kurš veicinātu skolēnu gatavību karjeras pašvadībai.

Kopsavilkums

Summary

Nowadays, several of the global challenges we are facing include the fast pace of life and rapidly occurring changes, therefore when interacting with this changeable life environment it is important for the young people to self-develop, self-manage, as well as be themselves in charge of their personal change and career management.

Career self-management has been justified and characterized in scientific literature starting from the end of the 20th century, continuing the studies in the beginning of the 21st century. The topic has been especially raised during the last decade when in the newest modern studies its different management strategies have been looked at, it has been analysed within the context of new career theories, and its importance has been described in different stages of a person's life during its eternity, moreover the conceptual understanding of the concept has been widened. Nowadays, the concept of career self-management is viewed within the context of interpreting the wide sense of the career notion, which includes

professional self-determination, education and other areas of life activity. The conceptual understanding of the concept comprises career examination, setting and reaching one's career goals, including activities that allow for one's professional self-development, ability to forecast career opportunities in near-term and long-term future, therefore independent, responsible, purposeful and planned-out life activity, which is based on studying, understanding and interrelating with oneself and the environment, is becoming ever-so important in the rapidly changing world of work and education.

There are different interpretations of the notion *readiness for activity*, the scientific justification of the term is not uniform, as a result, several types of readiness are distinguished. The students' readiness for career self-management is studied from several viewpoints: self-examination, independence in one's career choice, purposeful decision making and implementation, ability to find balance between *I can, I want, I need* which comes from one's personal opinion of themselves, education and work environment, from the ability to harmonize and balance the potential of one's development with their needs, future goals, as well as opportunities offered by the socio-economical, work market and specific professional environments.

When analysing and systemizing the findings on the essence of the readiness for career self-management from the studies of different authors, criteria that could become the indicators for purposeful and independent student career choice within the context of general secondary education have become clear. One's personal readiness for career self-management is characterized by criteria such as personal independence, personal self-determination, self-examination and self-development, person's awareness and competence, interaction with the changing work and education environments, which includes studying one's career opportunities, career planning and ability to make decisions, etc.

Students' readiness for career self-management first and foremost manifests itself in psychological and competence-based readiness to independently and responsibly build and further develop one's own career during their entire lifetime.

In the changing conditions of modern job and education markets, career self-management takes an increasingly important role since it determines person's self-realization and satisfaction with one's career over the span of their lifetime. Readiness to change, readiness to adapt and be included in this changing environment, develop one's individual skills, educate oneself during life, readiness to plan and shape one's life, ability to notice opportunities for one's professional and career growth in the changing environment thus ensuring one's competitiveness, including one's demand and employment in the work market: those are the preconditions, the different manifestations of successful career self-management, as well as the results of the process of self-management, which determine someone's personal life both now and in the future.

It is necessary to promote and realize the strategic career planning and realizing through structured, systemic, systematic and specialized career guidance. In general secondary education, there is a need for career guidance that enhances students' readiness for career self-management.

Literatūra References

Ahmed, A.A., Sajid, M.A., Nesheen, S., & Sajid, A. (2015). The Relationship between Career Self-Management and Different Dimensions of Employees' Organizational

- Commitment. *International Journal of Management and Social Sciences Research*, 4(1), 58-62. Retrieved from <http://www.irjcjournals.org/ijmssr/Jan2015/9.pdf>
- Akkermans, J., Brenninkmeijer, V., Huibers, M., & Blonk, R.B. (2013). Competencies for the Contemporary Career: Development and Preliminary Validation of the Career Competencies Questionnaire. *Journal of Career Development*, 40(3), 245-267. DOI: 10.1177/0894845312467501.
- Ananina, E.V. (2006). Gotovnost' starsheklassnikov k professional'nomu samoopredeleniju. *Vestnik JuUrGU*, 9, 62-67. Retrieved from <https://cyberleninka.ru/article/n/gotovnost-starsheklassnikov-k-professionalnomu-samoopredeleniyu>
- Aron, I.S. (2015). Motivacija k professional'nomu samoopredeleniju podrostkov, nahodjashhihsja v osovoj social'noj situacii razvitija. *Psihologicheskaja nauka i obrazovanie*, 7(1), 154-164. DOI: 10.17759/psyedu.2015070115. Retrieved from <http://psyedu.ru/journal/2015/1/Aron.phtml>
- Arthur, M.B., Inkson, K., & Pringle, J.K. (1999). *The new careers: Individual action and economic change*. Thousand Oaks, CA: Sage.
- Arthur, M.B., Khapova, S.N., & Wilderom C.P.M. (2005). Career success in a boundaryless career world. *Journal of Organizational Behavior*, 26(2), 177-202. DOI: <https://doi.org/10.1002/job.290>
- Baltusite, R., & Katane, I. (2014). The structural model of the pedagogy students' readiness for professional activities in the educational environment. In V. Dislere (Ed.), *Proceedings of the 7th International Scientific Conference Rural environment. Education. Personality*, 7(29-41). Jelgava: Latvia University of Agriculture. Retrieved from <https://llufb.llu.lv/conference/REEP/2014/Latvia-Univ-Agricult-REEP-2014-proceedings-29-41.pdf>
- Baltušīte, R. (2013). *Pedagoģijas studentu gatavība profesionālai darbībai skolas vidē*. Promocijas darbs. Zin. vad. I. Katane. Jelgava: LLU.
- Besklubnaja, A.B. (2013). *Formirovanie gotovnosti starsheklassnikov k vyboru professii. Avtoreferat*. Nizhnij Novgorod: Nizhegorodskij gosudarstvennyj arhitekturno-stroitel'nyj universitet. Retrieved from <http://www.dslib.net/orders/?action=list&id=4264747>
- Briscoe, J.P., Hall, D.T., & Frautschy DeMuth, R.L. (2006). Protean and boundaryless careers: an empirical exploration. *Journal of Vocational Behavior*, 69(1), 30-47. DOI: <https://doi.org/10.1016/j.jvb.2005.09.003>
- Brown, Ch.P. (2017). *School Readiness*. Austin: University of Texas. Retrieved from: https://www.researchgate.net/publication/321168575_School_Readiness
- Brown, S.D., & McPartland, E.B. (2005). Career interventions: Current status and future directions. In W.B. Walsh, & M.L. Savickas (Eds.), *Handbook of vocational psychology: Theory, research, and practice*, 3rd ed. (195-226). Mahwah, NJ: Lawrence Erlbaum Associates.
- Chiaburu, D.S., Baker, V.L., & Pitariu, A.H. (2006). Beyond being proactive: What (else) matters for career self-management behaviors? *The Career Development International*, 11(7), 619-632. DOI: <https://doi.org/10.1108/13620430610713481>
- Chin, W.S., & Shen, Q.L. (2015). Factors Affecting Individual Career Management among Undergraduates in Higher Education Institutions. *International Journal of Academic Research in Business and Social Sciences*, 5(10), 56-68. DOI: 10.6007/IJARBS/v5-i10/1842.
- Chistjakova, S.N. (2007). Problema samoopredelenija starsheklassnikov pri vybore profilja obuchenija. *Pedagogika*, 1, 19-26. Retrieved from <https://portalus.ru/modules/shkola/>

- rus_readme.php?subaction=showfull&id=1193319817&archive=1196814959&start_from=&ucat=&
- Coetzee, M. (2019). The Value of Future-Fit Psychosocial Career Self-management Capabilities in Sustaining Career Wellbeing. In I. Potgieter, N. Ferreira, & M. Coetzee, (Eds.), *Theory, Research and Dynamics of Career Wellbeing* (139-157). Springer, Cham. DOI: https://doi.org/10.1007/978-3-030-28180-9_7
- Cvetkova, N.A. (2005). *Professional'noe samoopredelenie lichnosti na raznyh jetapah stanovlenija professionala*. Dis. kand. Jaroslavl': Jaroslavskij gosudarstvennyj universitet. Retrieved from <https://www.dissercat.com/content/professionalnoe-samoopredelenie-lichnosti-na-raznykh-etapakh-stanovleniya-professionala/read>
- Daugol, R., & Sherstha, M. (2019). Learning Readiness and Educational Achievement among School Students. *The International Journal of Indian Psychology*, 7(2), 467-476. DOI: 10.25215/0702.056
- DiRenzo, M.S. (2010). *An examination of the roles of protean career orientation and career capital on work and life outcomes*. Doctoral dissertation. Chestnut St: Drexel University. Retrieved from <https://idea.library.drexel.edu/islandora/object/idea%3A3378>
- Francis-Smythe, J., Haase, S., Thomas, E., & Steele, C. (2013). Development and Validation of the Career Competencies Indicator (CCI). *Journal of Career Assessment*, 21(2), 227-248. DOI: 10.1177/1069072712466724.
- Greenhaus, J.H., & Callanan, G.A. (1994). *Career management* (2nd ed.). Fort Worth, TX: Dryden Press.
- Hirschi, A., & Läge, D. (2007a). Holland's secondary constructs of vocational interests and career choice readiness of secondary students. *Journal of Individual Differences*, 28(4), 205-218. DOI: 10.1027/1614-0001.28.4.205
- Hirschi, A., & Läge, D. (2007b). The relation of secondary student's career-choice readiness to a six-phase model of career decision-making. *Journal of Career Development*, 34(2), 164-191. DOI: 10.1177/0894845307307473
- Imakaev, V., Gadzhieva, L., Vihman, A., & Popov, A. (2015). *Gotovnost' starsheklassnikov k professional'nomu samoopredeleniju: jempiricheskaja model' i ee interpretacija, 10*. Retrieved from <http://presto-online.ru/content/gotovnost-starsheklassnikov-k-professionalnomu-samoopredeleniyu-empiricheskaya-model-i-ee>
- Ireland, G.W., & Lent R.W. (2018). Career exploration and decision-making learning experiences: A test of the career self-management model. *Journal of Vocational Behavior*, 106, 37-47. DOI: <https://doi.org/10.1016/j.jvb.2017.11.004>
- Jung, Y., & Takeuchi, N. (2018). A lifespan perspective for understanding career self-management and satisfaction: The role of developmental human resource practices and organizational support. *Human Relations*, 71(1), 73-102. DOI: <https://doi.org/10.1177/0018726717715075>
- Kalinina, I.A. (2007). *Psichologicheskaja gotovnost' studentov k professional'noj dejatel'nosti i ee vzaimosvjaz' s uspeshnost'ju obuchenija*. Avtoref. dis. Moskva: Moskovskij psihologo-social'nyj institut. Retrieved from <https://www.dissercat.com/content/psichologicheskaya-gotovnost-studentov-k-professionalnoi-deyatelnosti-i-ee-vzaimosvyaz-s-usp>
- Katane, I., & Baltusite, R. (2007). Ecological Approach for the Formation and Development of Prospective Teachers' Readiness for the Professional activities at Latvian Schools. *Transformations in Business & Economics*, 6(2), 114-132.

- King, Z. (2004). Career Self-Management: Its Nature, Causes and Consequences. *Journal of Vocational Behavior*, 65(1), 112-133. DOI: 10.1016/S0001-8791(03)00052-6
- King, Z. (2001). Career self-management: a framework for guidance of employment adults. *British Journal of Guidance & Counselling*, 29, 66-78. DOI: <https://doi.org/10.1080/03069880020019365>
- Klimov, E.A. (2004). *Psihologija professional'nogo samoopredelenija*. Moskva: Akademija. Retrieved from <http://padaread.com/?book=3942&pg=1>
- Kossek, E.E., Roberts, K., Fisher, S., & DeMarr, B. (1998). Career Self-management: a quasi-experimental assessment of the effects of a training intervention. *Personnel Psychology*, 51(4), 935-962. DOI: <https://doi.org/10.1111/j.1744-6570.1998.tb00746.x>
- Krouwel, S., van Luijn, A., & Zweekhorst, M. (2019). Developing a processual employability model to provide education for career self-management. *Education + Training*. DOI: <https://doi.org/10.1108/ET-10-2018-0227>
- Kuijpers, M.T., & Scheerens, J. (2006). Career Competencies for the Modern Career. *Journal of Career Development*, 32(4), 303-319. DOI: 10.1177/0894845305283006.
- Lent, R.W., & Brown, S.D. (2013). Social Cognitive Model of Career Self-Management: Toward a Unifying View of Adaptive Career Behavior Across the Life Span. *Journal of Counseling Psychology*, 60(4), 557-568. DOI: 10.1037/a0033446.
- Lent, R.W., Morris, T.R., Penn, L.T., & Ireland, G.W. (2019). Social-cognitive predictors of career exploration and decision-making: Longitudinal test of the career self-management model. *Journal of Counseling Psychology*, 66(2), 184-194. DOI:<https://doi.org/10.1037/cou0000307>
- Linde, N. (2013). *Vidusskolēna gatavība pašrealizācijai un tās attīstība mācību procesā*. Rīga: LU. Pieejams <https://dspace.lu.lv/dspace/handle/7/34359>
- Luthans, F., & Youssef, C.M. (2004). Human, social, and now positive psychological capital management: Investing in people for competitive advantage. *Organizational Dynamics*, 33, 143-160. DOI: 10.1016/j.orgdyn.2004.01.003.
- Malikova, V.A., & Prokopenko, I.G. (2011). Psihologicheskaja gotovnost' studenta k kar'ernomu rostu. *Vestnik OGU*, 2(121), 209-214. Retrieved from http://vestnik.osu.ru/2011_2/36.pdf
- Merkulova, N.N. (2010). *Formirovanie psihologicheskoy gotovnosti uchashhihsja profil'nyh uchebnyh zavedenij k professional'nomu vyboru*. Nizhnij Novgorod: Nizhegorodskij gosudarstvennyj arhitekturno-stroitel'nyj universitet. Retrieved from <https://www.dissercat.com/content/formirovanie-psikhologicheskoi-gotovnosti-uchashchikhsya-profilnykh-uchebnykh-zavedenii-k-pr/read>
- Miķelsone, I. (2008). Karjeras attīstība cilvēku dzīves ciklos. No Dz. Šulce (red.), *Karjeras attīstības atbalsts. Izglītība. Konsultēšana. Pakalpojumi* (13-18). Rīga: VIAA.
- Miller, M.J., & Brown, S.D. (2005). Counseling for career choice: Implications for improving interventions and work with diverse populations. In S.D. Brown & R.W. Lent (Eds.), *Career Development and Counseling* (pp. 441-465). Hoboken, NJ: Wiley&SonsInc.
- Mitin, S.N., Kidinov, A.V., Fedotov, S.N., Leontev, M.G., Bolotova, A.K., & Kalinin, I.V. (2018). Modern Models Of Career Readiness. *Modern Journal of Language Teaching Methods*, 8(3), 78-86.
- Noe, R.A. (1996). Is career management related to employee development and performance? *Journal of Organizational Behavior*, 17(2), 119-133. Retrieved from <https://www.jstor.org/stable/2488587>
- Paradņike, K., Endriulaitiene, A., & Bandzevičiene, L. (2016). Career self-management resources in contemporary career frameworks: a literature review. *Organizaciju*

- Vadyba: *Sisteminiai Tyrimai*, 76, 91-106. DOI: <http://dx.doi.org/10.7220/MOSR.2335.8750.2016.76.6>
- Pavlova, A.M. (2005). Motivacionnyj faktor v aktualizacii professional'no-lichnostnogo potenciala sub"ekta truda. *Mir psihologii*, 1, 170-176. Retrieved from <https://elibrary.ru/contents.asp?titleid=8861>
- Pinto, J.C., & Taveira, M. do C. (2013). Developing career self-management skills: A study in higher education. *The International Journal of Management Science and Information Technology*, 8, 28-58. Retrieved from <https://www.econstor.eu/bitstream/10419/97868/1/786026286.pdf>
- Raabe, B., Frese, M., & Beehr, T.A. (2007). Action regulation theory and career selfmanagement. *Journal of Vocational Behavior*, 70, 207-311. DOI: <https://doi.org/10.1016/j.jvb.2006.10.005>
- Retivyh, M.V. (2013). Istoricheski slozhivshiesja koncepcii proforientacii i osobennosti ih razvitija v sovremennyh uslovijah. *Vestnik Brjanskogo gosudarstvennogo universiteta*. Retrieved from <https://cyberleninka.ru/article/n/istoricheski-slozhivshiesya-kontseptsii-proforientatsii-i-osobennosti-ih-razvitiya-v-sovremennyh-uslovijah>
- Savickas, M.L. (1984). Career maturity: The construct and its appraisal. *Vocational Guidance Quarterly*, 32, 222-231. DOI: <https://doi.org/10.1002/j.2164-585X.1984.tb01585.x>
- Savickas, M.L. (2001). Toward a comprehensive theory of career development: dispositions, concerns, and narratives. In F. T.L. Leong & A. Barak (Eds.), *Contemporary models in vocational psychology: A volume in honor of Samuel H. Osipow*, 12 (pp. 295-320). Mahwah, NJ: Lawrence Erlbaum Associates. Retrieved from <https://psycnet.apa.org/record/2001-16483-011>
- Secundo, G., De Carlo, E., Madaro, A., Maruccio, G., Signore, F., & Ingusci, E. (2019). The Impact of Career Insight in the Relation with Social Networks and Career Self-Management: Preliminary Evidences from the Italian Contamination Lab. *Sustainability*, 11 (21), 5996. Retrieved from <https://www.mdpi.com/2071-1050/11/21/5996/htm>
- Shibankova, S.V. (2008). *Psihologicheskie uslovija professional'no-lichnostnogo samoopredelenija starsheklassnikov*. Avtoref. dis. Nizhnij Novgorod: Nizhegorodskij gosudarstvennyj arhitekturno-stroitel'nyj universitet. Retrieved from <https://www.dissercat.com/content/psihologicheskie-usloviya-professionalno-lichnostnogo-samoopredeleniya-starsheklassnikov/read>
- Smith, E.C. (2014). Career Self-Management and Career Capital of Mid-Level Administrators in Higher Education Who Previously Served as Professional Academic Advisors. *Theses and Dissertations*. Fayetteville: University of Arkansas. Retrieved from <http://scholarworks.uark.edu/etd/2293>
- Sokolova, D.V. (2015). Izuchenie psihologicheskogo aspekta professional'nogo samoopredelenija obuchajushhihsja. *Mir nauki*, 3, 1-10. Retrieved from <http://mir-nauki.com/PDF/33PSMN315.pdf>
- Sokolova, D.V., & Senicheva, N.N. (2015). Psihologicheskaja gotovnost' starsheklassnikov k professional'nomu samoopredeleniju. *Voprosy territorial'nogo razvitija*, 5(25). Retrieved from <https://cyberleninka.ru/article/v/psihologicheskaya-gotovnost-starsheklassnikov-k-professionalnomu-samoopredeleniyu>
- Stabiņš, J. (1998). *Audzēkņu gatavības veidošanās dzīvesdarbībai komercskolas pedagoģiskajā procesā*. Rīga: RPIVA. Pieejams <https://dspace.lu.lv/dspace/handle/7/46025?show=full>

- Sturges, J. (2008). All in a Day's Work? Career Self-Management and the Management of the Boundary between Work and Non-Work. *Management Human Resource Journal*, 18(2), 118-134. DOI: 10.1111/j.1748-8583.2007.00054.x.
- Super, D.E. (1990). A life-span, life-space approach to career development. In D. Brown, & L. Brooks (Eds.), *Career choice and development: Applying contemporary theories to practice*, (2nd ed.). (pp. 197-262). San Francisco, CA: Jossey-Bass.
- The Global Competitiveness Report 2019*. Insight Report. (2019). K. Schwab (Ed.). Geneva: World Economic Forum. Retrieved from http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf
- Tims, M., & Akkermans, J. (2020). Job and Career Crafting to Fulfill Individual Career Pathways. In J.W. Hedge, & G.W. Carter (Eds.), *Career Pathways: From School to Retirement* (pp. 165-189). Oxford: Oxford University Press.
- Transforming our world: the 2030 Agenda for Sustainable Development*. (2015). United Nations General Assembly, 70/1. Retrieved from https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf
- Van Esbroeck, R., Tibos, K., & Zaman, M. (2005). A dynamic model of career choice development. *International Journal of Educational and Vocational Guidance*, 5, 5-18. Retrieved from <https://link.springer.com/article/10.1007/s10775-005-2122-7>
- Vertsberger, D., & Gati, I. (2015). The effectiveness of sources of support in career decision-making: A two-year follow-up. *Journal of Vocational Behavior*, 89, 151-161. DOI: <https://doi.org/10.1016/j.jvb.2015.06.004>
- Yu, Ch. (2013). The Relationship between Undergraduate Students' Creative Self-efficacy, Creative Ability and Career Self-management. *International Journal of Academic Research in Progressive Education and Development*, 2(2), 181-193. Retrieved from <https://pdfs.semanticscholar.org/0923/d516458e5e22525df98777ba640685d971ac.pdf>
- Zakaria, N., Yamin, A., & Maarof, R. (2017). Career Management Skills Among Vocational Students. *International Research and Innovation Summit. IOP Conference Series: Materials Science and Engineering*, 226(1). DOI: 10.1088/1757-899X/226/1/012187
- Zeer, J.F. (2005). Professional'noe samoopredelenie i potencial professionala. *Mir psihologii*, 1, 141-147. Retrieved from <https://elibrary.ru/contents.asp?titleid=8861>

SKILLS FOR CREATING SUPPORTIVE LEARNING ENVIRONMENTS – AN ESSENTIAL COMPONENT OF TEACHERS' PROFESSIONAL COMPETENCE

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Abstract. *The current research on music teachers' professional skills of structuring and developing supportive learning environments for implementation of National Curricula is the third in line, based on a pilot project of 2013, a study of 2015. The research problem for all the three studies was "How do music teachers at general comprehensive schools comprehend supportive learning environment and opportunities for their design and development. The data collected and analysed (n=70) in 2019 allow to follow the development of teachers' professional abilities and creativity at structuring and designing supportive environments for learning music at general comprehensive schools and kindergartens. If smartly designed and created, they promote learning, lead to higher academic achievement and contribute to students' self-esteem. The study has also provided information about teachers' professional approaches, real environments at schools and the needs for improvement. The analysis of the data, providing some insights allows to make recommendations for teacher training, for curriculum design at school level and offer suggestions for cultural activities in local communities supporting cohesion and identity building in society. Current turbulent times require increasingly wider competences and creativity from teachers for making music education socially meaningful.*

Keywords: *creativity, music education, professional skills, social impact of music education, supportive learning environments, teachers' comprehension of environment structures.*

Introduction

Whatever the curriculum says, teachers are the ones to implement it and responsible for their students' achievement (from a practicing teacher).

The issue of developing supportive learning environments (SLE) has been an issue for educational reforms related to implementation of new national curricula (NC) in all countries, also in Estonia where curriculum development for general comprehensive schools has been a difficult and often controversial

process since regained statehood in 1991. The life span of educational aims, the selected content of learning as well as its organization usually does not exceed a decade, as the rapidly changing world around us with its new challenges sets new demands for education, especially to that meant for all the population. No curriculum reform can change everything overnight, however, new school subjects can appear and some disappear according to what is considered necessary and useful to know preparing the new generation for future life by answering the perennial question “What is worth learning?” Even if that has been specified in NC by careful selection, its implementation requires conditions needed for specific learning activities. These conditions can be defined by a common concept of learning environments, which can be characterised as educational approaches, cultural contexts or physical settings. Good learning environments these days are expected to be not only supportive, but also interactive and engaging, developing independent and critical thinking, and hopefully, leading to desired learning outcomes. The role and potential of supportive learning environments was also the key theme on the British Educational Training and Technology Show (January 2020), where 600 companies offered their educational products, which could be used to enhance learning of any kind (BETT, 2020). There is even a journal *Learning Environments Research* (LER) since 1998 and there are numerous articles, how to create context based learning environments in science subjects. There have also been advances in research concerning learning environments of different kind (e.g. Aldridge & Frazer, 2008), the most recent one being an overview of thirty recent years (Zandvliet & Frazer, 2019).

Although research on learning environments can be traced back for some forty years, there has been no research so far, how to create supportive learning environments for music education at general comprehensive schools. This article is dedicated to research in that particular field and how teachers could professionally design it.

NC, music education and specific environments for that

In addition to traditional languages, math, sciences and history, Estonian NCs of different times have always contained music as a compulsory school subject. It has often been questioned whether it really needs to be there, considering how long it takes to train music teachers, how costly it is to provide instruments, and accept the fact that not all people are musically talented. Accordingly, many, and not only politicians, have considered compulsory music education a waste of resources (money, time, competence). However, recent brain research has proved the value and meaning of music and musicking (a term meaning *making music*) for all people, as during developmental stages, active engagement with music can impact the way that the brain can process information,

enhance the perception of language and speech, and subsequently improve our ability to communicate with others and learn to read (e.g. Hallam, 2010, et al.). So we have found new and solid arguments to proceed with music education with its full cycle from kindergarten up to the end of gymnasia/high schools.

The NC of 1996, 2002 and 2010/2011 have specified rather high aims. The NC of 2011 lists development of *students' musical literacy skills, /.../ comprehension and respect different national cultures /.../, creation of pieces of music /.../ with the following components: singing, playing musical instruments, musical movement, composing, listening to music and musicology, musical literacy and educational outings /.../. By introducing Estonian and global music culture to the students, their musical tastes and socio-cultural value judgements are shaped.* (NC, 2011)

All these undoubtedly positive cultural and social aspirations specified as aims need to be described as a carefully selected content for learning, and put into practice at school level. When the content of learning in syllabi has been described, conditions for acquisition of particular knowledge and skills have to be created. It means implementation of the NC by teachers, primarily creation of the learning process with its specific learning activities in suitable learning environments. Accordingly, all school subjects require specific environments. However, the NCs of 2010/2011 have for the very first time in music syllabi, both for compulsory schools and gymnasia us specified requirements for the physical environment for music education as follows.

The school enables the students to use the following resources: natural piano, and piano chair, synthesizer, audio system, board with staves, music stands, shifting quarter note, scale degrees` chart, keyboard chart, a computer with a sound card and Internet connection with notation and MIDI recording software. The school conducts the lessons in a classroom where students can work in groups and there is sufficient space for movement. The school provides the necessary instruments (the Orff-set of instruments, recorder or 6-string smaller zithers and acoustic guitars) for the students to engage in making music. (NC, 2011)

Our research was triggered by the fact that such a specification, although listing several objects, was unstructured and not systematic, which made practical implementation difficult, because meaningful and needed environments to support teaching and learning music are much more diverse. Music teachers as well as other subject teachers have to consider many more opportunities for creating their subject specific SLEs and have the skill to structure and develop them into a practically functioning system. The pilot studies of 2013 and 2015 showed already then that environments for music education were considerably more advanced than described in the NC as the majority of schools had special choir classes (to preserve our tradition of Song Celebrations). These

have usually adjacent front tables and seats, placed on different levels of semi-circular steps, so that all singers can see the conductor and be organized by vocal groups when performing music (Laanemets & Rostovtseva, 2015).

This article is a summary of three different research projects of 2013, 2015 and 2019 showing the development of music teachers' comprehension, how to structure, design and create SLEs for music education, considering different opportunities of formal, informal and non-formal education.

Theoretical background and components of learning environments

We probably have to agree with Edmonds (Edmonds, 1999), who claimed already then all learning environments be complex and multidimensional, and even if its components were known, it is still not easy to unite it into a meaningful and systematic whole, most suitable for learning a particular subject, topic or skill. Kurt Lewin (1936) was among the first to discuss the concept of person-environment fit (PEF) and simply said – by creating learning environments that align with the needs of learners, educators can maximize achievement of their students and themselves. Understandably, as learners vary, teachers must be able to create varied learning environments. At the same time, teachers have to consider the subject content they teach, so that they can recognise all possible opportunities that can be used for learning and understanding the meaning of knowledge and skills provided by a particular school subject. All educators should understand that the learner is at the heart of creating effective and varied learning environments, which enable students to understand, why a particular environment (technical, cultural, linguistic, etc.) is useful and supportive for their learning. It probably goes without saying that teachers should try to identify features of environments that help to create developmentally appropriate conditions, so that learners of all ages feel secure, comfortable, welcome and ready to explore and learn.

Wilson (1995) has specified minimal learning environments where there have to be learners and functional rooms/spaces used for studies. In 2006 Salomon (Salomon, 2006, 255) considered any environment suitable for learning, if specially designed and where learning takes place as a supervised process and where instruction can be provided by teachers, computers, worksheets, etc. Harsh and Young (2015) explain a strategic approach to designing such environments for maximum impact through deeper learning by using real world examples. Environment variations can be designed to enhance depth of content, augment instructional processes or expand the range of students' learning outputs. (Harsh & Young, 2015, 79)

Although several researchers have tried to analyse and structure different environments in diverse way, it is really difficult to generalize, or even describe

them adequately. Finnish specialists (Manninen et al., 2007, 36–41) have specified five of them: physical, social, technological, local and didactical environments, which allow to gain a broader view of available opportunities that could be used as environments for learning. It is also possible to consider formal, informal and non-formal educational spheres that could be used for acquisition of desired and intended knowledge and skills. In Estonian teachers' training, when talking about supportive learning environments, we usually specify three big fields: spatial conditions, study aids and social environments. (Läänemets, 2013/2017, 46–47).

Spatial environments have to be functional and provide the facilities required for specific learning activities. It starts with school architecture, e.g. classrooms, gyms, labs, etc. All infrastructure, including school territories must meet safety, hygiene and aesthetic standards.

Study materials have to correspond to the content of syllabi specified in the NC. In addition to traditional textbooks, workbooks, maps, instruments etc., there are numerous study aids available in virtual environments. However, traditional study aids probably stay for long. There is ample research to support the potential of different textbooks for learning. According to Ruuska (2015) a textbook is a framework that learning is based on (Ruuska, 2015, 43). Vuorinen (2015) considers all teaching materials tools that are adapted to the needs of the teacher and the pupils, enabling access to new information and learning new things (Vuorinen, 2015, 117). Moreover, Elomaa (2009) suggests that teachers might gladly use textbooks because they do not have the time themselves to prepare appropriate material for their students (Elomaa, 2009, 31). It has to be agreed that the textbook provides a good framework for teaching and leads the way in a sense, to which teachers can add other elements they see fitting. Guerretaz & Johnston (2013) say that the textbook provides structure and even acts as the curriculum (Guerretaz & Johnston, 2013, 781). The fact that teachers more often teach the textbook than design a school curriculum for implementation of the NC seems to be true in many countries.

Social environments and organization of learning activities means school organization and management by a rational timetable and professional teamwork, providing friendly and supportive atmosphere and where individual abilities and capacities are respected. It also means potential support from school leaders to extracurricular activities, cooperation between school and homes. Meaningful integration of all potential and opportunities of formal, informal and non-formal education are much more important for music education than any other school subject (Läänemets et al., 2018).

It can be concluded that although some basic elements of SLE can be specified, its design remains subject specific and greatly dependent on teachers' professional skills and creativity.

Objectives, methods and data collection

The objective of the studies was to observe and analyse how teachers' professional skills have developed and how environments, which music teachers can use, have developed and improved in the process of implementation of the music syllabus as specified in the most recent NC. Based on recommendations offered in the studies of 2013 and 2015 some changes were made in music teachers' pre- and in-service training at the Estonian Academy of Music and Theatre, which allowed to see the preliminary impact of the introduced changes.

The research questions were the following:

1. How do teachers understand the concept of learning environments and how can they structure them?
2. What are the materials/study aids they can use to develop supportive environments?
3. What has changed/improved in SLE for music education in recent years?
4. What are the teachers' present needs for creating supportive learning environments for motivating and successful music education?

Our three studies can be considered longitudinal in character, as they are descriptive and based on data collected over an extended period of time (from 2012–2019). Considering the fact that Estonian music teachers rarely change their jobs, mostly the same respondents were studied at different points in time, which makes the study also “cross-sectional”. A cross-sectional study provides a „snapshot” of a population at a particular point in time (Cohen & Manion, 1997, 68). For all three research projects, mixed methods were used as this type of research provides a more complete view, and it also helps during the different phases of a research project to choose the right and effective tool for the study. (Guest, 2013; Johnson & Christiansen, 2014; Creamer, 2017 et al.)

The research data were collected by semi-structured questionnaires, both paper and web-based and by focus groups' interviews in 2013 and 2015. In 2019, web-based questionnaires and focus groups interviews were used. The questions were influenced by the theoretical framework to an extent, but the analysis is still more inclined to be data-driven (Vanha, 2017, 25). The data was analysed using content analysis method (Tuomi & Sarajärvi, 2009), which describes the phenomenon – in this case learning environments for music education – and the purpose of the analysis is to create a verbal and clear account of it through text analysis. The purpose of the analysis of qualitative data is increasing the information value to create meaningful, clear and coherent information from disconnected data. (Vanha, 2017, 24)

Conclusions about the phenomenon being inspected can be used for making recommendations for organizing teacher pre-service and in-service training but

also for curriculum development, implementation, especially for economics of education.

The final study was carried out in 2019. Since 2016/2017 the course theme of learning environments has been included into the pre- and in-service music teacher training curricula. The study of 2019 used a random sample of 70 respondents, all of which work as music teachers in towns (41%) or rural schools (59%). 48% of teachers have MA degree of a certified music teacher, the others have BA or have studied at vocational music school, some have attended in-service teacher training courses within “Open University” projects. All respondents were given a number for analysis. 55,8% of respondents have been working longer than 15 years, 32,9% have work experience of more than 20 years. 25,7% of respondents have worked 1 to 5 years. Teachers’ work load is rather big and they mainly work at one school: 34,2% of them delivers 21–29 lessons per week, 15,7% have incredibly up to 30–37 weekly working hours. Their activities consist of music lessons (98,6% of the work load), supervising and conducting choirs (81,4%), orchestras (5,7%), ensembles (40%) or soloists (2,9%).

Results and discussion

Results of the analysis are presented by the criteria as follows, which are based on research questions.

1. How do teachers comprehend SLE and how do they structure it?

Compared to earlier data, teachers have started to structure the SLE more precisely and they still start with spatial conditions where the music lessons take place. Whether the room is supportive or not for learning music, they usually do not specify or explain what the potential of a particular classroom is.

79% of respondents use specially equipped music classrooms and they consider it also supportive for teachers, but they do not want to share it with teachers of other subjects. If they have to use ordinary classrooms, they have to use a different environment, not organized by themselves and it seems to disturb them. Perhaps it should also be studied, how different environments (specially designed SLE and ordinary rooms) impact on students’ learning activities. 27,1% of respondents carry out their music lessons in ordinary classrooms, 20% use school assembly hall and ordinary classrooms. However, it was not specified, whether they used the same room or was it a random choice according to the school lesson plan. In five cases music teacher use a computer class, lecture halls, corridors and even the balcony of the school assembly hall has once been mentioned. Understandably, in such cases we cannot talk about SLE, or teachers’ preparatory attempts to structure and/or design environments specifically for their subject, although it would be critically needed. According to Meador (2019) in a structured learning environment, students are more likely to thrive and experience

personal and academic growth. Too often teachers provide students with freedoms that they can abuse. A lack of structure can destroy a learning environment and undermine a teacher's authority, leading to misbehaviour and wasted time that could be used for learning. Thus, it has to be acknowledged that teachers cannot always use their existing skills to structure and design suitable and supportive learning environments.

It takes time to bring music instruments and study aids from one classroom to another, as the only available time for that are breaks between lessons. Teachers consider it *unnecessary, tiring and often causing stress, sometimes even unmanageable*. (R20) It also became clear that in schools, where music lessons take place at ordinary or at random chosen places, the school leaders' supportive role to music activities at school have not been mentioned.

Structuring of SLE and choice of classrooms also greatly depends on the number of students in a class, for whom the music lesson is delivered. Music lessons are usually organized for the whole class at all school levels: 41,4% of respondents reported the class size of 21–25 students, 34,2% more than 25 students.

2. What kind of study aids are available for creating SLE for music education?

All respondents have learned to differentiate between diverse study aids, and even in some cases, characterize shortly their potential which was not there in teachers' answers in 2013. They usually list textbooks and workbooks for music education, but also music instruments.

There are no clear preferences between materials offered by different publishing houses, usually teachers have their own individual taste, sometimes based on repertoire of songs offered, etc. Teachers are reasonably well informed about the study aids and materials available, but they mostly use textbooks they have got used to during several years of their school practice. About 20% of respondents say that buying new textbooks or other materials for music education is not the priority at their schools. 70% of the teachers questioned are using textbooks, but 12,4% does not. In 80% of all cases all students have got their individual school music textbook. Teachers often claim that *textbooks are meant and mainly to be used in lessons. So every child really has his/her own textbook (there is usually one set of class textbooks, which can be used in different classes)*. (R 38)

When comparing the use of textbooks and workbooks, teachers clearly prefer textbooks. This is usually explained by the fact that they have to follow the requirements of the music syllabus in the NC. Still, teachers often do not comprehend neither the role of the workbook as a part of the full set, designed by textbook authors, nor the full potential and functions of workbooks in general. However, workbooks can be a useful tool for teachers and offer a number of

diverse, interesting and meaningful learning activities, which in turn, greatly contribute to SLE, and provide opportunities for differentiated learning.

However, 38,6% of respondents claim workbooks necessary, 6% considers them most necessary (usually teachers working with a big work load). *It is good for consolidating acquired knowledge. A good tool for revising the themes already covered. Helps to development of literacy and notation, etc.* (R 24) *Workbooks make lessons more flexible and they offer students tasks good for development of their theoretical skills in music.* (R 28) *It is not possible for teachers constantly compile new tasks and/or exercises. Workbooks contain so many smart and practical consolidating exercises.* (R69) *It is quite simple for children to find and understand instructions for exercises and finish them at home. It also helps to catch up with learning, if they have been absent from school.* (R 19) *Children like workbooks, and they make teachers work less time consuming, especially for those, working with a big load.* (R 26)

When the school has managed to buy workbooks, so all students in the class have them (86%). If only the teacher has bought it (11%), he/she usually copies some exercises as worksheets, especially at gymnasium/high school level. *I often use workbook exercises as basis and compile similar to them my own worksheets.* (R 35)

28% of respondents are of the opinion that workbooks are necessary in some cases only, (or at some school level). *I usually have more practical music activities, and we study notation in the general process together with playing instruments, singing and their own compositions.* (R 41) *Most needed in grades 1–3. For comprehension, in grades 4–6. It is more interesting and meaningful to compile worksheets myself.* (R 9) *Workbooks could be at school available from grade 7 onwards, (just one class set), so that students could do some of these exercises now and then by copying them into their ordinary exercise books.* (R 60)

14,3% of respondents consider workbooks not particularly necessary. *There are lots of senseless exercises for me in textbooks.* (R 4) *Students' learning should focus on practical activities, not writing.* (R 70) *I believe every teacher should have their own style, how to plan music lessons. It should depend on an individual teacher personality. If necessary, I can compile all worksheets myself and there are lots of good materials in the Internet.* (R 22) *The majority of tasks in workbooks are of very little use. It is not rational to buy a full set of workbooks for a few good exercises.* (R 42) *Not necessary at all. We use ordinary exercise books and music sheets.* (R 32)

The opinions presented above may mean freedom for some teachers to decide about everything themselves and make them absolutely convinced about ones' high professionalism (compile worksheets, etc. themselves) or "specific style". It also has to be mentioned, that those teachers, not using textbooks or workbooks (14,3%) have acquired their qualification quite recently (during the

last decade, mostly by attending courses, and they have been working at school for a few years only. Perhaps some of these have tried to follow the so-called “new approach to learning”, where freedoms of different kind have been highlighted, both for students and teachers.

However, if schools want to follow well organized activities leading to attainment of aims set, such approaches with irregular activities without meaningful SLE may lead to ineffective learning processes, depriving students of opportunities to train their skills, especially new techniques. It can become rather difficult for inexperienced teachers, and they can lose borders between sequenced topics/units for studies and make students feel incapable of learning music. It is still important to highlight the fact that such a considerable number of respondents do not consider study aids as a part of SLE. It still has to be stressed that „textbooks assist managing a lesson, it saves time, give direction to lessons, guide discussion, facilitate in giving homework, making teaching ‘easier, better organized, more convenient’, and most of all, it provides confidence and security.” (DBE, 2015)

All music teachers consider music instruments important for SLE, more specifically in the lessons they deliver. There are usually pianos of different kind at schools (98,6%), rhythmic instruments (92,9%), barred instruments (80%), small cithers (65,7%), guitars (54,3%), drum sets (40%), ukuleles (21,4%). In addition to those teachers also use their own individual instruments: *flutes, violins, double bass, accordions, guitars, etc. I keep them in my music class and use as a study aid.* (R25)

3. What do teachers still need for development of SLE?

Usually teacher want to have more different music instruments (51%), technical equipment of good quality stationary music class with movable furniture (for making space for movement). In addition to those they mention that in-service training courses organized by different institutions/entrepreneurs are few, they are often of low quality and unsystematic. *In recent times we also have to use different digitalized study aids, there are usually some general courses available. However, there is practically nothing for development of specific musical skills – for listening, guessing various games, which we really need.* (R 11) Teachers want trainings/courses in smaller groups, *because in big groups practical music activities and use of instruments remains insufficient.* (R 44) They also expect greater interest in music from children. *It is inevitable for younger teachers to face the fact that senior students have not been taught by me and they have not learnt to love and value music. I am trying to develop that love among younger children, but for the senior students it is unfortunately too late already.* (R 63) Some respondents also say that students do not always take learning music with responsibility as *students think that they come into the music lesson to sing and have a rest.* (R 28) *There is a widely spread understanding in society that music*

is just entertainment. However, the job of a music teacher is one of the toughest at school, and only the other music teacher can understand it, nobody else. (R 41) I understand that it is the task of music education to develop interest in music, but when they experience success, when performing, it could lead them to continue with making music in their later life. This would probably improve mental health in all society and make it less money-oriented. Unfortunately, many music teachers choose a simpler route and focus on music history in their lessons. Still, it can be delivered in a most fascinating way, and there could be most intriguing tasks for listening and song repertoire related to that, which also can be most developing for all people. I believe many music teachers consider them bad teachers, because they do not have enough time for their musical activities (especially playing instruments) and there are not enough resources at schools to organize music activities. (R 5)

4. How have teachers' professional skills to structure and create SLE developed at schools and outside schools?

As before, according to studies of 2013 and 2015, everything depends on the work load of music teachers. They work with choirs, ensembles, orchestras and soloists, which means that they have to create different SLE considering the students they work with and activities they have to organise, as the aims of musical activities are different. In addition to delivering music lessons there are lots of traditional activities and events at school music teachers are made responsible for, as their students are expected to perform there: festive events, graduation ceremonies, school anniversaries, Christmas and spring concerts, mothers' and fathers' days, teachers' day, the first school day event in September, etc.

In addition, there are church concerts, advent concerts, concerts for young musicians, competitions for ensembles, orchestras, soloists, etc., family days, festivals, events for young composers, choir camps for exercising for traditional Song Celebrations everybody is eager to take part in at least once in a life-time. This list tells about active music life in Estonia, but it also means additional work for music teachers.

For making music education more diverse and offer student experience of listening professionally made music, schools widely use concerts, organized by the company Eesti Kontsert. *It is possible to book shorter school concerts, but also full performances. (R 16) These events are mainly offering classical music and these are the concerts students perhaps would not go on their own initiative. (R 58) Needless to say, experience with high quality professional music „can improve learning and increase positive classroom atmosphere”.* (Eerola & Eerola, 2013) Teachers have also mentioned professional musicians and composers, former graduates of their schools, who willingly come to concerts and other events. Understandably, this is not the case with all schools.

78,6% of respondents said that they often perform in their community, especially from small schools of rural areas. 59% of respondents reported performing in events in Tallinn and other towns. Teachers also mentioned their students' participation in competitions (45,7%), festivals (31,4%), concert tours (12,9%).

Music teachers also feel the support of local music schools (40%) and hobby groups (37,3%), although no active cooperation has been mentioned. Some teachers do not know, how many of their students attend music schools. However, some say that there is *too little support, as it is extremely difficult to find people to teach playing instruments or dancing*. (R 34) Understandably, those students attending music schools, perform more often at school events. Unfortunately, 8% of respondents claim that they are not supported in any way in their community.

All music education at schools is closest connected with the Estonian cultural great event – Song Celebrations. To have the right and take part in this event is the aim of all choirs. 67,1% of respondents have been singing there more than once, 10% once, but 22,9% of respondents have never taken part in these celebration with any of their school choirs. Sometimes they still perform at local Song Celebrations which take place more often. Choirs of those music teachers, who have worked at school 20 or more years, have also attended Song Celebrations more often. Two respondents explained their no-attendance with the fact that they have worked at school only 1 year. Six respondents admitted the fact that they had not passed the compulsory rehearsal.

It can be concluded that the majority of music teachers are active in creating both at school and outside school SLEs, but there is still a long way to go for using all the potential for its enrichment.

Conclusion and recommendations

Although the data collected over a period of 8 years was not too long, it can be considered adequate for monitoring, how the music syllabus in the NC was implemented. It can also be concluded that music teachers' professional understanding and thinking have improved in time, especially after the topic on design and creation of supportive learning environments was included into their pre- and in-service training. They have learnt, how important SLEs are and what the potential of meaningful integration of diverse opportunities of formal, informal and non-formal education could be for development of successful music education. Their skills for structuring and designing SLE have also developed, which has contributed to their professional abilities. However, it has to be admitted that music teachers work under rather different conditions, which cannot always be considered as SLE for music education at schools only. Accordingly, both school environments as well as activities and events out-of school need

systematic monitoring. Still, it has to be stressed that more attention should be paid to SLE when training all teachers of all subjects. We have proposed a specialized course on theory and implementation of NC could be added to all teacher training programs, which undoubtedly could provide new professional knowledge and skills in their respective fields. Smart development of SLEs would make learning any school subject more successful and meaningful for students as well as for teachers' when planning and carrying out their work.

References

- Aldridge, J.M., & Frazer, B.J. (2008). *Outcomes-Focused Learning Environments: Determinants and Effects*. Rotterdam, The Netherlands: Sense Publishers.
- Best, J.W. (1970). *Research in Education*. Prentice-Hall, Englewood Cliffs, New Jersey.
- Cohen, L., & Manion, L. (1997). *Research Methods in Education*. Fourth Edition. London: Routledge.
- Creamer, E.G. (2017). *An introduction to fully integrated mixed methods research*. Thousand Oaks, CA: Sage.
- Department of Basic Education. (2015). *The effective use of textbooks in the classroom*. The Ministry of Education of the Republic of South Africa. Retrieved from <https://www.umalusi.org.za/docs/presentations/2015/textbooks.pdf>
- Eerola, P.S., & Eerola, T. (2014). Extended music education enhances the quality of school life. *Music Education Research*, 16(1), 88–104.
- Elomaa, E. (2009). *Oppikirja eläköön! Teoreettisia ja käytännön näkökohtia kielten Oppimateriaalien uudistamiseen*. Jyväskylä: Jyväskylä University Printing House.
- Guerrettaz, A.M., & Johnston, B. (2013). Materials in the classroom ecology. *The Modern Language Journal*, 97(3), 779–796. Retrieved from <https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1540-4781.2013.12027.x>
- Guest, G. (2013). Describing mixed methods research: An alternative to typologies. *Journal of Mixed Methods Research*, 7, 141–151. Retrieved from <https://doi.org/10.1177/1558689812461179>
- Eesti Vabariigi valitsus. (2011). *Gümnaasiumi riiklik õppekava* (National Curriculum for upper secondary schools. In Estonian). Retrieved from <https://www.riigiteataja.ee/akt/129082014021>
- Eesti Vabariigi valitsus. (2011). *Põhikooli riiklik õppekava* (National curriculum for basic schools. In Estonian). Retrieved from <https://www.riigiteataja.ee/akt/129082014020>
- Hall, R.A. (2015). Critical Thinking in Online Discussion Boards: Transforming an Anomaly. *The Delta Kappa Gamma Bulletin*, Spring 2015, 81-3, 21–28.
- Hallam, S. (2010). The power of music: Its impact on the intellectual, social and personal development of children and young people. *International Journal of Music Education*, 28(3), 269–289. Retrieved from http://legacy.laphil.com/sites/default/files/media/pdfs/shared/education/yola/susan-hallam-music-development_research.pdf
- Harsh, S., & Young, J. (2015). Using varied Learning Environments for Deeper Learning and Student Mastery of Complex Content. *The Delta Kappa Gamma Bulletin*, Spring 2015, 81-3, 7–16.
- Heller, D.E. (2001). *The states and public higher education policy: Affordability, access and accountability*. Baltimore, MD: Johns Hopkins University Press.

- Johnson, R.B., & Christensen, L.B. (2014). *Educational research: quantitative, qualitative, and mixed approaches* (5th ed.). Los Angeles, CA: Sage.
- Kubota, R., & Austin, T. (2007). Critical approaches to world language education in the United States: An introduction. *Critical Inquiry in Language Studies*, 5(2 & 3), 73–83.
- Lewin, K. (1936). *Principles of Topological Psychology*. New York: McGraw-Hill.
- Laanemets, U., & Rostovtseva, M. (2015). Developing supportive learning environments. *Psychology Research*, 5(1), 32–41. David Publishing.
- Läänemets, U. (2013, 2017). *Didactica minima*. (In Estonian). Tallinn: Juura.
- Läänemets, U., Kalamees-Ruubel, K., Kiilu, K., & Sepp, A. (2018). Curriculum Development Considering Formal, Non-formal and Informal Education. In *Society. Integration. Education*. Proceedings of the International Scientific Conference, II, 286–295.
- Meador, D. (2019). *Basic Strategies for Providing Structure in the Classroom*. Retrieved from thoughtco.com/strategies-for-structure-in-the-classroom-4169394
- Ruuska, H. (2015). Opettajan ei tarvitse tehdä työvälineitään. In H. Ruuska, M. Löytönen & A. Rutanen (Eds.), *Laatua! Oppimateriaalit muuttuvassa tietoympäristössä*, (pp. 41–46). Porvoo: Bookwell Oy.
- Salomon, G. (2006). The systemic vs. analytic study of complex learning environments. In J. Ellen and R.E. Clark (Eds.). *Handling Complexity in Learning Environments: Theory and Research*, (pp. 255–274). Amsterdam: Elsevier.
- Tuomi, J., & Sarajarvi, A. (2009). *Laadullinen tutkimus ja sisällönanalyysi* (5th ed.). Helsinki: Tammi.
- Vanha, L. (2017). *Teachers' perspectives on the role of textbooks in English language learning and teaching in Finland*. Master thesis. Faculty of Humanities, University of Oulu. Retrieved from <http://jultika.oulu.fi/files/nbnfioulu-201706012364.pdf>
- Vuorinen, K. (2015). Kieltenoppimateriaalit. In H. Ruuska, M. Löytönen & A. Rutanen (Eds.). *Laatua! Oppimateriaalit muuttuvassa tietoympäristössä*, (pp. 117–128). Porvoo: Bookwell Oy.
- Wilson, B. (1995). Metaphors for instruction: Why we talk about learning environments. *Educational Technology*, 35(5), 25–30. Retrieved from <http://carbon.ucdenver.edu/~bwilson/wils95>
- Zandvliet, D.B., & Fraser, B. (Eds.) (2019). *Thirty Years of Learning Environments. Looking Back and Looking Forward*. Series: *Advances in Learning Environment Research*, 11. Leiden, The Netherlands: Koninklijke Brill NV.

SĀKUMSKOLĒNA – LASĪTĀJA RAKSTUROJUMS: PROBLĒMAS UN RISINĀJUMI

A Profile of Primary School Reader: Problems and Solutions

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Abstract. *In order to ensure a targeted development of literacy in a primary school, it is important to recognize needs and realize experience of the little reader.*

The article aims to analyze the results of a study of literacy levels, reading habits and needs of pupils studying in classes 2 and 3.

The study's methodology is based on psychological theories about the current development of children of the youngest school age, on necessity theories, linguadidactic theories and educational observation, as well as on teacher polls.

The data analyzed in the study was collected from April 2017 to January 2018. The study involved 819 pupils studying in classes 2 and 3.

The results of the study have been processed using quantitative (arithmetic mean, frequency distribution) and qualitative (meaning content analysis) methods.

They have contributed to the development of the profile of the Latvian starting school reader, and have exposed the difficulties encountered by students while learning and using literacy, as well as the reading habits of pupils and the main causes to draw attention to in the primary education process, in order to improve the level of literacy and gradually turn in a proficient reader.

Keywords: *competent reader, reading habits reading literacy, reader profile.*

Ievads

Introduction

Pētījuma aktualitāte izriet no OECD Starptautiskajā skolēnu novērtēšanas programmā PISA 2018 iegūtajiem rezultātiem. Salīdzinot ar iepriekšējo ciklu – PISA 2015, Latvijas skolēniem lasītprasme ir statistiski nozīmīgi samazinājusies. Lai arī atsevišķi sasniegumi skolēniem lasītprasmes jomā ir uzlabojušies, piemēram, prasme atrast informāciju un to izprast, nevaram samierināties ar to, ka, salīdzinot ar citu valstu skolēnu rezultātiem, Latvijas skolēniem ir zemāki sasniegumi informācijas izvērtēšanas un reflektēšanas jomā. Nozīmīga problēma ir arī skolēnu mazais vārdu krājums, kas traucē

uztvert un izprast tekstu, neprasmē strādāt ar dažādiem avotiem. Joprojām Latvijā sasniegumi lasīšanā ir atšķirīgi atkarībā no dzimuma vai izglītības iestādes atrašanās vietas. Meitenēm ir ievērojami augstāki sasniegumi nekā zēniem, starp Latvijas skolām ar augstiem vidējiem sasniegumiem dominē Rīgas skolēni. Ne mazāk nozīmīgs ir fakts, ka tiem skolēniem, kuri lasa gan iespīstās grāmatas, gan digitālos tekstus, vidējie sasniegumi lasīšanā ir augstāki. Savukārt skolēniem, kuri lasīšanu izmanto galvenokārt tikai mācību vajadzībām, jo, kā atzīst skolēni, tas ir obligāti jādara, bet nelasa sava prieka pēc un lasīšanu neuzskata par vienu no saviem vaļaspriekiem, ir zemāki sasniegumi. Pat tiem skolēniem, kuri vairākas reizes dienā lasa e-pastu, ziņas, tiešsaistē meklē informāciju mācību nolūkiem, piedalās grupu diskusijās vai forumos, meklē tiešsaistē dažādus sarakstus, informāciju par pasākumiem, padomus u.c., vidējie sasniegumi lasīšanā ir augstāki par to skolēnu sasniegumiem, kuri šādās darbībās iesaistās retāk vai neiesaistās vispār (Latvija OECD Starptautiskajā skolēnu novērtēšanas programmā PISA 2018 – pirmie rezultāti un secinājumi, 2019).

Ņemot vērā to, ka sākumskola ir tas izglītības posms, kurā sākas lietpratīga lasītāja veidošanās process, aktuāla problēma ir, kā mācību procesā skolēna un skolotāja sadarbībā panākt augstāku skolēnu lasītprasmes līmeni, kā skolotājam kļūt par šī “ceļa rādītāju”, apzinoties, ka sākumskolēns ir tajā vecumā, kurā viņš grib darīt, bet ne vienmēr zina, kā to var veiksmīgāk izdarīt. Skolotājs ir tas, kurš profesionāli var palīdzēt apgūt dažādus, šajā gadījumā, lasītprasmes apguves un attīstības paņēmienus, pārliecināt, ka lasīšanas process ir aizraujošs, un tāds var būt mūža garumā. Taču, lai skolēna un skolotāja sadarbība būtu veiksmīga, lai varētu mērķtiecīgi risināt iepriekš minētās problēmas, bija svarīgi veikt pētījumu par to, kādas ir mūsdienu sākumskolēna objektīvās un subjektīvās vajadzības, ar kurām jāreķinās lasītprasmes apguves procesā.

Raksta mērķis ir analizēt Latvijas sākumskolēna – lasītāja portretu un piedāvāt vairākus pedagoģiskos risinājumus viņu lasītprasmes attīstībai sākumskolā.

Pētījuma teorētisko pamatu veido pedagoģijas un psiholoģijas teorijas (Blakemore & Frith, 2005; Gutierrez & Rogoff, 2003; Hedegaard, 2002; Macintyre, 2007), lingvodidaktikas teorijas (Anspoka, 2008, Anspoka & Tūbele, 2015; Gootkina, 2010; Latham & Faulkner, 2013).

Empīriskajā pētījumā izmantota teorētiski pamatota un Latvijas izglītības pētījumos adaptēta aptaujas anketa ar slēgtiem un atvērtiem jautājumiem, kuras mērķis iegūt skolēna izpratni par vairākiem ar viņa lasītprasmi saistītiem jautājumiem. Anketas saturs un jautājumu forma veidota tā, lai sākumskolēns justos kā eksperts, sniedzot padomus anketā minētajam varonim.

Pētījumā piedalījās 819 Latvijas 2.–3. klases sākumskolēnu (53% no respondentu skaita 2. klases skolēni, 47% – 3.klases skolēni. Starp respondentiem 51% ir meitenes un 49% zēnu).

Ņemot vērā ievērojamo respondentu skaitu, datu vākšanas procesā tika izmantoti Latvijas Pasta pakalpojumi. Anketu aizpildīšanu vadīja skolēnu (respondentu) skolotāji un/vai klašu audzinātāji, ievērojot viņiem sniegtās instrukcijas. To skolēnu atbildes, kuri neprata izteikties rakstrunā, tika precīzi pierakstītas.

Anketās iegūtie dati tiek analizēti gan kvantitatīvi un kvalitatīvi. No kvantitatīvā viedokļa atspoguļots respondentu procentuālais dalījums par kādu jautājumu pēc izteikumu biežuma. No kvalitatīvā viedokļa pētījumā veikta respondentu izteikumu kontentanalīze. Izmantojot kontentanalīzi, iegūtas ar pētāmo problēmu saistītas satura vienības, un tās vispārinātas. Izmantojot vispārinātās satura vienības, aprēķināts to procentuālais sadalījums biežuma ziņā, tādejādi starp satura vienībām nav 100% dalījuma, jo vienam respondentam bija iespēja sniegt tādu atbildi, lai no tās izdalītu vairākas satura vienības. Tā ļauj iegūt informāciju par sākumskolēna izpratni, ko nozīmē labi lasīt, kāpēc lasītprasme ir nozīmīga viņa dzīvesdarbībā.

Lasītprasmes jēdziens *Reading literacy concept*

Atbilstoši OECD Starptautiskajā skolēnu novērtēšanas programmā izvirzītajām prasībām lasītprasme tiek definēta kā spēja saprast, izmantot un novērtēt rakstveida tekstus, lai sasniegtu savus mērķus, pilnveidotu savas zināšanas un potenciālu, piedalītos sabiedrības dzīvē (Geske, Grīnfelds, Kangro, & Kiseļova, 2013).

Ja 20. gadsimtā lasītprasmes apgūšana vai pilnveide galvenokārt bija saistīta ar grāmatu un tās lasīšanas kultūru, tad digitālo mediju laikmetā lasītprasmes jēdziens kļuvis plašāks, un šī prasme tiek attiecināta arī uz spēju atkodēt un izmantot daudzveidīgu tekstuālo, vizuālo un audiovizuālo informāciju (Godwin – Jones, 2011).

Tajā pašā laikā lasītprasmes apguve ir process, kas prasa piepūli un laiku, lai iemācītos izlasīt to, kas rakstīts uz papīra vai ekrāna, iespiestiem vai rakstītiem burtiem, lai uztvertu lasīto, iedziļinātos tajā un spētu par to spriest, stāstīt u.tml., citiem vārdiem sakot, darīt visu, kas nepieciešams atbilstoši lasīšanas nolūkam (Anspoka, 2015, 2008).

Nevaram ignorēt arī to, ka lasītprasmes apguve ir komplicētu un sarežģītu darbību kopums. Tās kvalitāte ir atkarīga gan no tā, ko skolēns lasa, gan no tā, kas notiek lasīšanas procesā, gan arī no tā, kas tiek darīts pēc teksta vai tā fragmenta izlasīšanas.

Lai veicinātu lietpratīga lasītāja veidošanos, lasīšanai un izlasītā interpretācijai piedāvājami dažādu žanru un stilu teksti. Ne mazāk svarīga ir arī noteikumu, veidlapu, reklāmu, sludinājumu, tabulu un diagrammu lasītprasme. Viens no skolas uzdevumiem, strādājot ar lasāmajiem tekstiem, ir apgūt prasmi veidot arī savus tekstus (Anspoka & Tūbele, 2015).

Lasīšana ir sarežģīts process, kurā nepieciešama uzmanība, atmiņa, asociatīvās saiknes starp sensorajām sistēmām, fonoloģiskā uztvere, ātra atkodēšana u.c.

Lasīšanas procesā notiek vārdu nozīmju uztveršana, jēdzieniskās saiknes saskatīšana, sapratne un izpratne, lasītā analītisks vērtējums, sociālo prasmju attīstība un vērtību izpratne (Gutierrez & Rogoff, 2003; Blakemore & Frith, 2005; Block & Duffly, 2008).

Ja lasīt var iemācīt samērā ātri, tad sakarību meklēšana starp teksta rindām ir tā prasme, kas veidojas izteikti individuālā, daudzveidīgā darbībā.

Lasīšanas process ir saistīts arī ar tādiem aspektiem kā prasmi paredzēt, kontrolēt, uzdot jautājumus, lasīto saistīt ar attēlu (šis aspekts ir būtisks mūsdienās, jo jāspēj ātri lineāru tekstu saistīt ar ilustratīvo materiālu), atgriezties un atkārtoti pārlasīt tekstu, mainot lasīšanas mērķi, atrast galveno domu, apkopot un novērtēt u.c. Ņemot vērā, ka mūsdienās ir sastopami arī daudzveidīgi digitālie un virtuālie teksti, lasītprasmes apguves procesā skolēnam ir vajadzīga prasme ātri reaģēt, dalīt uzmanību starp vajadzīgo un nenozīmīgo informāciju, ierobežotā laikā izlasīt vai tekstā atrast vajadzīgo informāciju (Block & Duffly, 2008; Anspoka & Tūbele, 2015).

Iepriekš aprakstītais ļauj secināt, ka kļūt par lietpratīgu lasītāju, kurš lasa tekstu, skaidri zinot lasīšanas nolūku, piemēram, noskaidrot kādu jautājumu, izprast ideju, iegūt jaunu informāciju, sagatavot stāstījumu, atrisināt krustvārdu mīklu, salīdzināt savu pieredzi ar tekstā pausto, strukturēt tekstā atrodamo informāciju tabulā vai attēlā, pilnveidot lasīšanas tehniku u.c., kā arī tekstā ātri pazīst vārdus, lasa, izmantojot atbilstošu lasīšanas paņēmienu, izprot teksta saturu, izlasīto informāciju saista ar jau zināmo informāciju un kritiski vērtē, ir pēctecīgs un mērķtiecīgs process.

Tikai lietpratīgs lasītājs ir spējīgs domāt par teksta saturu, jo viņam grūtības vairs nesagādā burtu, zilbju, vārdu, frāžu un apjomīgāku teksta daļu izlasīšanas tehnika (Anspoka & Tūbele, 2015).

Lai skolēns varētu kvalitatīvi veikt mācību uzdevumus skolā un ārpus tās, jau 2. un 3. klasē ir svarīgi panākt, lai skolēns veidojas par pieredzējušu lasītāju.

Skolēna izpratne par lasītprasmi un tās nozīmi dzīvesdarbībā *The reading literacy understanding of the pupil and it's role in his/her life*

Meklējot atbildi uz pētījuma jautājumu par to, kādas ir sākumskolēna vajadzības, lai skolēns var pakāpeniski kļūt par lietpratīgu lasītāju, svarīgi bija noskaidrot, ko skolēni lasa un kāpēc, skolēnuprāt, jāprot labi lasīt.

Pētījuma dati apliecina, ka visbiežāk skolēni lasīšanu saista ar daiļliteratūras lasīšanu. Viņi norāda, ka lasa par piedzīvojumiem (25,74%), lasa pasakas vai stāstus par dažādiem notikumiem (23,68%), dzīvniekiem (21,88%). Statistiski nenozīmīgas ir respondentu atbildes par to, ka viņi lasa arī cita žanra vai stila tekstus.

Tas ļauj secināt, ka mācību procesā ir paplašināma skolēna izpratne par lasīšanu kā procesu, un to var izdarīt, mācību procesā iekļaujot darbu ar dažādiem tekstiem žanru, stilu, apjoma un izkārtojuma ziņā.

Noskaidrojot to, kā skolēni izvēlas lasāmos tekstus, 82% skolēnu apmeklēja bibliotēku, lai uz vietas lasītu grāmatas (51,06%), ņemtu grāmatas lasīšanai mājās (39,97%), pētītu grāmatas, to ilustrācijas (9,42%).

Iegūtie statistiski nozīmīgie dati par bibliotēku liek domāt par to, kā skolas vai vietējā pagasta bibliotēku izmantot par mērķtiecīgu resursu skolēna lasītprasmes pilnveidei un lietpratīga lasītāja pieredzes apguvei. Ir svarīgi panākt, lai bibliotēkas darbinieki ir mērķtiecīgs skolotāju atbalsta personāls mācību procesā. Bibliotēku attīstības veidotājiem un skolotāju tālākizglītotājiem ir pamats domāt par bibliotēkas funkciju, bibliotēku darbinieku un skolotāju sadarbības paplašināšanu.

No 802 atbildes sniegušajiem respondentiem 92% ikdienā izmanto internetu. Nozīmīgs fakts ir arī tas, ka informācijas ieguvei un apmaiņai 53% skolēnu izmanto sociālos tīklus, un biežāk minētie ir - draugiem.lv (67,90%), Instagram (40,74%), Facebook (34,07%).

Tie ir vērā ņemami fakti, kā šos resursus izmantot skolēna lasītprasmes apguves procesā.

Ir jāreķinās ar to, ka mūsdienu skolā mācās skolēni, kuri, agrīnā vecumā izmantodami informācijas tehnoloģijas, ir pielāgojušies plašai saziņai ar pasauli. Šāda saziņa ir loģisku darbību kopums, un tāpēc skolēnam ir svarīgi ne tikai tas, ko viņš dara, bet arī precīzi noteikumi, uz kuriem balstās šis darbs (Latham & Faulkner, 2013).

Mācību procesā ir būtiski pilnveidot skolēna zināšanas un prasmes, kā analizēt un izmantot dažādās interneta vietnēs iegūto informāciju, pilnveidot kritisko domāšanu un prasmi izvērtēt informāciju no ticamības viedokļa.

Darbam ar e-vidē sastopamajiem tekstiem ir vajadzīga digitālā prasme. 807 respondenti sniedza atbildes par to, ar kurām no aptaujā minētajām ierīcēm viņi prot rīkoties.

Apkopotie dati liecina, ka skolēni visaugstāk vērtē savu prasmi izmantot skārienjutīgo telefonu, planšeti un datoru (attiecīgi – 97,03%, 97,15% un 97,65%). Gandrīz puse – 44,98% respondentu atzīst, ka prot rīkoties ar interaktīvo tāfeli, kura tiek izmantota mācību procesā. Vērā ņemama skolēnu pieredze arī darbā ar skārienjutīgo galdu (25,03%) un dokumentu kameru (19,58%).

Iegūtie dati gan vēl nenozīmē, ka viņi to dara mērķtiecīgi, līdz ar to skolotājam rodas iespējas skolēnam to palīdzēt apgūt.

Taču ir redzamas arī procentuālās atšķirības starp to, kā skolēns prot lietot tehnoloģisko ierīci un to, cik bieži to izmanto mācību procesā. Visās sadaļās procentuālais daļījums sadaļā *izmanto mācību procesā* ir zemāks kā sadaļā *prot lietot* (sk. 1. tabulu).

1.tabula. Atbilžu procentuālais salīdzinājums starp skolēnu sniegtajām atbildēm, ar kurām ierīcēm, viņaprāt, prot rīkoties un kuras, viņaprāt, izmanto mācību procesā
Table 1 Comparison of responses provided by pupils (in percentage), showing which devices they consider they are able to handle and which devices they consider are used by them in the learning process

Ierīce	Prot lietot	Izmanto mācību procesā
Rakstāmmašīna	20,32%	1%
Dators	97,65%	82%
Planšete	97,15%	39%
Skārienjutīgais telefons	97,03%	53%
Telefons “ar podziņām”	74,23%	7%
Diktafons	19,21 %	1%
Interaktīvā tāfele	44,98%	40%
Skārienjutīgais galds	25,03%	4%
Dokumentu kamera	19,58%	13 %
3D printeris	12,76%	1%

Tā ir pretruna, kas risināma. Pastāv daudz dažādu iespēju, kā skolēnu motivēt lasīt un strādāt ar tekstu, pietam izmantojot tos līdzekļus, kuri skolēnam ir zināmi.

Nepietiekamais materiālais nodrošinājums, skolotāja neprasme vai nevēlēšanās integrēt skolēna prasmes mācību procesā nedrīkst būt šķērslis to neizmantošanai.

Noskaidrojot skolēnu izpratni par lasītprasmes nepieciešamību, gandrīz puse aptaujāto respondentu, t.i., 46% uzskata, ka jāprot lasīt, lai lasīšanu izmantotu papildu zināšanu ieguvei, ar to galvenokārt saprotot lasītprasmes

lomu mācīšanās procesā. 24% atbilžu norāda, ka lasītprasme nepieciešama, lai varētu izlasīt dažādus tekstus, jo lasītprasme ir nepieciešama ikdienā un ar sadzīvi saistītās situācijās, īpaši lasot tādus tekstus kā avīzes, informatīvos ziņojumus u.c. 30% skolēnu lasīšanas nozīmīgumu saista ar tās vajadzību darbā.

No tā var secināt, ka respondenti izprot lasītprasmes vajadzību cilvēka dzīvē. Ir apzināti svarīgākie lasīšanas nolūki kā lasīšana, lai iegūtu informāciju, lasīšana, lai atrastu atbildi uz konkrētu jautājumu, lasīšana emocionālās pieredzes pilnveidošanai u.c.

Pamatojums tam, ka no lasītprasmes ir atkarīga skolēna mācīšanās kvalitāte, ir arī 64% respondentu skaidrojums, ka viņiem skolā bijušas situācijas, kad nav bijuši spējīgi izlasīt uzdevumu nosacījumus, īpaši matemātikā, latviešu valodā, dabaszinībās un angļu valodā.

Daži skolotāja profesionālās darbības aspekti skolēna lasītprasmes apguves procesā

Some aspects of teacher's professional activities in the pupils reading literacy development process

Pētījuma laikā respondentiem tika modelēta situācija, kurā kāds skolēns neprot izlasīt vārdus vai tekstu. Tika jautāts, kam līdzīgā situācijā palīdzību lūgs skolēns.

Kā visbiežāko iepriekš minētās problēmas risinājumu respondenti min *pajautātu palīdzību skolotājam*, (47,54%), *atcerētos pats, ja iedziļinātos* (32,55%), *pajautātu klasesbiedriem* (14,05%).

Iegūtie dati liecina, ka skolotājs sākumskolā ir skolēna autoritāte, un to jāprot profesionāli izmantot.

Vienlaikus liela uzmanība pievēršama arī tiem skolēniem, kuri atbildes meklē paši atceroties vai iedziļinoties, un tas nozīmē, ka skolotājam jāprot to respektēt, nesteidzināt vai, nesagaidot tūlītēju rezultātu, pateikt skolēnam priekšā.

Savukārt statistiski nozīmīgais rādītājs, ka daļa skolēnu palīdzību lūgtu klasesbiedriem, skolotājam liek apzināties, kā grupu vai pāru darbā nodrošināt savstarpējo mācīšanos.

Ņemot vērā, ka sākumskolēna kā personības attīstība atkarīga no viņa individualitātes, veselības stāvokļa, sociālās un kultūrvides, kurā viņš dzīvo, savstarpējām attiecībām starp vienaudžiem un pieaugušajiem, vērtību sistēmas ģimenē (Hedegaard, 2002; Macintyre, 2007), skolotājs var veiksmīgi virzīt skolēna lasītprasmes apguves procesu.

Apgūstot iepriekš minētās prasmes, pastāv vairāki svarīgi nosacījumi, kas ņemami vērā, lai šis process notiktu ne tikai jēgpilni, bet arī skolēna piemērotā vidē.

Galvenais ir radīt pozitīvu, labvēlīgu attieksmi pret mācībām, tajā skaitā arī pret lasītprasme apguves procesu, jo šajā posmā tā ir jauna pieredze. Ja pret lasīšanu izveidosies negatīva attieksme, vēlāk to būs ļoti grūti mainīt, un skolēnam var rasties problēmas citu mācību priekšmetu apgūvē (Geske & Ozola, 2007).

Skolēna kā lasītāja pieredzes veidošanās, viņa dzīves vērtības, tajā skaitā arī lasīšana kā viņa dzīves vērtība atkarīga no dažādiem faktoriem (Huntsinger, Jose, Larson, Kreig, & Shaligram, 2000; Gutierrez & Rogoff, 2003).

Tas, ka zēnu un meiteņu lasītprasmes līmenis atšķiras, saistīts ar to, ka, sākot mācības skolā, zēni ir mazāk nobrieduši kā meitenes. Šajā vecumā nozīmīga ir arī sociālo lomu apguve. Tā kā vairākums sākumskolas skolotāju ir sievietes, tas atvieglo meitenēm identificēšanos ar skolotāju un līdz ar to, iespējams, palīdz labāk mācīties (Geske & Ozola, 2007). Iepriekš teiktais gan neatbrīvo skolotāju no profesionālas palīdzības arī zēniem apgūt lasītprasmi. Skolotājam, apzinoties šo problēmu, mācību procesā lielāka uzmanība pievēršama tieši skolēnu – zēnu interesēm atbilstošu tekstu izvēlei, lasītprasmes līmeņa attīstības dinamikas monitorēšanai. Lielāka uzmanība pievēršama arī zēnu gatavībai mācīties un sadarboties gan ar saviem vienaudžiem – kā zēniem, tā meitenēm un skolotāju.

Lai arī sākumskolēnam, īpaši 1. un 2.klasē raksturīga spilgta, dzīva iztēle ar tieksmi uz fantāziju, ne vienmēr skolotājs par apgūto pieredzi var sagaidīt atbilstošu refleksiju. Tas saistīts ar to, ka šajā vecumposmā joprojām ir grūtības ar augstas pakāpes abstrakto domāšanu (Krastiņa & Pipere, 2004; Šteinberga, 2013). Neprasme izteikt savas domas, nabadzīgais vārdu krājums var ievērojami bremsēt arī lasītprasmes attīstības procesu. Šajā sakarā statistiski nozīmīgais fakts, ka vairāk kā puse aptaujāto respondentu uzskata, ka ir grūtības kādā no mācību priekšmetiem viņu lasītprasmes dēļ, rosina domāt, kā plānot darbu ar noteiktiem matemātikas, dabaszinātņu u. c. jēdzieniem, to leksiskās nozīmes izpratni, panākt lielāku starppriekšmetu saikni, vienā mācību jomā iegūto zināšanu un prasmju pārnesi citā jomā.

Sākumskolā skolēns nav psiholoģiski orientēts uz rezultātu. Viņš ir gatavs iesaistīties procesā, un, ja vien skolotājs šo procesu vada tā, ka tas nav fragmentārs, bet sistēmisks, pēctecīgi no vienas darbības var pāriet uz otru, tiek dažādoti lasītprasmes apguvei paredzētie pedagoģiskie līdzekļi, skolēns var sekmīgi apgūt daudzas jaunas lietas, bieži pat netiešā veidā, un priecāties par savu veikumu (Anspoka, 2012).

Skolas pirmajos gados no didaktiskā viedokļa svarīgi radīt apstākļus, lai skolēnu aizrauj process, lai var iejusties tajā vidē, ko viņš pazīst, kas viņu interesē, lai darba temps un apjoms atbilst viņa individuālajām spējām (Gootkina, 2010).

Sākumskolēnam ir vajadzība pēc kaut kā jauna, interesanta un aizraujoša. Zinātkāre ir viņa dabiskais dzinulis. Tieksmi mācīties nosaka griba, kuru nevar ietekmēt ar varu. Svarīgi radīt apstākļus, kuros skolēns apkārtējā pasaulē cenšas noskaidrot lietu un parādību mijšakarības, meklēt izlasītā satura saistību ar reālo dzīvi (Krastiņa & Pipere, 2004; Anspoka & Tūbele, 2015).

Skolotājam ir jābūt gatavam saskarties arī ar izaicinājumiem. Mūsdienās skolēna zināšanas un prasmes kādā jomā var būt arī augstākas nekā skolotājam. Tas nozīmē integrēt skolotāja profesionālo kompetenci ar skolēna zināšanām un prasmēm, lai pēc iespējas īsākā laikā iegūtu augstākus mācību sasniegumus, šajā gadījumā, augstāku skolēna lasītprasmes kvalitāti.

Secinājumi **Conclusions**

- Mūsdienās lasītprasme ir svarīga dzīvesdarbības prasme, kas ļauj cilvēkam izlasīt to, kas rakstīts gan uz papīra, gan ekrāna, iespiestiem vai rakstītiem burtiem, iedziļināties un uztvert lasīto, to kritiski vērtēt, salīdzināt iepriekšējo pieredzi ar jauno pieredzi vai kā citādi apgūt prasmi reflektēt.
- Lasīšana ir sarežģīts process, kurā nepieciešamas tādas prasmes kā uzmanība, atmiņa, fonoloģiskā uztvere, ātra kodēšana, vārdu nozīmju uztveršana, jēdzieniskās saiknes saskatīšana, sapratne un izpratne, lasītā analītisks vērtējums, sociālās prasmes, ātra reakcija, prasme šķirt vajadzīgo un nenozīmīgo informāciju, ierobežotā laikā izlasīt vai tekstā atrast vajadzīgo informāciju.
- Sākumskolā ir paplašināma skolēnu izpratne par lasīšanas procesu, mācību procesā iekļaujot darbu ar žanru, stilu, apjoma un izkārtojuma ziņā dažādiem tekstiem. Īpaša uzmanība pievēršama e-vidē sastopamajiem tekstiem un darbam ar tiem, pilnveidojamas skolēnu zināšanas un prasmes, kā lasīt, analizēt un izmantot dažādās interneta vietnēs iegūto informāciju, pilnveidot kritisko domāšanu un prasmi izvērtēt informāciju no ticamības viedokļa.
- Ņemot vērā to, ka zēnu un meiteņu lasītprasme sākumskolā ir atšķirīga, īpaša uzmanība pievēršama tieši zēnu lasītprasmes attīstības dinamikas regulārai monitorēšanai.
- Statistiski nozīmīgais fakts, ka vairāk kā puse aptaujāto respondentu uzskata, ka grūtības kādā no mācību priekšmetiem rodas viņu lasītprasmes dēļ, tas rada vajadzību plānot darbu ar matemātikas, dabaszinātņu u.c. jēdzieniem, to leksiskās nozīmes izpratni, panākt lielāku starppriekšmetu saikni, vienā mācību jomā iegūto zināšanu un prasmju pārnese citā jomā.

- Lasītprasmes apguves procesā vairāk izmantojami bibliotēku resursi, svarīgi panākt lielāku skolotāju un skolas vai pagasta bibliotēku darbinieku sadarbību sākumskolas mācību procesā.
- Skolēni prot lietot dažādas tehnoloģiskās ierīces, un tas nozīmē, ka nepietiekamais materiālais nodrošinājums, skolotāja neprasme vai nevēlēšanās integrēt skolēna prasmes mācību procesā nedrīkst būt šķērslis to neizmantošanai. Lai veicinātu skolēna augstākus sasniegumus lasīšanā, svarīgi integrēt skolotāja profesionālo kompetenci ar skolēna zināšanām un prasmēm.

Summary

The topicality of the study stems from the results of the OECD Programme for International Student Assessment (PISA) 2018, which indicate a significant decline in reading literacy among Latvian pupils. Although pupils have improved their ability to find information and comprehend it, compared to the results of pupils of other countries, Latvian pupils have lower results in areas of information assessment and information analysis. The small vocabulary of pupils, which interferes with the perception and comprehension of text, as well as inability to work with different sources, is also a major problem. In Latvia, reading results still differ and depend on a sex or a location of educational establishment. Girls have significantly higher achievements/results than boys, and Riga city pupils dominate over other Latvian schools with average and high achievements/results.

In the light of a fact that the beginning of a process of developing a smart reader originates in a primary school, an actual problem emerges how to achieve higher levels of reading among pupils in the learning process by teachers.

However, a study on the current objective and subjective needs of primary school pupils was carried out to ensure that the cooperation between a pupil and a teacher is successful in order to be able to address the problems mentioned above.

The purpose of the article is to analyse the profile of the pupil of Latvian primary school and to offer a number of pedagogical solutions for the development of his/her reading literacy in primary school.

The empirical study uses a questionnaire, which is theoretically based on and adapted to Latvian education studies, with closed and open questions. The contents of the questionnaire and the form of the questions are designed in such a way that make primary school pupils feel like experts providing advice to a personage mentioned in the questionnaire.

The study covered 819 Grade 2-3 Latvian primary school pupils (53% of the total number of respondents were pupils of Grade 2; 47% - Grade 3 pupils. Among respondents, 51% were girls and 49% were boys).

From a quantitative point of view, the percentage of respondents' responses according to the frequency of statements is reflected. From a qualitative point of view, the study carried out an analysis of respondents' statements. By using the generalized content units associated with the problem under investigation there has been calculated their distribution (in percentage) in terms of frequency, therefore there is no 100% division between the content units, as one respondent was able to provide a response that would result in multiple content units.

The study's data show that pupils read fiction most frequently. As statistically insignificant were considered the respondents' answers stating that they also read texts of another genre or style. This leads to the conclusion that in the learning process an understanding of reading as a process has to be expanded, and it can be done via work with different texts in terms of genres, styles, size and layout. Special attention should be paid to the work with digital texts, as well as to knowledge and skills of pupils on how to read, analyse and use different online information. Also, critical thinking and the ability to evaluate information credibility have to be improved.

Of all respondents, 82% visit the library, and these are statistically significant data that suggest how to use the school or local parish library as an expedient resource for improving reading literacy of pupils and acquire the experience of a smart reader.

Considering the different reading skills of boys and girls in primary school, particular attention should be paid to the regular monitoring of the dynamics of the development of boy reading skills.

As 64% of respondents believe that learning difficulties in some subjects arise due to their poor reading skills, this makes it necessary to plan work on the concepts/notions of mathematics, science, etc., to elaborate/adjust their lexical meaning, to create a greater link between subjects, thus transferring knowledge and skills acquired in one field to another.

Of the 802 respondents, 92% use the Internet daily. It is also important that 53% of pupils use social networks for obtaining and exchanging information. It is a remarkable fact that these resources should be used in the process of acquiring reading skills.

Since the work with digital/online texts requires some digital skills, 807 respondents responded which devices they are able to handle. Collected data shows that 97% of pupils think they can handle different devices. This does not mean that they do it purposefully, consequently the lack of material provision, lack of teachers' skills or reluctance to integrate pupils' skills into the learning process should not be a reason of their non-usage. In order to promote higher reading literacy results, it is important to integrate the professional competence of a teacher with the knowledge and skills of a pupil.

Literatūra References

- Anspoka, Z., & Tūbele, S. (2015). *Lingvodidaktika: latviešu valoda 1. –6. klasē. Monogrāfija*. Rīga: LVA.
- Anspoka, Z. (2012). Rakstpratība pirmskolā un skolā: dažas pēctecības problēmas un risinājumi. *Sabiedrība. Integrācija. Izglītība. Rēzeknes Augstskolas starptautiskās zinātniskās konferences materiāli. 2. daļa*, 21 – 30.
- Anspoka, Z. (2008). *Latviešu valodas didaktika 1. – 4. klasē. Monogrāfija*. Rīga: RaKa.
- Blakemore, S-J., & Frith, U. (2005). *The Learning Brain: Lessons for Education*. United Kingdom: Blackwell Publishing.
- Block, C.C., & Duffy, G.G. (2008). Research on teaching comprehension. Where we've been and where we've going. *Comprehension instruction. Research –based best practices*, New York: The Guilford Press, 19 – 37.
- Geske, A., Grīnfelds, A., Kangro, A., & Kiseļova, R. (2013). *Latvija OECD Starptautiskajā skolēnu novērtēšanas programmā 2012 – pirmie rezultāti un secinājumi*. Rīga: LU Pedagoģijas, psiholoģijas un mākslas fakultātes Izglītības pētniecības institūts.
- Geske, A., & Ozola, A. (2007). *Skolēnu sasniegumi lasītprasme Latvijā un pasaulē*. Rīga: LU Akadēmiskais apgāds.

- Godwin - Jones, R. (2011). Emerging Technologies Autonomous Language Learning. *Language Learning and Technology*, 15(3), 4-11.
- Gootkina, N.I. (2010). School readiness in the context of the problem of preschool and primary school education continuity. *Psychological science and education. Perspectives on early childhood care and education*, 3, 85 – 91.
- Gutierrez, K.D., & Rogoff, B. (2003). Cultural Ways of Learning. Individual Traits or Repertoires of Practice. *Educational Researcher*, 32(5), 19 – 25.
- Hedegaard, M. (2002). *Learning and Child Development*. Denmark: Narayana Press.
- Huntsinger, C.S., Jose, P.E., Larson, S.L., Kreig, D.B., & Shaligram, C. (2000). Mathematics, vocabulary and reading development in Chinese American and European American children over the primary school years. *Journal of Education Psychology*, 92, 745 – 760.
- Krastiņa, E., & Pipere, A. (2004). *Mācību sasniegumu pašizvērtēšana*. Rīga: RaKa.
- Latham, G., & Faulkner J. (2013). Teachers of reading: Where new narratives in the virtual practice. *Australian Journal of Language and Literacy*, 36, 1. Retrieved from <https://www.questia.com/library/journal/1G1-318107070/teachers-of-reading-where-new-narratives-in-the-virtual>
- Latvija OECD Starptautiskajā skolēnu novērtēšanas programmā PISA 2018 –pirmie rezultāti secinājumi. (2019). Retrieved from https://www.izm.gov.lv/images/aktualitates/2019/OECD_PISA_2018.pdf
- Macintyre, C. (2007). *Understanding Children's Development in the Early Years*. London and NY: Routledge.
- Šteinberga, A. (2013). *Pedagoģiskā psiholoģija*. Rīga: RaKa.

ФОРМИРОВАНИЕ КУЛЬТУРЫ ОБЩЕНИЯ ШКОЛЬНИКОВ В ПРОЦЕССЕ ГРУППОВОЙ РАБОТЫ НА УРОКАХ В НАЧАЛЬНОЙ ШКОЛЕ

Formation of Communication Culture of Schoolchildren in the Process of Group Work at the Lessons of Primary School

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Abstract. *The authors of the article comment on the difficulties of the formation of communication culture among primary school pupils from the first days of training; explain the need for such educational work by the systematic use of new educational technologies at the lessons and in extracurricular activities of primary school pupils. It is represented the psychological and pedagogical prerequisites for the formation of communication culture from the point of view of cultural and communicative approaches to the organization of the educational environment. By means of the survey of primary school pupils and their teachers, the problematic moments of the organization of group work at the lessons are revealed. The researchers present the system of educational, cognitive and communicative situations for the formation of communication culture skills in the process of group work of pupils and comment on its productivity.*

Keywords: *primary school educational process, culture-oriented approach, innovative technologies, group forms of work, the formation of communication culture.*

Введение

Introduction

Процессы глобализации экономических систем, демократизации общественной жизни предполагают переориентирование образовательной системы с коллективных на групповые формы организации образования, активное участие школьников в работе малых групп, самостоятельное и взаимное обучение. Способность к корректной работе в паре или группе позволяет учащимся начальной школы быстрее и легче адаптироваться к условиям школьного обучения, сформировать «мягкие» навыки для

дальнейшей успешной жизни в человеческом обществе, проявить предметные и специальные способности, реализовать познавательные интересы, таким образом создать для себя ситуации жизненного успеха.

Вместе с тем, потребность в этичном участии детей в работе малой группы вступает в противоречие с преобладанием коллективных форм организации образовательного процесса в традиционной украинской начальной школе. В связи с тем, что дети недостаточно знакомы, не владеют умениями распределения обязанностей в групповой работе, не имеют опыта коллективного решения возникшей учебной задачи, организацию групповой работы берёт на себя учитель. Именно он определяет частотность использования в процессе обучения групповых или парных форм работы, личностный состав пар или малых групп, навязывает распределение ролей в группе, формирует способы решения учебной задачи на основе представленного образца. Таким образом, степень сформированности у учащихся культуры общения следует рассматривать не только с позиции изучения речевых этикетных норм, языковой правильности высказывания, богатства его лексических средств, но и точки зрения реализации речевых учебных и спонтанных коммуникативных ситуаций. Поэтому вопросы формирования культуры общения у детей младшего школьного возраста в процессе групповой работы остаются актуальными для научного исследования.

Историко-педагогический анализ проблемы формирования культуры общения свидетельствует о значительном интересе психологов и педагогов к различным её аспектам. Так, учёными активно исследовались сущность, структура и функции общения (Vygotskij, 1999; Leont'ev, 1969); методы и приёмы формирования культуры общения у разных возрастных групп школьников (Zyazyun, 2006); активные методы коррекции и совершенствования культуры речевого поведения школьников (Maksymenko, 2005; Demchenko, Kit, Goljuk et al., 2019).

Особый интерес современных исследователей к данной проблеме объясняется еще и культурным разнообразием школьников и педагогов в связи с активными миграционными процессами в странах Европы и Америки. На необходимости формирования навыков межкультурного общения для формирования уверенности в социальной защищенности, умений социального взаимодействия в классе как социальной группе, способности налаживать межличностные связи для содействия интеграции вновь прибывших учащихся в образовательные контексты нацеливают ученые Испании (Rojas, Castillejo, & Jimenez-Fernandez, 2018), Италии (Biasutti, Concina, & Frate, 2019), Румынии (Mesaros, Zivkov, & Markov, 2018), Хорватии (Nemet, 2018), Чили (Huaiquimil Hermosilla, Mellado Hernandez, & Cubo Delgado, 2019) и других стран.

Вопреки значительному интересу современных отечественных и зарубежных исследователей к вопросам культуры общения недостаточно изученным остаётся направление формирования умений коммуникации в процессе групповой и парной работы школьников при решении учебно-познавательных задач на уроках в начальной школе. Это и обусловило выбор темы нашей статьи.

Цель статьи – теоретическое и эмпирическое обоснование приёмов формирования культуры общения в ходе групповой работы учащихся на различных уроках в начальной школе.

Методы исследования: *теоретические* – анализ данных психолого-педагогической литературы, основных государственных документов об образовании, сопоставление данных для выяснения состояния исследуемой проблемы, определения и теоретического обоснования педагогических условий и разработки модели формирования культуры общения младших школьников в образовательном процессе; *эмпирические* – анкетирование, беседа, работа в фокус-группе учителей начальной школы для обсуждения вопросов формирования культуры речевого поведения, собеседование с младшими школьниками для прогнозирования гипотезы исследования и подтверждения её правильности; *методы статистического анализа* для преобразования эмпирических данных в количественные и качественные показатели.

Теоретические основы темы *The theoretical background*

Авторы проекта «Новая украинская школа» отмечают, что в перспективе до 2030 года украинские работодатели видят потребность в дополнительных когнитивных и социально-эмоциональных навыках своих работников (Bibik, 2018). То есть, требуется переориентирование системы образования с обеспечения профессиональных навыков на формирование «мягких» навыков. Решение этой задачи на основе компетентного подхода предусматривает формирование у выпускников школы умения высказывать свою позицию устно и письменно, логически её обосновывать, подкреплять адекватными аргументами; критически и системно мыслить; проявлять инициативность, оригинальность, творчество; умение решать проблемные ситуации; оценивать риски, конструктивно управлять эмоциями; применять эмоциональный интеллект; способность к сотрудничеству в команде.

Способность к сотрудничеству в команде требует не только наличия определённой информированности её участников в той или иной области знаний, умений мыслительной и речевой деятельности, но и навыков

комфортной парной или групповой работы, то есть наличия определенного уровня культуры общения.

Представим краткий анализ толкования базовых терминов проблемы. Культура школьника в психолого-педагогических исследованиях трактуется как способность к развитию и усовершенствованию своих способностей при решении нестандартных заданий в образовательном процессе. Несомненно, это относится и к культуре общения, поскольку оно является компонентом общей культуры школьника (Хомуч, 1998).

Общение большинством специалистов рассматривается как способ связи между личностями в процессе их взаимодействия (Leont'ev, 1969). В педагогическом значении общение следует рассматривать как взаимодействие учителя и школьников, школьников между собой в процессе обучения, которое создаёт максимально благоприятные условия у учащихся для развития мотивации и творческого характера учебно-познавательной деятельности. Оно также обеспечивает благоприятный эмоциональный климат в образовательном процессе, управление социально-психологическими связями в детском коллективе и позволяет самым выгодным образом использовать в процессе обучения личностные качества учителя (Poul", 2008).

Культуру речевого общения специалисты характеризуют с позиции таких основных признаков: чёткость, богатство, выразительность, многоплановость, адекватность речи образовательным ситуациям и задачам, способность планировать речевое высказывание и управлять им (Pentylyuk, 2010; Mesaros, Zivkov, & Markov, 2018).

Считаем целесообразным рассматривать вопросы формирования и развития культуры общения младших школьников с позиции компетентностного подхода к организации образования. Коммуникативную компетентность определяем как совокупность достаточно сформированных знаний об окружающем мире, коммуникативных и организаторских способностей, готовности к самоконтролю, нормативности вербального и невербального взаимодействия, умения эффективно решать конфликтные ситуации. Таким образом, термин «культура общения младших школьников» мы объясняем как сумму знаний детей младшего школьного возраста о правилах общения, осознание и реализацию учащимися правил общения с детьми и взрослыми, основанных на уважении и доброжелательности, а также корректного поведения в различных учебно-познавательных (работа в парах и группах) и социально-ролевых (в школе, на детской площадке, в театре или музее, в транспорте, на прогулке и т.д.) ситуациях школьного и семейного окружения.

В результате изучения психолого-педагогических предпосылок исследуемой проблемы в качестве ведущих критериев сформированности умений культуры общения мы можем дифференцировать *мотивационный, когнитивный, деятельностный* критерии. Мотивационный критерий позволяет определить степень осознания учащимися необходимости придерживаться правил культуры поведения, самостоятельно провести рефлексию коммуникативных умений. Когнитивный критерий предполагает полноту и точность владения школьниками моральными понятиями, осознание, глубину понимания правил культуры речевого поведения; потребности в систематическом пополнении этих знаний. Степень реализации правил культуры общения в различных видах деятельности и формах сотрудничества демонстрирует деятельностный компонент сформированности культуры общения. На основании анализа критерияльного аппарата по названным критериям и показателям можно определить *высокий, средний* или *низкий уровень культуры общения* младших школьников.

Конечную цель формирования культуры общения школьников специалисты видят в их становлении как сознательной языковой личности, способной вербальными и невербальными средствами решать личностные, познавательные, профессиональные и иные задачи, обладающей достаточной диалогической компетентностью и этической ответственностью (Lapshina & Ljubchak, 2019).

Формирование умений культуры общения предполагает целенаправленную образовательную работу как на уроках, так и во внеурочное время. Значительное влияние на её становление оказывает не только школьное окружение детей, но и их семейное окружение. Поэтому становление и развитие умений культуры общения должно быть организовано в единстве трёх направляющих: сам школьник, учитель и классный коллектив, семья.

Методы, организация и результаты исследования ***Methodology, organization and results of the research***

С целью выяснить реальный уровень формирования навыков культуры общения младших школьников средней общеобразовательной школы 1-3 ступеней №5 г.Винницы в начале 2019-2020 учебного года мы предложили 12 педагогам этого заведения ответить на вопросы анкеты: Как Вы оцениваете потенциал групповой и парной работы для формирования культуры общения учащихся? Какие трудности в организации работы по формированию культуры речевого поведения ощущаете? Какие приёмы работы считаете наиболее эффективными?

При ответе на первый вопрос «Как Вы оцениваете потенциал групповой и парной работы для формирования культуры общения учащихся?» 4 из 12 опрошенных высоко оценили потенциал активных образовательных технологий, основанных на парной и групповой работе учащихся. Три учителя отметили, что иногда используют такие формы работы, но из-за трудностей организации отдают предпочтение коллективной или индивидуальной работе школьников. 5 учителей не смогли четко сформулировать и убедительно обосновать свою позицию.

На второй вопрос анкеты «Какие трудности в организации работы по формированию культуры речевого поведения Вы ощущаете?» учителя давали полярные ответы. Самые адекватные ответы приведены в таблице 1.

Таблица 1. Трудности в организации работы учителя по формированию культуры речевого поведения

Table 1 The difficulties in the organisation of teacher's work in the formation of communication culture

Трудности	Количество ответов	%
Низкий общий уровень воспитанности детей	7	58,3
Отсутствие единства требований родителей и педагогов	5	41,7
Недостаточная помощь психолога школы	3	25,0
Влияние средств массовой информации	2	16,7

К трудностям формирования умений культуры поведения учителя, принимающие участие в педагогическом эксперименте, отнесли такие: низкий общий уровень воспитанности детей, которые начинают школьное образование; отсутствие единства требований родителей и педагогов к общению детей с ровесниками и взрослыми; недостаточную помощь психолога школы для формирования культуры общения учащихся. Некоторые отмечали негативное влияние средств массовой информации на уровень культуры общения школьников и отсутствие контроля со стороны родителей за качеством программ, которые смотрят дети. Как видим, педагоги рассматривают проблему формирования культуры речевого поведения младших школьников прежде всего в отсутствии единого влияния семьи и школы на становление личности воспитанников.

Самые разнообразные ответы мы получили на третий вопрос анкеты «Какие приёмы работы считаете наиболее эффективными?». Наиболее популярные ответы можем проследить в таблице 2.

Таблица 2. *Приёмы работы для формирования культуры общения учащихся*
 Table 2 *Techniques in the formation of students' communication culture*

Приёмы работы	Количество ответов	%
Коллективные морально-этические беседы	4	33,3
Сюжетно-ролевые игры	3	25,0
Коллективная творческая деятельность	2	16,7
Театрализация	2	16,7
Семейные праздники этического содержания	1	8,3

Как видим, наиболее эффективными приёмами работы по становлению культуры общения детей младшего школьного возраста учителя Винницкой СООШ №5 называют традиционные коллективные морально-этические беседы, использование сюжетно-ролевых игр. Вместе с тем, несколько учителей отметили организацию коллективной творческой деятельности, проведение семейных праздников и забав этического содержания и др. Вызывает удивление факт, что групповой и парной работы среди названных приёмов нет. Проведенный нами опрос педагогических работников носил диагностический характер, его результаты позволили предположить направления экспериментальной образовательной работы по становлению и развитию у учащихся начальной школы культуры общения.

Для определения исходного уровня культуры общения учащихся Винницкой СООШ №5 мы провели также собеседование с детьми 3 классов (61 школьник). В доверительной форме в присутствии одноклассников и одноклассниц, которых они считают верными друзьями, им были заданы такие вопросы: Как ты оцениваешь себя как собеседника / собеседницу? Интересен / интересна ли ты своим друзьям / подругам? Прислушиваются ли они, считаются ли с твоим мнением? Как ты убеждаешь друзей и одноклассников в правильности твоей точки зрения? Каким выражениям отдаешь предпочтение? Нравится ли тебе работать в паре или группе с одноклассниками? Какие умения нужно тебе выработать для успешной работы в группе?

В ходе таких индивидуально-групповых бесед мы пытались определить *уровень моральной сознательности* учащихся, степень развития их морального самосознания, понимания детьми важности групповой работы.

Настораживает факт, что большинство – 43 учащихся 3 классов (более 70% респондентов) не задумываются над предложенными вопросами, самостоятельно не пытаются оценить степень своей коммуникативной культуры, без уточняющих вопросов даже не понимают сути проблемы.

Но это дети, имеющие уже несколько лет опыта совместной учебно-познавательной деятельности и коммуникации по личным интересам.

Мы также предложили детям поразмышлять на тему: «Какой / какая я одноклассник / одноклассница?» Учащиеся составили и записали связное мини-высказывание с учётом пунктов-ориентиров:

1. Кто твои одноклассники и одноклассницы?
2. Каким учеником / ученицей себя считаешь ты? (прилежным, внимательным, организованным или ...) Почему ты так считаешь? Готов / готова ли ты к сотрудничеству в группе?
3. Доволен / довольна ли ты собой? (да, нет) Почему?
4. Что ты выберешь: самостоятельное выполнение задания или работу в группе? Чему нужно еще научиться, чтобы работа была успешнее?

В результате предложенного свободного письма школьники получили возможность составить коммуникативный автопортрет. Для объективной оценки результатов собеседования с учащимися заметим, что 6 школьников (9,8%) отказались выполнять это задание, а большая часть детей (51 школьник – 83,6%) без раздумий положительно оценили себя как участника коммуникации, отметив при этом только привлекательные характеристики («хороший», «вежливая», «заботливая», «доволен» и т.д.). И только 4 учащихся (6,6%) не довольны собой в общении с одноклассниками и готовы обратиться за помощью к учителю.

Таким образом, в основе формирования культуры общения младших школьников мы предполагаем *моральное самосознание детей, способность оценить собственные коммуникативные умения и способности тех, с кем придётся сотрудничать, готовность принять эмоциональное настроение собеседника / собеседницы, разделить позитивное или негативное настроение, успех / поражение, найти слова для коррекции этой ситуации.*

Также в свободное от уроков время мы предложили учащимся серию речевых ситуаций для рефлексии успешности общения. Учитывали такие ведущие признаки культуры общения:

- правильность построения и произношения фразы, точность и логичность ответных реплик;
- соответствие речевого поведения (сила голоса, поза, мимика и т.д.) ситуации общения, целесообразность манеры держаться в общении;
- выразительность и эмоциональность детской речи, умение контролировать эмоциональное настроение;
- адекватность содержания и формы общения его цели.

Представим несколько примеров речевых ситуаций, обсуждаемых с младшими школьниками:

Ситуация 1. Ты увидел / увидела в классе новую ученицу. Ты подошёл / подошла к ней и сказал / сказала: ... О чём ты у неё спросишь? Что обязательно расскажешь о себе?

Ситуация 2. Ты что-то рассказываешь одноклассникам и одноклассницам, но вдруг понимаешь, что тебя не слушают. Как ты привлечёшь внимание окружающих к своему высказыванию? Что при этом скажешь? Как скажешь?

Ситуация 3. Учитель предлагает выполнить учебное задание не самостоятельно, а в группе твоих одноклассников или одноклассниц. С кем ты хочешь поработать в группе? С какими словами обратишься к ребятам, чтобы образовать рабочую группу? Как предложишь распределить обязанности в этой группе?

Ситуация 4. На перерыве ты предлагаешь друзьям поиграть в весёлую игру и видишь, что одна из одноклассниц чем-то взволнована. Ты будешь настаивать на её участии в игре? С какими словами обратишься к ней? Что ей предложишь?

Ситуация 5. Уроки завершились. Что ты скажешь ребятам, с которыми провёл / провела интересный и насыщенный школьный день? Как попрощаешься с учителем / учительницей? А если ты на него / неё немного обижен, будешь ли прощаться?

Способы решения школьниками предложенных коммуникативных ситуаций продемонстрировали недостаточные знания детей о правилах этического общения, незначительный опыт использования формул речевого этикета, ситуативных этикетных реплик. Большая часть опрошенных не могут объективно оценить себя как собеседника, гибко и корректно отреагировать на отрицательную реакцию окружающих. Вместе с тем, 38 учащихся (62,3%) частично готовы к инициированию контактов с одноклассниками, организации совместной работы в группе, владеют средствами речевого этикета, но не всегда готовы их использовать в различных коммуникативных ситуациях.

В ситуации приветствия или прощания учащиеся предполагали использовать традиционные этикетные выражения, были очень сдержаны в припоминании выражений извинения или несогласия, на реакцию-ответ не рассчитывали. Кроме того, значительное количество школьников (20 детей – 32,8%) не готовы инициировать общение с ровесниками, долго расспрашивают, кто с ними будет общаться – мальчики или девочки. Ситуация свободного общения со взрослыми вызывает у ребят замешательство, неосознанную панику. И всего лишь трое школьников (4,9%) продемонстрировали полную готовность к групповой и парной работе,

были инициаторами учебных контактов, адекватно использовали средства речевого этикета в различных коммуникативных ситуациях.

В результате проведенного экспериментального исследования мы смогли определить уровень культуры общения младших школьников. К *высокому* уровню отнесли учащихся, которые демонстрировали в ситуациях совместной деятельности моральную воспитанность, владение средствами речевого этикета, готовность их использовать в различных коммуникативных ситуациях, а также способность оценить собственные коммуникативные умения и способности тех, с кем вынуждены сотрудничать, готовность принять эмоциональное настроение собеседника, а также умение инициировать контакты с одноклассниками. *Средний* уровень культуры общения проявили школьники, которые эпизодически демонстрировали в общении со сверстниками моральную воспитанность, положительно оценивали себя, как участника коммуникации, проявляли готовность к сотрудничеству и принятию эмоционального настроения собеседника только в ситуациях дружественных отношений, частично готовы к инициированию контактов с одноклассниками, организации совместной работы в группе. *Низкий* уровень культуры общения характерен тем учащимся, кто не задумывается над степенью своей коммуникативной культуры, не владеет средствами речевого этикета, не знает правил этического общения, отказывается оценить собственные коммуникативные умения, не готов сотрудничать и принимать эмоциональное настроение собеседника в процессе групповой работы.

Учащиеся 3-А (31 школьник) и 3-Б (30 школьников) классов проявили средний и низкий уровень коммуникативных возможностей в начале учебного года (сентябрь 2019 г.).

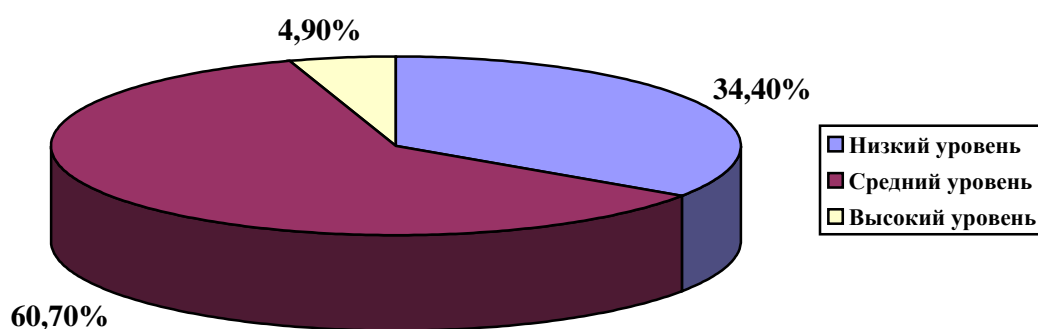


Рисунок 1. Уровень культуры общения учащихся 3-А и 3-Б классов коммунального заведения «Средняя общеобразовательная школа 1-3 ступеней №5 Винницкого городского совета»

Figure 1 The level of communication culture of students of 3-A and 3-B forms of the municipal institution «Secondary comprehensive school of 1-3 levels No.5 of Vinnitsa City Council»

Как видим, 21 учащегося (34,4%) условно следует отнести к низкому уровню культуры общения, а поэтому они требуют целенаправленной и систематической образовательной работы по формированию основ морального общения, изучения правил речевого поведения со сверстниками и взрослыми, адекватному использованию неречевых средств общения. С учащимися среднего уровня культуры общения (37 школьников – 60,7%) также следует проводить целенаправленную коррекцию с учетом критериев формирования ожидаемой личностной характеристики – готовность к групповой коммуникации, владение необходимыми знаниями для участия в работе группы или пары, наличие специальных умений организовать совместную учебно-познавательную или творческую деятельность.

Благодаря корреляционному анализу (программа SPSS v.21.0) было определено, что уровень культуры общения младших школьников тем выше, чем меньше учащиеся переживают трудности в общении во время совместной деятельности ($r_{xy} = 0,531$, при $p \leq 0,05$), а также при условии, что учителя используют эффективные методы и приёмы формирования коммуникативной культуры школьников ($r_{xy} = 0,644$, при $p \leq 0,01$).

Коррекционная работа, по нашему мнению, должна проводиться на уроках, а также во внеурочное время (утренние встречи, перемены, проектная деятельность в группах, групповые морально-этические беседы, непосредственное общение и т.п.).

Максимальный эффект в ходе становления культуры общения будут иметь групповые формы организации учебно-познавательной и коммуникативной деятельности младших школьников. Таким образом, следует чётко определить педагогические условия этой работы, в частности:

- наличие высокого уровня развития культуры общения у учителя как модератора образовательного процесса;
- систематическое использование на всех уроках начального обучения групповых и парных форм взаимодействия школьников с целью становления и развития коммуникативных способностей и автоматизации культуры речевого поведения на основе морально-этических норм;
- стимулирование учащихся к самоусовершенствованию знаний и умений в общении.

Обозначим перечень составляющих умений и личностных качеств для формирования у младших школьников культуры общения: уважение к окружающим, умение реагировать на их мнение, чувства, настроение; вежливость, уважительность, дружелюбие, сдержанность, умение

руководить своими эмоциями в различных ситуациях общения; внешние формы культуры речевого поведения, которые проявляются в мимике, жестах, позах; культура речи: умение чётко и доступно выражать своё мнение, вежливо обращаться с просьбой, предложением, сообщением, не перебивая разговор других людей, выслушивать собеседников, говорить без крика, владеть голосом, не засорять речь словами-паразитами, спокойно и достойно держаться во время общения и пр.

Система работы по формированию культуры речи должна предполагать адекватное наполнение уроков различных образовательных отраслей. Так, на уроках литературно-языковой отрасли следует акцентировать внимание учащихся на освоение литературных норм родного языка, на мотивированное усвоение речевого этикета и способов решения коммуникативных ситуаций. На уроках математической и природоведческой отраслей целесообразно закреплять умения школьников работать в парах и группах сменного состава для решения учебно-познавательных задач. Для уроков социальной и технологической отраслей важными будут образовательные ситуации, связанные с усвоением специфических средств общения (общение с помощью цвета, звуков, формы, материала и т.д.).

Выводы *Conclusions*

Обобщение научной литературы и результатов констатирующего этапа педагогического эксперимента позволило сделать следующие выводы:

1. Работа по формированию культуры общения на уроках в начальной школе предусматривает не только тематическое изучение правил речевого этикета, но и практическое становление и развитие у учащихся умений групповой и парной работы для достижения общего социально значимого результата. С этой целью необходимо стимулировать школьников к внимательному слушанию и пониманию собеседника / собеседницы; нормативному и чёткому выражению своей мысли, позиции, корректному задаванию вопросов, формулированию уточнений в диалоге; определению эмоционального настроения участников малых групп или пар; соблюдению умений культуры общения в семейном окружении и общественных местах. Поэтому образовательная работа может быть организована не только в форме традиционного урока, но и в форме учебных экскурсий (реальных и воображаемых), групповых и

индивидуальных занятий по интересам, разнообразных форм внеурочной деятельности.

2. Формированию культуры речевого поведения детей младшего школьного возраста максимально способствуют имитационные, коммуникативные и конструктивные упражнения; морально-этические беседы, дискуссии; слушание, обсуждение и театрализация художественных произведений о ситуациях общения; творческие и сюжетно-ролевые игры. Названные приёмы основаны на групповой или парной работе учащихся в ходе решения учебно-познавательной или коммуникативной задачи.

Summary

The work on the formation of communication culture at the primary school lessons involves not only a thematic study of the rules of speech etiquette, but also the practical formation and development of students' skills in group and pair work to achieve common socially significant results. For this purpose, it is necessary to stimulate students to attentive listening and understanding of the interlocutor; normative and clear expression of student's thought, position, correctly asking questions, formulating clarifications in the dialogue; determining the emotional mood of participants in small groups or pairs; compliance of communication culture skills in the family environment and public places. Therefore, educational work can be organized not only in the form of a traditional lesson, but also in the form of study tours (real and imaginary), group and individual classes on interests, various forms of extracurricular activities.

Simulation, communication and design exercises; moral and ethical conversations, discussions; listening, discussing and dramatizing works of art about communication situations; creative and storytelling role-playing games make contribution to the formation of primary school students' communication culture. These techniques are based on group or pair work of students in the process of solving educational, cognitive or communicative tasks.

Литература References

- Biasutti, M., Concina, E., & Frate, S. (2019). *Working in the classroom with migrant and refugee students: the practices and needs of Italian primary and middle school teachers*. *Pedagogy, Culture & Society*.
- Bibik, N. (2018). *Nova ukrayins'ka shkola: poradnyk dlya vchytelya*. Kyiv: Litera LTD.
- Demchenko, E., Kit, G., Goljuk, O., Rodjuk, N., Pahal'chuk, N., & Grigorovich, O. (2019). Delovye igry v kvaziprofessional'noj podgotovke budushhih pedagogov k razvitiju odarennosti detej. *Society. Integration. Education, I*, 144-159. DOI: <http://dx.doi.org/10.17770/sie2019vol1.3993>
- Huaiquimil Hermosilla, A., Mellado Hernandez, M.E., & Cubo Delgado, S. (2019). *Intercultural sensibility and attitude towards cultural diversity in a school context*. *revista inclusions, 6*, SI, 211-229.

- Lapshina, I., & Ljubchak, L. (2019). Ispol'zovanie tehnologii kollektivnogo igrovogo obshhenija v processe formirovanija diamonologicheskoy kompetentnosti mladshih shkol'nikov. *Society. Integration. Education, II*, 267-279. DOI: <http://dx.doi.org/10.17770/sie2019vol2.3995>
- Leont'ev, A. (1969). *Psiholingvisticheskie edinicy i porozhdenie rechevogo vyskazyvaniya*. Moskva.
- Maksymenko, S. (2005). *Texnolohiya spilkuvannya. Komunikatyvna kompetentnist": sutnist" i shlyaxy formuvannya*. Kyiv. Hlavnyk.
- Mesaros Zivkov, A., & Markov, Z. (2018). The opinion of pupils of primary and secondary schools about the meaning of the term-polite behaviour in school. *International Conference on Beliefs and Behaviours in Education and Culture. Romania*, 47-53.
- Nemet, M. (2018). A cooperation between teachers' social and pedagogical competences and school culture. *Sodobna Pedagogika. Journal of Contemporary Education Studies*, 69(3), 142-155.
- Pentylyuk, M. (2010). *Dilove spilkuvannya ta kul"tura movlennya*. Kyiv. NNL.
- Poul", V. (2008). Osoblyvosti vzayemozv'yazku movlennyevoyi diyal"nosti ta vol"ovoyi povedinky ditej doskil"noho ta molodshoho shkil"noho viku. *Praktychna psixolohiya ta social"na robota*, 9, 51-59.
- Rojas, D., Castillejo, J., & Jimenez-Fernandez, S. (2018). Intercultural education in the classroom: Teachers and ICT. *Education intercultural en el aula: Profesorado y TIC*, 22, 327-345.
- Vygotskij, L. (1999). *Myshlenie i rech'*. Moskva. Labirint.
- Xomych, L. (1998). *Profesijno-pedahohichna pidhotovka vchytelya pochatkovyx klasiv*. Kyiv. Mahistr-S.
- Zyazyun, I. (2006). *Estetychni zasady rozvytku osobystosti. Mystectvo u rozvytku osobystosti. Monohrafiya*. Chernivci. Zelena Bukovyna.

ПРИМЕНЕНИЕ ИГРОВЫХ ПРАКТИК КАК ТЕНДЕНЦИЯ СОВРЕМЕННОГО ОБРАЗОВАНИЯ

Application of Playing Practices as a Trend of Modern Education

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Abstract. *Traditional forms of education contribute to the acquisition of an information base by students, but do not form the necessary skills for future activities. Therefore, today, attempts are increasingly being made to integrate technologies used in the practical activities of business structures and the public sector into the educational process. These include Agile technology, gamification, the “inverted class”, which principles are flexibility, balanced teamwork, cooperation, initiative, transparency. The indicated approaches and tools are used by the authors of the article in the educational process for future engineers and managers.*

Analyzing the work of students in the classroom using flexible and gaming technologies, as well as surveys based on class results, the authors draw a number of conclusions. Positive results include the ability to increase motivation to learn through such factors as recognition, self-realization, social connections, curiosity, and others.

The use of new approaches and tools in the educational process allows the teacher to design an educational environment that contributes to the formation of universal and personal competencies of students. A prerequisite for a wider and more active use of the considered approaches and tools at the university is the adoption of this concept by the teaching staff and confidence in its effectiveness.

Keywords: *competencies, educational process, gaming technologies, survey results, quiz.*

Введение

Introduction

В современных условиях развития общества система образования выступает как сфера формирования общественного интеллектуального потенциала, что вызывает необходимость постоянного переосмысления знаний и их обновления, определяет актуальность сферы профессионального образования в части генерирования новых идей, знаний, способностей, навыков и умений. В связи с этим инновационное развитие

высшего профессионального образования состоит не только в необходимости формирования у обучающегося, будущего специалиста, определенного уровня квалификации, но и его интеллекта как инструмента сознания; развития творческого потенциала, умения овладевать навыками взаимодействия и сотрудничества.

Одной из актуальных проблем в отечественной системе образования является проблема организации учебного процесса с использованием современных педагогических и информационных технологий. При ориентации на будущую творческую деятельность выпускника, процесс преподавания должен быть выстроен таким образом, чтобы включать не только предоставление обучающемуся теоретических знаний, но и развитие у него образного мышления, умения четко и логично мыслить, учиться и др..

Современная образовательная деятельность как процесс - это разработка, создание и реализация инновационных образовательных программ, предусматривающих применение, в том числе, и новых технологий обучения, включая имитационное. Последнее предполагает использование игровых и имитационных форм, при которых характеристика традиционной технологии обучения модифицируется в сторону увеличения доли активных методов (ролевые, деловые, имитационные игры).

Цель настоящего исследования состоит в том, чтобы, опираясь на труды зарубежных и отечественных исследователей игропрактик в образовательной деятельности, попытаться осмыслить собственный опыт в данном направлении, а также дать оценку вовлеченности в игропрактики студентов, обучающихся по направлениям «Менеджмент» и «Экономика» в ПсковГУ.

Для целей исследования был проведен обзор литературных источников зарубежных и отечественных авторов по заявленной теме; обобщен собственный опыт проведения практических занятий с использованием игротехник, а также проведен опрос студентов. В ходе исследования использовались такие методы, как наблюдение, эксперимент, анкетирование, анализ и моделирование.

Понимая, что при решении организационно-методических вопросов не может быть шаблонов, авторы, между тем, полагают, что важно не только обобщать, но и делиться полученным опытом, что будет в целом способствовать дальнейшему совершенствованию образовательного процесса в учебном заведении.

Применение игровых практик в образовании *Application of game practices in education*

В последние десятилетия сложившиеся особенности VUCA – мира (Volatility, uncertainty, complexity and ambiguity; Волатильность, неопределенность, сложность и неоднозначность) предъявляют новые требования ко всем сферам жизни общества, в том числе к образованию. Традиционные формы обучения способствуют приобретению учащимися информационной основы, но не формируют необходимые навыки будущей деятельности.

Повсюду в мире все чаще производятся попытки интеграции в образовательный процесс так называемых игровых практик (геймификации). Среди известных работ зарубежных авторов в этой сфере следует выделить фундаментальное изыскание Й. Хёзинги, описывающего пространство человеческой деятельности и культуры как необъятное поле игры (Kheuzinga, 2004). Исследование креативности как универсальной познавательной творческой способности (концепция креативности) представлено Дж. Гилфордом (Gilford, 1965) и Э.П. Торренсом (Torrance, 1977). Позднее работы по межличностному общению в качестве игровой деятельности описаны Э. Берном (Bern, 2004) и другими исследователями. Тогда же, в начале 2000-х, были разработаны и предложены универсальные подходы к сущности геймификации и геймифицированных систем в трудах таких авторов, как Р. Бартл, (Bartle, 2003), К. Вербах и Д. Хантер (Verbakh & Khanter, 2012) и другие.

В последние десятилетия в российских вузах также тенденция внедрения в образовательный процесс деловых/ролевых игр и кейсов (игропрактик), Для целей настоящего исследования под игрофикацией (геймификацией) будем понимать использование игропрактик в неигровом контексте. При этом игропрактики выступают инструментом, вовлекающим участников в мыслительный процесс через активную деятельность.

Приоритетная цель игрофикации - повышение эффективности учебного процесса с помощью элементов игрового контента. Причины успешного внедрения данной технологии, по мнению Серовой А.В., основаны на фактах: 20% всех играющих в России - это обучающиеся; среднее время, потраченное на игры – 16 часов в неделю; запоминаемость информации, полученной в процессе игры десятикратно превышает запоминаемость непродолжительной рекламы (Serova, 2018).

Игра – это потребность человека, и игропрактики основаны на этой потребности. К имманентным элементам игрофикации по мнению Бахметьевой И.А., Яйлаевой Р.Н., Серовой А.В., следует отнести:

- динамику, предусматривающую создание легенды, формирующей у пользователя сопричастность к достижению цели;
- механику с применением виртуальных наград, рейтингов, статусов и других составляющих игры;
- эстетику, предназначенную для создания эмоционального фона, общего впечатления пользователя;
- набор техник, способствующих социальному взаимодействию участников (Bahmet'eva & Jajlaeva, 2019; Serova, 2018).

При применении игропрактик необходимо основываться на научных знаниях нейробиологии, поведенческой экономики, мотивационной психологии. Американский предприниматель и исследователь различных аспектов геймификации Ю-Кай Чоу выявил восемь ключевых факторов мотивации человека среди которых признание, стремление к лидерству, самореализация, чувство обладания, социальные связи, ограничения, любопытство, избегание потерь (Yu-kai Chou, 2016).

Для наглядного представления мотивы отображены в восьмиугольнике, условно разделив который на «полушария», получаем два типа мотивации. Первый тип мотивации внешний – ориентирован на результат: признание, достижения, обладание и прочее. Второй тип мотивации направлен на реализацию своего потенциала через творчество, самовыражение, социальное взаимодействие, и является внутренним. По мнению Ю-Кай Чоу (Yu-kai Chou, 2016) для повышения результата следует базироваться на внутренних мотивах при проектировании игровых техник. Концепция получила название «октализ». Ее освоение и осмысленное применение позволяет выстраивать персонифицированные игрофикации с учетом мотивов конкретных участников.

По мнению авторов, особого внимания заслуживают имитационные игры, предусматривающие использование Agile-технологий, основополагающими принципами которых являются гибкость, сбалансированная командная работа, сотрудничество, инициативность, прозрачность. Наиболее популярными инструментами указанного проектного подхода являются Scrum, Kanban, Lean. Перечислим их общие характеристики: фокусировка команды на удовлетворении потребностей клиента, упрощение процессов и минимизация излишних функций, работа короткими циклами, получение обратной связи в процессе выполнения задания.

Отдельные элементы указанной концепции уже применяются (в том числе и авторами данной статьи) в рамках проектного обучения по экономическим и управленческим дисциплинам, таким как «Организация

проектной деятельности», «Управление проектами», «Инновационное проектирование», «Бизнес-планирование».

Приоритетной целью такого обучения выступает создание условий, способствующих формированию мотивации у обучающихся к работе и коммуникации в группах, к применению полученных знаний при решении теоретических и практических задач. Проектные методы обучения призваны сформировать проектный подход к любому виду деятельности и к любому продукту, что является их несомненным достоинством. Однако, широкое применение проектного подхода в образовании ограничивается перечнем закрепленных (освоенных) в рамках дисциплины компетенций, которых часто бывает недостаточно для решения предложенной задачи. Точнее, сложности возникают при проектировании задания преподавателем в границах заданных дисциплиной компетенций.

Таким образом, применение проектного обучения целесообразно на курсах, обеспечивающих междисциплинарные связи. Это могут быть различного рода практики, формирующие умения и навыки студентов по профилю выбранного направления подготовки (Kazun & Pastuhova, 2018).

В качестве еще одного современного образовательного инструмента исследователи называют «Перевернутый класс» - технологию смешанного обучения, когда теоретическую часть материала обучающиеся изучают дома, а во время аудиторных занятий закрепляют полученные знания, активно работая в группах (Lisina, Grjaznova, & Mal'ceva, 2018). К достоинствам технологии относят большую вовлеченность обучающихся в образовательный процесс, совместную работу, выработку способности критического мышления. Модель «перевернутого обучения» может использоваться как для освоения целых модулей, так и для проработки ключевых тем курса. Положительным является и то, что преподаватель вправе подбирать наиболее удобную технологию для восприятия информации учащимися: презентацию, видеолекцию, видеоролик, электронную книгу.

По данным опроса (Johnson, Adams Becker, Estrada, & Freeman, 2015) данная модель нашла широкое применение в вузах США: 29% преподавателей уже интегрируют ее в учебный процесс, еще 27% планировали начать активно использовать в течение года. Мотивированные студенты к достоинствам рассматриваемой модели относят возможность повторного изучения тем в удобное для них время.

В то же время, обучающиеся, не нацеленные на самостоятельную работу, отмечают нежелание изучать материал вне учебной аудитории, предпочитая традиционные лекции. Наряду с положительными отзывами отмечаются и критические замечания, выражающие сомнения в широком

распространении технологии в ближайшее время в системе российского образования. Среди основных причин можно отметить следующие.

Во-первых, недостаточность финансовых ресурсов образовательных учреждений, что не позволяет приобрести в необходимом количестве соответствующее оборудование. Во-вторых, не все обучающиеся имеют доступ к современным информационно-коммуникационным технологиям. В третьих, трудоемкость разработки материалов педагогами, отсутствие вознаграждения и сложность овладения новыми для многих инструментами передачи информации.

В настоящее время образовательные платформы в помощь преподавателям предлагают множество обучающих ресурсов, но на начальном этапе поиск, отбор и подбор также увеличивают временные затраты. Следовательно, необходим некоторый переходный период для адаптации и внедрения технологии «перевернутый класс» в российское образование.

Игропрактики в педагогике призваны создавать образовательную среду, способствующую повышению эффективности результатов образовательного процесса через активное вовлечение обучающихся. Положительными факторами по мнению Бессмертного А.М., Гаенковой И.В. могут стать: инновационные техники и технологии, возможности индивидуализированного обучения, использование привычных «подручных» средств (социальных сетей и мессенджеров), формирование нового типа отношений между обучающим и обучающимся (Bessmertnyj & Gaenkova, 2016).

Исследование игропрактик в вузе

**(на примере Института права, экономики и управления, ПсковГУ)
*Study of gaming practices at the university (example of the Institute of Law,
Economics and Management, Pskov State University)***

Как правило, пионерами в деле внедрения новаторских педагогических методик и экспериментирования становятся столичные вузы; позднее новшества начинают применять региональные учебные заведения. Необходимым условием применения игрофикации в вузе является принятие данной концепции профессорско-преподавательским составом, уверенность в ее эффективности.

Авторы настоящей статьи полностью разделяют передовые взгляды зарубежных и отечественных педагогов относительно необходимости и пользы применения игропрактик. У нас уже имеется некоторый собственный опыт внедрения деловых/ролевых игр, охватывающих экономические и управленческие дисциплины.

В результате применения игропрактик в образовательном процессе следует отметить их основные характеристики:

- игровой характер занятия обеспечивает вовлеченность обучающихся в образовательный процесс и тем самым формирует мотивацию к обучению;
- возможность различных вариантов событий и, следовательно, необходимость выработки нескольких альтернативных решений способствует развитию критического мышления;
- активное участие обучающихся в нетрадиционной форме проведения занятий способствует раскрытию личностного потенциала;
- возможность «возврата ситуации» формирует иное отношение студентов к ошибке;
- участие в игропрактиках вырабатывает способности к генерации идей, проверке теоретических положений на практике, формированию прототипа решения реальных кейсов;
- совместное решение поставленных задач формирует умения осуществлять эффективную коммуникацию, применять принципы командной работы.

При этом преподаватель может выбирать различные формы игрового обучения в зависимости от собственных предпочтений и имеющихся ресурсов: геймифицированную образовательную и физическую среды, обучающие игры, увлекающую интригу.

Роли преподавателя в игротехниках распределяются в зависимости от поставленных целей и задач (таблица 1).

Таблица 1. Формирование ролей преподавателя в игротехниках
Table 1 The formation of the roles of a teacher in gaming

Роль преподавателя	Решаемые задачи
Игровой менеджер	Проектирование инфраструктуры игры: необходимого оборудования, команды, помещения
Игротехник	«Запуск» игры: объявление и пояснение правил, игровые установки
Игропрактик	Проведение игры: «заключение» научных и учебных знаний в оболочку игры, применение игровых методик

Вместе с тем, авторы статьи солидарны во мнении, что необходима дальнейшая систематизация применяемых ими деловых/ролевых игр и кейсов для более глубокого осмысления, лучшей организации и измерения эффективности игропрактик в нашем вузе.

В связи с этим, нами был предпринят первичный интернет-опрос с тем, чтобы приближенно определить, насколько распространены игропрактики в учебном процессе, а также выявить отношение к ним обучающихся. В опросе принимали участие студенты 2-го, 3-го и 4-го курсов направлений «Менеджмент» и «Экономика» (ПсковГУ). Будущим бакалаврам была предложена анкета из 5 вопросов, на которую ответили 129 студентов (анонимно). Ниже приведены результаты опроса.

На вопрос «Приходилось ли Вам принимать участие в игровых практиках (деловых/ролевых играх), проводить разбор кейсов (ситуационный анализ), затем выступать с докладом (презентацией) перед группой?» утвердительно ответили 93% опрошенных. Таким образом, фактически в обсуждении игропрактик приняли участие 120 студентов.

При этом, 53 человека (44,2%) студентов ответили, что принимают участие в деловых/ролевых играх и разборе кейсов в среднем 1 - 2 раза в семестр; почти половина опрошенных - 56 человек (46,5%) - отметили, что они занимались игропрактиками как минимум два или более раз за время учёбы.

На вопрос «Игры (кейсы) по каким дисциплинам Вам запомнились (понравились) больше всего?» подавляющее большинство (90,7%) опрошенных выделили дисциплины, относящиеся к экономике, менеджменту и финансам.

Далее, студентам был предложен вопрос о том, помогают ли игровые практики и разбор кейсов лучше усвоить материал, разобраться в основных понятиях дисциплины, приобрести некоторые умения? Опции ответов на данный вопрос предполагали, во-первых, ответ «да» (см. ответ А) или «нет» (см. ответ Г). Затем, респонденты, ответившие утвердительно, могли сделать выбор ещё из двух вариантов (см. ответы Б и В). Здесь ответы распределились следующим образом:

Ответ А: «Да, игровые практики и кейсы – это хорошо; они повышают интерес к будущей профессии» - дали 116 студентов из 120 (96,7%);

Ответ Б: «Игровые практики и кейсы могут быть полезны, если они правильно организованы преподавателем» - выбрали 26 студентов из 116 (22,5%);

Ответ В: «Игровые практики и кейсы могут быть полезны, если студенты хорошо подготовлены (требуется знать теоретические основы дисциплины, много читать перед практикой), а это не всегда удается» – выбрали 87 студентов из 116 (87,5%);

Ответ Г: «Нет, мне не нравятся игровые практики и кейсы (укажите причины)» – дали 4 студента из 120 (3,3%).

Студенты, выбравшие ответ «Нет, мне не нравятся игровые практики и кейсы» отметили следующие причины:

- А. Считаю, что чтение учебника и традиционная организация занятий дают лучшие результаты – 1 респондент;
- Б. Не вижу связи между игрой и будущей деятельностью – 1 респондент.
- В. Не люблю работать в группе – 1 респондент.
- Г. Другие причины (указать) – 1 респондент, без указания причин.

Таким образом, результаты опроса дают возможность утверждать следующее:

- игропрактикам и кейсам отводится заметная роль в университетской модели учебного процесса, её полезность наряду исследователями/преподавателями отмечают и сами обучаемые;
- деловые/ролевые игры, разбор кейсов (ситуационный анализ) в рамках дисциплин по менеджменту, экономике и финансам организованы достаточно грамотно, данный вид учебных занятий в основном выполняет свои основные функции;
- вместе с тем, очевидна необходимость дальнейшего совершенствования методик преподавания в данном направлении для усиления мотивации обучающихся к формированию универсальных и профессиональных компетенций.

Резюме **Conclusions**

В соответствии с меняющимися запросами общества происходит изменение целей обучения. В современных условиях, и это подтверждается многочисленными исследованиями и практикой, образовательному учреждению важно не только обеспечивать определенный уровень профессиональной подготовки обучающихся, но и помогать формировать и развивать характер взаимодействия с внутренней и внешней средой при осуществлении профессиональной деятельности.

Процесс познания в высшем учебном заведении динамичен, что проявляется в постоянном повышении уровня информированности и квалификации. В зарубежной и отечественной теории и практике все шире используется термин «креативное образование», выступающее альтернативой образованию «знания опыта», преимущественно прагматическому. По мнению авторов, креативное образование в значительной степени расширяет горизонт видения проблем развития и проектирования, вариантов их решения, что имеет особое значение при подготовке специалистов по экономическим специальностям, включая

менеджмент. В этой связи становится очевидным необходимость и польза применения игропрактик в образовательном процессе.

Развитие науки и накопление знаний, создание новых технологий и высокотехнологичных наукоемких производств, неизбежно повышают уровень требований к профессиональной квалификации работника, развитию духовных способностей как необходимому условию его способности к труду. Практико-ориентированная направленность высшего образования, составляющая суть его новой траектории развития, все в большей степени смещает акцент на освоение общечеловеческих ценностей как одной из составляющих профессионализма. При этом последний термин, подразумевающий в традиционной трактовке узкую направленность на специализацию, заменяется на более широкие понятия «компетентность» и «образованность».

Движение высшего учебного заведения от традиционной к инновационной технологии обучения представляет собой движение в направлении изменения определенных характеристик традиционного учебного процесса – улучшения или развития. А это, в конечном итоге, определяет качество образования и конкурентоспособность вуза, обеспечивает повышение интегральных показателей результативности его деятельности.

Summary

In accordance with the changing demands of society, a change in the goals of training takes place. In modern conditions, and this is confirmed by numerous studies and practice, it is important for an educational institution not only to provide a certain level of professional training for students, but also to help shape and develop the nature of interaction with the internal and external environment in the implementation of professional activities.

The process of learning in a higher educational institution is dynamic, which is manifested in a constant increase in the level of awareness and qualifications. In foreign and domestic theory and practice, the term “creative education” is used more and more widely, which is an alternative to the formation of “knowledge of experience”, mainly pragmatic. According to the authors, creative education significantly broadens the horizon of vision of development and design problems, options for solving them, which is of particular importance in training specialists in economic specialties, including management. In this regard, the need and benefits of the use of gamification in the educational process becomes apparent.

The development of science and the accumulation of knowledge, the creation of new technologies and high-tech science-intensive industries, inevitably increase the level of requirements for the professional qualifications of the employee, the development of spiritual abilities as a necessary condition for his ability to work. The practice-oriented higher education, which is the essence of its new development path, is increasingly shifting the emphasis to the development of universal values as one of the components of professionalism. Moreover, the last term, implying a narrow focus on specialization in the traditional interpretation, is replaced by broader concepts of “competence” and “education”.

The movement of a higher educational institution from traditional to innovative educational technology is a movement in the direction of changing certain characteristics of the traditional educational process - improvement or development. And this, ultimately, determines the quality of education and the competitiveness of the university, provides an increase in the integrated performance indicators of its activities.

Литература References

- Bahmet'eva, I.A., & Jajlaeva, R.N. (2019). Igrofikacija v obrazovanii. *Colloquium-journal*, 21(45), 10 - 13.
- Bartle, R.A. (2003). *Designing Virtual Worlds*. Indianapolis, IN: New Riders Publishing.
- Bern, E. (2004). *Igry, v kotoryye igrayut lyudi. Psikhologiya chelovecheskikh vzaimootnosheniy*. Retrieved from <https://e-libra.ru/read/479645-igry-v-kotorye-igrayut-lyudi-lyudi-kotorye-igrayut-v-igry-sbornik.html>
- Bessmertnyj, A.M., & Gaenkova, I.V. (2016). Igrofikacija kak obrazovatel'naja paradigma obuchenija. *Izvestija VGPU*, 6(110), 15–22.
- Gilford, Dzh. (1965). *Tri storony intellekta. Psikhologiya myshleniya*. Retrieved from <http://baguzin.ru/wp/dzh-gilford-tri-storony-intellekta/>
- Johnson, L., Adams Becker, S., Estrada, V., & Freeman, A. (2015). *Otchet NMC Horizon: vysshee obrazovanie*. Ostin, Tehas: New Media Consortium.
- Kazun, A.P., & Pastuhova, L.S. (2018). Praktiki primeneniya proektnogo metoda obuchenija: opyt raznyh stran. *Obrazovanie i nauka*, 20(2), 32-59.
- Kheyzinga, Y. (2004). *Homo Ludens. V teni zavtrashnego dnya*. Retrieved from <http://baguzin.ru/wp/dzh-gilford-tri-storony-intellekta/>
- Lisina, E.D., Grjaznova, E.V., & Mal'ceva, S.M. (2018). Problemy vnedrenija tehnologii «FLIPPED CLASSROOM» v obrazovatel'nyj process vuza. *Innovacionnaja jekonomika: perspektivy razvitija i sovershenstvovanija*, 7(33), 247 – 251.
- Perevernutyj klass: tehnologija obuchenija XXI. Retrieved from <https://www.ispring.ru/elearning-insights/perevernutyi-klass-tehnologiya-obuchenija-21-veka>
- Serova, A.V. (2018). *Igra i obrazovanie*. Retrieved from [https://olymp.hse.ru/data/2018/04/19/1150481348/Igra i obrazovanie_Serova2018](https://olymp.hse.ru/data/2018/04/19/1150481348/Igra_i_obrazovanie_Serova2018)
- Torrance, E.P. (1977). *Deliverance and nurturance of giftedness in the culturally different*. Reston, VA: Council for Exceptional Children.
- Yu-kai Ch. (2016). *Gamification & Behavioral Design*. Retrieved from <https://yukaichou.com/gamification-examples/octalysis-complete-gamification-framework/>
- Verbakh, K., & Khanter, D. (2012). *Vovlekay i vlastvuy. Igrovoye myshleniye na sluzhbe biznesa*. Retrieved from <https://nice-books.ru/books/knigi-o-biznese/upravlenie-podbor-personala/page-3-16158-kevin-verbah-vovlekai-i-vlastvui-igrovoe-myshlenie-na.html>

THE PERCEPTION OF “THE OTHER” BY THE HIGH SCHOOL STUDENTS AND THE TOLERANCE

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Abstract. *The issue of tolerance has been actively discussed in psychology. Psychological science has to solve a number of important methodological problems related to the etiology of this term. Adolescence is the time then one’s identity is being formed. This can be assumed by the authors that the pupils with a positive identity are more tolerant towards “others.” The hypothesis of the study: Positive attitude influence the perception of “tolerant” schoolchildren by the “other” to a greater extent. The perception of the “other” by “intolerant” schoolchildren is more subject to negative stereotyping. For the purpose of the study, a methodology for measuring tolerance was developed. It included scales of measuring interpersonal and intergroup tolerance. In addition, expert teachers evaluation of pupils were used. Based on their assessments, two groups of pupils were formed. One of them experts rated as “good” pupils. They received higher marks on the tolerance scale. The second group of pupils, according to the experts’ evaluation, had serious problems with discipline at school. They received low marks on the tolerance scale. This group of pupils was called “hooligans.” The results of the study indicate that tolerant students have no significant differences in the perception of “themselves” and “strangers.” The perception of “hooligans” shows a polarization effect: “they” are perceived only positively but “strangers”.*

Keywords: *tolerance, high school students, self-esteem, friends, strangers.*

Introduction

Van Dorn defines tolerance as accepting things that one disagrees with, disapproves or dislikes (Van Dorn, 2012). The author’s definition of tolerance includes not only social aspect, but also an activity of a person. C. Rapp develops his definition of tolerance by taking into account the current social situation in Western Europe. He defines tolerance as one’s ability to put up with something potentially difficult, such as increasing the influx of immigrants into one’s country (Rapp, 2015).

Sometimes tolerance is related to a place in the repertoire of relations between people. T.M. Scanlon wrote that tolerance requires one to accept people and permit their practices even when one strongly disapproves them. Tolerance involves an attitude that is intermediate between wholehearted acceptance and unrestrained opposition (Scanlon, 2003). One can also find extreme definitions of tolerance as social phenomena that a person does not like or hates (Moreno-Riaño, 2006)

The term tolerance is used in various spheres of human life. The authors suggest one more definition that is used in a political psychology in which competing groups support a positive orientation of actions towards each other in the field of openly conflicting values or interests (Jackman, 1977).

Tolerance as a psychological term appears in the middle of the twentieth century. It is used in relation to the situation of ambiguity in which a person is located. The term is increasingly used in a narrow sense - as a relation to the social world and other people. In the modern world, which is characterized by the processes of globalization, the problem of tolerance is of particular importance. As Vogt wrote, without tolerance, cultural diversity and peace cannot be preserved (Vogt, 1997). Tolerance in the interpersonal relationships helps to find a compromise in the debate and serves as a means to reach agreement (Vogt, 1997).

Researchers seek to identify the boundaries between tolerance and other similar manifestations of human activity. Vogt wrote that the term tolerance implies opposition or disagreement. If this is not the case, one should speak not only about tolerance, but also about indifference or simple sympathy. Tolerance is required only in the case of hostility, disagreement, disapproval, and, therefore, is closely associated with differences between people (Vogt, 1997).

As noted above, one of the directions of the study of tolerance is the study of the phenomenon of tolerance in relation to uncertainty. As noted by Furnham and Marks, the focus of interest about this phenomenon is increasingly shifting toward social, clinical, and organizational psychology, where tolerance is seen as a measure of adaptation and healthy functioning of an individual (Furnham & Marks, 2013). McLain defined tolerance as “a range, from rejection to attraction, from reactions to stimuli perceived as unfamiliar, complex, dynamically uncertain, or subject to multiple conflicting interpretations” (McLain, 1993, p. 184). According to Frenkel-Brunswick, low tolerance for uncertainty is manifested in one’s inability to see several solutions to solve a difficult situation, one’s inability to perceive simultaneously the positive and negative traits of one person, a black and white outlook on life, a rigid dichotomy in evaluating events, being closed to others to gain confidence (Frenkel-Brunswick, 1951).

For the individuals with a low tolerance for uncertainty in ambiguous situations, difficulties arise in meaning making situations. The lack of the necessary information creates fear. Fear generates stress and avoidance of contact with other people (Furnham & Ribchester, 1995).

The representatives of positive psychology are most optimistic and argue that tolerance can be considered as a part of the positive constructs that could potentially lead to a well-being and prosperity of people and society (Linoa, Hashimb, & Ricardoc, 2017).

Among the approaches of classifying tolerance, the following approaches can be distinguished:

- in the areas of human social activity: political, moral and social tolerance (Vogt, 1997);
- according to a degree of awareness: non-reflective tolerance characteristic to the monocultural societies, and reflective tolerance as a conscious rejection of prejudice, beliefs and discriminatory behavior in multicultural societies, to which many European countries belong to as a result of the flows of immigrants (Witenberg, 2019);
- according to the criterion of intrapersonal, interpersonal, intergroup and communication (Makarevich, 2001);
- by the time criterion: situational tolerance and tolerance as a quality of personality (Makarevich, 2001).

Several researchers point to the connection that exist between tolerance and a self-confidence (psychological stability) (Belasheva & Petrova, 2016; Kozhukhar, 2013).

An extensive study of the relationship between tolerance and personal characteristics of a person was undertaken by A. Banyukhov and O. Rudykhina (Banyukhova & Rudykhina, 2007).

They wrote that personality traits inherent in a tolerant person can have both positive and negative significance for one's life.

On the one hand, a person with a high level of tolerance is characterized by an orientation towards values of a self-actualizing personality, such as kindness, justice, and others, a desire to take into account the needs of another person, due the expressiveness of an idealistic style of thinking, as well as developed flexibility of thinking and a willingness to take responsibility for what is happening in one's life (Makarevičs & Iliško, 2019).

On the other hand, such a person will not be sensitive to his/her own needs, he/she will have orientation towards the opinions of others, which is manifested in the low level of development of volitional qualities (Banyukhova & Rudykhina, 2007, p. 315).

Tolerance and Education

The relationship of education and tolerant human behavior is considered by researchers in two aspects. The first concerns how education levels affect tolerance. The second concern is how is it possible to teach tolerant behavior.

It has been written that there is a direct connection between education and tolerance (Brehm, (1998). In addition, tolerance contributes to the formation of emotional stability of a person. (Belasheva & Petrova, 2006). As for the training of tolerance, researchers often focus on the opposite aspect: lower level of intolerance.

One of the manifestations of intolerance in adolescence and youth is in-group favoritism. In its extreme manifestations, group favoritism is **associated** with the preference of “friends” and a negative attitude towards members of groups or companies of “others,” which are perceived as “strangers.” Consequently, one of the tasks of teaching tolerance is to overcome in-group favoritism. M. Sherif experimentally proved that this can be done by uniting groups and setting common goals for them (Sherif, 1967). However, La Barbera, who worked with the groups of Chinese immigrants and locals - Italians, showed that having common goals is not enough. This is also necessary to accept these goals as significant for each individual. This increases the level of motivation and promotes tolerant relationships (La Barbera, 2015).

Tolerance and Stereotypes

The studies on the psychology of tolerance focus on three constructs: stereotypes, prejudice, and racism (Christie and Dawes, 2001). Stereotypes are usually seen as a form of social categorization that simplifies and reduces the complexity of the social world (Brown, 1995). D. Christie and A. Dawes emphasize that stereotypes can have both positive and negative aspects (Christie & Dawes, 2001). Unlike stereotypes, prejudice and tolerance are mutually exclusive manifestations of human activity (Van Dorn, 2012).

Stereotypes depend on the characteristics of the groups to which the individual belongs. E. Golebowska found out that tolerance is related to how well the person’s behavior matches the stereotypical model of the group in which he or she is a member (Golebowska, 1999).

The influence of stereotypes on the processes of perception of other people can serve as an indicator of personality deformation, which manifests itself as an intolerant attitude towards others. When working with adolescents one needs to take into account that a search for the identity can take on negative forms, manifested in intolerance and stereotyping of others' perceptions (Makaryev, 2009).

One of the factors that contributes to a formation of stereotypical perceptions of other people is stress (Friedland, Keinan, & Tytiun, 1999). Formation of identity begins in adolescence. This process is often associated with stressful experiences and the use of negative stereotypes when describing peers and other people that can serve as an indicator. In the future such an attitude towards others can be fixed and manifests itself as intolerance.

The Boundaries of Tolerance

The authors refer to another definition of the boundaries of tolerance. This point of view is implicitly disclosed in J. Ferrar's dimensions of tolerance. She writes that tolerance is not a one-dimensional phenomenon. There are at least three main components of tolerance: the degree of approval or disapproval; a degree of permission or prohibition; and the origins of beliefs (investigated or unexplored). There are at least three major components of tolerance: extent of approval or disapproval, extent of permission or prohibition and the origins of belief (examined or unexamined) (Ferrar, 1976). This should be noted that the boundaries of tolerance depend on the individual (degree of approval or disapproval), on social norms and requirements set for the behavior of the subject (degree of permission or prohibition) and the source of the origin of these norms and the related beliefs (religion, traditions, culture, morality, law).

The boundaries of tolerance are problematic both in the axes of history and in geography (Boundaries of Toleration, 2014).

I. Belasheva and N. Petrova stress that tolerance is based on the acceptance (rather than rejection) of the other while maintaining the boundaries of one's individuality (Belasheva & Petrova, 2006).

Numerous studies indicate that the manifestation of intolerance depend on cultural traditions, and the reason for this may be not only a violation by other boundaries, but also a violation of other behavioral norms accepted in his/her culture in situations that do not directly threaten the individual (Makarevičs & Dombrovskis, 2006).

On the other hand, the boundaries of tolerance may be associated with the functioning of the personality. According to A. Banyukhova and O. Rudykhina, there is a threshold level of tolerance, which leads to deterrence of one's own interests, depending on the external assessments and circumstances, and one's inability to actively use constructive methods for resolving problem situations (Banyukhova & Rudykhina, 2007).

Research Methods and Design

One of the important indicators of the manifestation of tolerance - intolerance is the modality of the stereotypes that the individual uses in the process of social perception of “himself/herself” and “strangers.” This determined the aim of this study: to specify the stereotypes of perception of “others” and “strangers” by the group of tolerant and intolerant pupils.

The study comprises fifty secondary school pupils in the city of Daugavpils, Latvia. The age of the participants ranges from 16 to 17 years. They were divided into two groups: “tolerant” and “intolerant.” Teachers acted as experts in the process of selection of those groups of pupils. The children, whom the teachers described as behaving pro-socially and respectfully towards their peers, not entering into conflicts with teachers, made up the group of “tolerant” children. The children, who, according to the description of teachers, displayed aggression in relations with their peers, came into conflict with teachers, made up the group of “intolerant” pupils. Thirty people comprised the first group and twenty pupils made up the second group.

The study applied the technique called Kelly's Grid (Kelly, 1991). Kelly's repertoire is a matrix, the columns of which are associated with certain people and their social roles, and the rows are associated with personal characteristics or the respondent's attitude to these people.

The columns of the matrix were named in the following way: me, a typical representative of the group, a typical representative of an alien group, the person I don't like (stranger), a person that I like.

The lines in the matrix point to the stereotypes. Three were positive: always help, clever, hardworking, and two negative: unreliable in business and having poor manners.

Respondents filled in the matrix, guided by the following criteria: completely agree (+3); I agree (+2); partially agree (+1); I do not know (neutral position) (0); partially disagree (-1); I do not agree (-2); totally disagree (-3).

It should be noted that the matrix, which was used in the study, contained 22 columns and 20 rows. It was intended to study stereotypes associated with inter-individual, intergroup and inter-mental tolerance. In this article, the authors explore the relationship between stereotypes and interpersonal tolerance.

Research results

For the convenience of processing the obtained data, the authors transformed the above criteria in such a way as to get rid of negative values: I completely agree (-7), I agree (-6), partially agree (-5), I don't know (neutral position) (-4); partially disagree (-3); I do not agree (-2); completely disagree

(-1). The results obtained are presented in Tables 1 and 2 as average values for the sample.

Table 1 The results of a study of a subgroup of tolerant schoolchildren (average vsalue)

Societal roles Stereotypes	Me	Typical Representative of my group	Typical representative someone else's group	A person that I like	A person that I don't like
Will always help	4,8	4,9	4,7	5,1	3,7
Clever	5,9	5,9	4,6	5,1	3,2
Hardworking	5,7	5,5	4,9	5,8	3,1
Unreliable in business	1,5	1,9	2,2	2,8	2,3
Poorly mannered	2,6	2,8	3,0	2,5	4,2

Table 2 The results of a study of a subgroup of intolerant schoolchildren (average values)

Societal roles Stereotypes	Me	Typical Representative of my group	Typical representative someone else's group	A person that I like	A person that I don't like
Will always help	4,6	4,7	4,4	5,2	4,8
Clever	6,1	5,1	3,4	5,2	2,9
Hardworking	6	5,7	4,8	5,4	4,1
Unreliable in business	1,9	3,0	3,6	2,7	3,3
Poorly manered	3,0	3,8	2,1	3,0	4,4

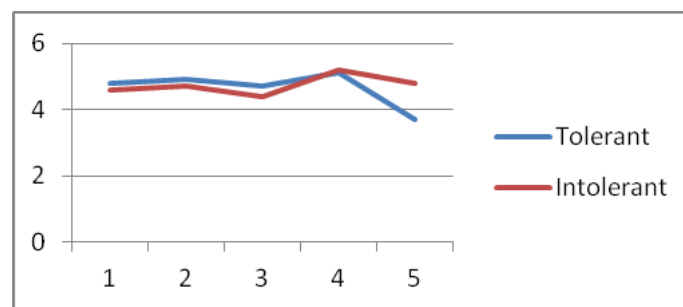


Figure 1 The average grades of tolerant and intolerant schoolchildren according to the stereotype “always help”. Mann-Whitney U-test = 11 (differences are insignificant)

Hereinafter, number 1 indicates I am the respondents, number 2 indicates a typical the representative of my company, 3 - a typical representative of a foreign company, 4 - a person who I like (my own), 5 - a person who I do not like (someone else's).

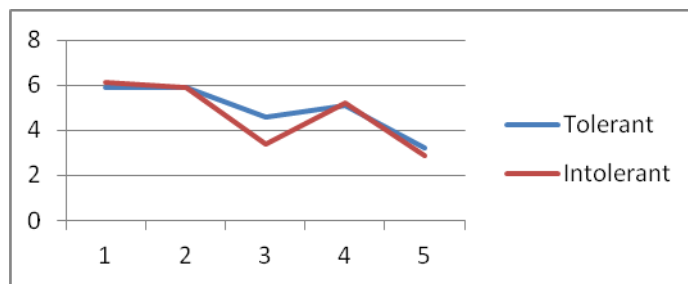


Figure 2 *Average grades of tolerant and intolerant schoolchildren according to the “smart” stereotype. Mann-Whitney U-test = 12 (differences are insignificant)*

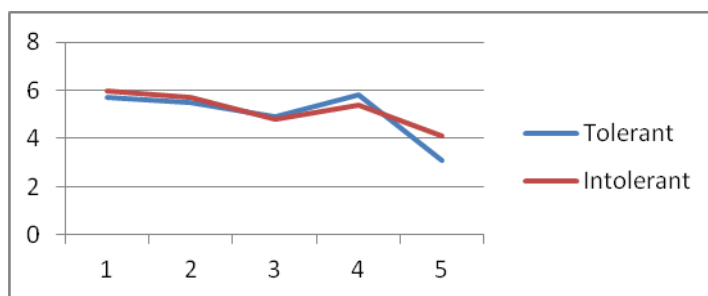


Figure 3 *The average grades of tolerant and intolerant students by the stereotype of “hardworking”. Mann-Whitney U-test = 12.5 (differences are insignificant)*

Figures 1-3 show that the assessments in the field of positive stereotypes of tolerant and intolerant students are either close or coincide. The exception is the role positions “typical representative of a foreign company” and “a person who I do not like.” In the first case, there is a tendency that tolerant typical representatives of a foreign company are evaluated more positively than intolerant. In the second case (the person I don’t like), the ratings of intolerant students turned out to be more positive than the ratings of tolerant students. But, according to the Mann – Whitney criterion U calculated for these cases, these differences are not statistically significant.

The authors also considered the distribution of respondents' assessments in the field of negative stereotypes.

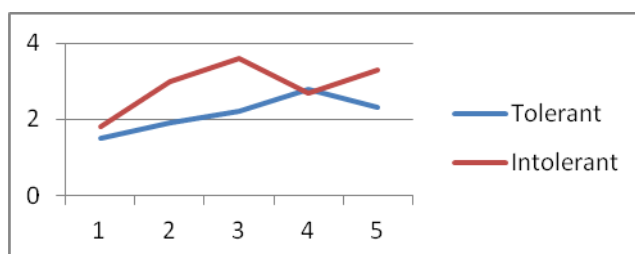


Figure 4 *The average grades of tolerant and intolerant students by the stereotype of “unreliable in business”. Mann-Whitney U-test = 4 (differences are significant at the level of 0.05)*

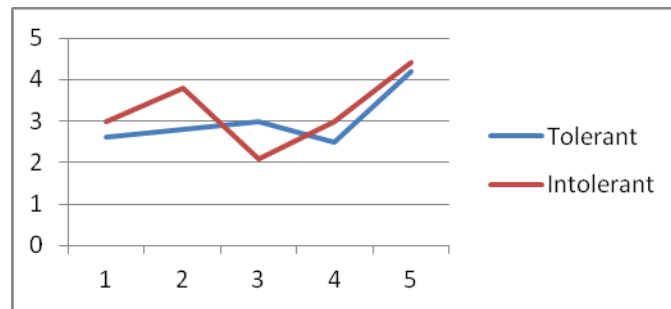


Figure 5 The average grades of tolerant and intolerant students by the stereotype of "poorly educated." Mann-Whitney U-test = 9 (insignificant differences)

Figure 4 shows that significant differences firstly appear here. The most intolerant students by the stereotype of "unreliable in business" are typical representatives of someone else's company and people whom I do not like.

Figure 5 shows that the stereotype "poorly educated" received a higher average score among the tolerant students in relation to the role position "typical representative of another group." This difference is not statistically significant.

The role position of "poorly educated" tolerant and intolerant students is assessed equally negatively. It can be seen from the figures that our assumption about the connection between tolerance and stereotypes was only partially confirmed.

Among the reasons that influenced the result, the authors observed the following.

The level of education affects manifestations of tolerance. The study involved respondents who attended high school. Consequently, there was a selection during the transition from primary to the secondary stage of schooling. The criterion for intolerance here may be described as offensive nicknames that the students received in the primary school.

Conclusions

A sign of intolerant behavior may be described as the desire for self-assertion, which is normal in adolescence. In this regard, this is necessary to specify the criteria for intolerant behavior in relation to the age characteristics.

The results obtained in this study suggest that among the stereotypes that guide pupils in their social perception of other people, there are subjectively insignificant and significant stereotypes. In this study, the most significant for the respondents was the negative stereotype of "unreliable person," which corresponds to the desire of representatives of this age to find reliable friends and, having received confirmation of reliability, to strengthen their ego identity.

References

- Banyukhova, A.E., & Rudykhina, O.V. (2007). The relationship of tolerance with personality traits and its boundaries. Tolerance and intolerance in modern society: discrimination. *Materials of the International Scientific-Practical Conference*. St. Petersburg: St. Petersburg State University, 311-316.
- Belasheva, I., & Petrova, N. (2016). Psychological stability of a personality and capability of tolerant interaction as diverse manifestations of tolerance *International Journal of Environmental and Science Education*, 11(10), 3367-3384.
- Brehm, C. (1998). *Stereotypes, Tolerance, and the Classroom*. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.850.5360&rep=rep1&type=pdf> (17.12.2019).
- Brown, R. (1995). *Prejudice: Its Social Psychology*. Cambridge, MA: Blackwell.
- Christie, D.J., & Dawes, A. (2001). Tolerance and Solidarity. *Peace and Conflict: Journal of Peace Psychology*, 7(2), 131–142.
- Ferrar, J.W. (1976). The dimensions of tolerance. *The Pacific Sociological Review*, 19(1), 63-81. Doi: 10.2307/1388742.
- Frenkel-Brunswick, E. (1951). Personality theory and perception. In R. Blake, & E. Ramsey (Eds.), *Perception: An approach to personality*. (pp. 23-34) New York: Ronald. Doi: 10.1037/11505-013
- Friedland, N., Keinan, G., & Tytiun, T. (1999). The effect of psychological stress and tolerance of ambiguity on stereotypic attributions. *Anxiety, Stress & Coping: An International Journal*, 12(4), 397–410. Doi: 10.1080/10615809908249318
- Furnham, A., & Ribchester, T. (1995). Tolerance of ambiguity: A review of the concept, its measurement and applications. *Current Psychology*, 14, 179-199. Doi: 10.1007/BF02686907
- Furnham, A., & Marks, J. (2013). Tolerance of Ambiguity: A Review of the Recent Literature. *Psychology*, 4(9), 717-728. Retrieved from https://www.scirp.org/pdf/PSYCH_2013091613521890.pdf (10.11.2019).
- Golebowska, E. (1999). Gender gap in political tolerance. *Political Behavior*, 25(1), 43-66.
- Kelly, G.A. (1991). *The Psychology of Personal Constructs. A theory of personality*. London: Routledge.
- Kozhukhar, G. (2013). Basic assumptions as predictors of interpersonal tolerance and ethnic identity in psychology. *The 5th Congress of Russian Psychological Society. Procedia - Social and Behavioral Sciences*, 86, 511 – 517.
- La Barbera, F. (2015). Research reports educating to tolerance: Effects of communicating social psychology. Research findings. *Europe's Journal of Psychology*, 11(3), 476–483. Doi: 10.5964/ejop.v11i3.888.
- Linoa, M., Hashimb, I., & Ricardoc, R. (2017). The Conceptualization and operationalization of cultural tolerance: Adopting positive psychology perspective. *Social Sciences Postgraduate International Seminar (SSPIS) 2017*. School of Social Sciences, USM, Pulau Pinang, Malaysia, 213-220.
- Makarevičs, V., & Dombrovskis, V. (2006). Migration und tolerance. *Migration in Europa: Soziologische und psychologische forschungen*, 159-176, Kiev.
- Makarevich, V. (2001). Tolerance as a psychological problem. *Tolerance un citas psiholoģiskās un pedagoģiskās problēmas*, (29-38). Daugavpils: Saule.

- Makarevičs, V., & Iliško, Dz. (2019). Governance of informal learning as a pathway for the development of young adults' agency for sustainability. In Calvo de Mora, J., & Kerry J. Kennedy (Eds.), *Schools and informal learning in a knowledge-based world*. Routledge: Taylor and Francis. Doi: <https://doi.org/10.4324/9780429022616>
- Makaryev, I.S. (2009). Intolerance as a form of manifestation of a teenager's personality deformation. Tolerance and intolerance in modern society. *Materials of the International Scientific-Practical Conference*, 327-334. Saint Petersburg: St. Petersburg State University, 327-334.
- McLain, D.L. (1993). The MSTAT-I: A new measure of an individual's tolerance for ambiguity. *Educational and Psychological Measurement*, 53, 183-189. Doi: 10.1177/0013164493053001020
- Moreno-Riaño, G. (2006). Tolerance, identity, and the problem of citizenship. Gerson Moreno-Riaño (Ed.), *Tolerance in the twenty - first century: Prospect and challenges*, (pp. 81-96). London: Lexington books.
- Rapp, C. (2015). More diversity, less tolerance? The effect of type of cultural diversity on the erosion of tolerance in Swiss municipalities. *Ethnic and Racial Studies*, 38(10), 1779-1797.
- RJackman, M. (1977). Prejudice, tolerance, and attitudes toward ethnic groups. *Social Science Research*, 6(2), 145-169.
- Stepan, A., & Taylor, C. (Eds.). *Boundaries of Toleration*. New York: Columbia University Press.
- Scanlon, T.M. (2003). *The Difficulty of Tolerance*. Cambridge University Press, Cambridge.
- Sherif, M. (1967). *Social Interaction: Process and Products*. New York. Routledge.
- Van Doorn, M. (2012). *Tolerance*. Retrieved from <http://www.sagepub.net/isa/resources/pdf/Tolerance.pdf>
- Vogt, W.P. (1997). *Tolerance and Education: Learning to Live with Diversity and Difference*. London: Sage.
- Witenberg, R.T. (2019). *Psychology of Tolerance. Conception and Development*. Springer, Verlag.

DEVELOPMENT OF PROFESSIONAL SELF-DETERMINATION OF TEENAGERS

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Abstract. *The article dwells on the problem of teenagers' professional self-determination as the readiness to making choice of the profession. Psychological factors of professional self-determination of high school students are defined and theoretically substantiated. Psychological properties are investigated, the means of which is the formation of factors of senior school students' professional self-determination. In our research by professional self-determination we mean a stable, value-oriented complex of professionally important traits and personality traits, which is characterized by a certain structure, determines the readiness of high school students to choose a profession and is formed by a number of psychological factors. We prove that the set of psychological factors of professional self-determination of high school students has a nonlinear character and multi-level structure. The purpose of the publication is to investigate the psychological factors of professional self-determination and to substantiate the need to introduce a program of psychological and pedagogical support for the development of professional self-determination of high school students. As a result of the research psychological factors of professional self-determination of high school students were established: actual motives; sufficient level of development of volitional regulation of personality; locus control; a sufficient level of the formation of reflectivity development. The conducted psycho diagnostics revealed the immaturity of psychological factors of professional self-determination among high school students; unreadiness of teenagers to make an independent, conscious professional choice. This situation requires targeted correction through the introduction of a program of psychological and pedagogical support.*

Keywords: *choice of profession, professional self-determination, psychological factors of professional self-determination, readiness for choice of profession, teenagers.*

Introduction

The problem of the professional self-determination development of teenagers' is urgent and caused by the need of Ukrainian society in citizens, who can who can be prepared for a conscious and independent choice of profession. In this regard it is necessary to improve vocational guidance, in particular to explore the psychological characteristics of the personality of senior schoolchildren, which are important for the choice of profession. The aim of the article is to investigate the psychological factors of professional self-determination and to substantiate the need to introduce a program of psychological and pedagogical support for the development of professional self-determination.

Professional self-determination is mostly regarded as a process in the scientific literature: the constantly changing choices that underpin the «I concept» and the problem of the freedom of personal choice in society (Zakatnov, 2001; Tytarenko, 2013; Sappa 2011); personal development in the light of the internal contradictions resolution of the personality (Shavyr, 1981); takes place over a long period and includes a series of intermediate decisions and leads to the final professional choice (Hinzburh, 1998); formation of personal attitude to the occupational work environment and the way of its self-realization (Chystiakova, 1987); the continuous process of searching for and acquiring the meaning of one's professional activity in the light of the discovery and realization of one's «I» as a professional (Nikitina, 1998); independent and conscious finding of the meaning of performed work and all life activity (Priazhnykov, 1996) decision making by a person on the choice of future activity in the light of himself as a subject of a specific professional activity, due to self-esteem by a person of their own individual, psychological qualities and their capabilities comparison with psychological requirements for the profession (Honcharenko, 1996).

Theoretical basis of the research

The authors of the article have taken the position that the phenomenon of professional self-determination is described by the scientists as an integrative personal formation, ensuring the internal readiness of a person to choose a profession, conscious and independent construction of the desired future image, correction and realization of the prospects of their own professional development; has a corresponding structure, formed under the influence of certain psychological factors (Chystiakova, 1987; Priazhnykov, 1996; Hinzburh, 1998). Under the professional self-determination we mean a stable, value-oriented complex of professionally important personality traits, that has the

appropriate structure, determining the readiness of senior schoolchildren to choose a profession and is formed under the influence of certain psychological factors (Kaliuzhna & Miliaieva, 2019).

The article deals with the progress and results of establishing the psychological factors of professional self-determination of senior schoolchildren, where the factor is considered as the reason, the mover for the exercise of independent and conscious choice of profession.

In the theoretical aspect, the main internal factors of professional self-determination include: the presence of one's own position and conscious attitude to life (Rubynshtein, 2003); knowledge about oneself and the world of professions (Karpov, 2003; Kuznetsova, 2011); analysis of own interests, inclinations, abilities; the existence of a specific program of action for the selection and achievement of professional goals (Klymov, 2004); certain work and life experience, appropriate level of psychological maturity of the personality (Shavyr, 1981).

Researchers consider the external factors of professional self-determination of personality to be general factors of the macro-environment, its content depends on social and economic conditions of life of people, demographic development of the region, cultural, educational and professional level of the family etc. (Zakatnov, 2001; Klymov, 2004).

The authors of the article believe that the division of factors of professional self-determination only into «internal» and «external» does not reflect holistic structure. We have established that the structure of psychological factors of senior schoolchildren professional self-determination has a nonlinear complex character and is determined on the basis of the possibility of influencing the formation of factors of professional self-determination in the educational process. To the macro level belongs influenced factors minimally; to meso level – factors that can be indirectly influenced; to the micro level – the factors that can be influenced directly within the program of psychological and pedagogical support for the formation of professional self-determination of senior schoolchildren.

The structure of psychological factors of professional self-determination of senior schoolchildren includes:

- at the macro level – integration into the world community (formation of the global labor market); promoting of civil society; balanced state development; actual needs of the state in personnel; prestige / prestige of the profession;
- at the meso level – a favorable, competent position of parents; developing a subject-subjective strategy for the impact of the school environment;

- at the micro level – updated motives; sufficient level of volitional regulation development; locus control; sufficient level of development of reflexivity.

The outlined theoretical principles were the basis for building an empirical research of psychological factors of professional self-determination of senior schoolchildren.

Methodology

The research was conducted among the 10-th grades senior schoolchildren of 15-16 years old of Kyiv Comprehensive School in order to identify psychological factors of professional self-determination. A control group – 24 senior schoolchildren and an experimental group – 24 persons were formed to investigate the effectiveness of the program of psychological and pedagogical support for the formation of professional self-determination. Total respondents were: 330 high senior schoolchildren, 48 parents and 16 teachers.

A creative initiative group was created at the base of the school № 286 of Kyiv to carry out an empirical research consisting of: director; deputy director of educational work; psychologist; social pedagogue; tutors; teachers. Scientific support was provided by the educational and scientific center for leadership and staff development of Borys Grinchenko Kyiv University: scientific supervisor – Milyaeva V.R., junior researcher – Kalyuzhna I.P.

The logistical conditions for conducting the experimental work: cabinets for testing, training sessions and individual consultations were defined; necessary training materials were prepared. An incentive material form and a response form were prepared. All the results of the research were entered in the individual psychological and pedagogical card.

In order to establish the psychological factors of professional self-determination, a methodological toolkit of research was determined and the senior schoolchildren were tested at the beginning and at the end of the program of psychological and pedagogical support.

Thus, the following methods were used to establish the psychological factors of professional self-determination of senior schoolchildren: the test «Motives for choosing a profession» by R. Ovcharova to determine the leading type of motivation in choosing a profession; «The level of correlation of «value» and «accessibility» in different spheres of life by E. Fantalova for the diagnosis of value orientations of personality; «Research of volitional organization of personality» by M. Hutkin, G. Mychalchenko, A. Prudylo for research of volitional sphere of personality; «Locus Control» test by J. Rotter to determine locus of control; «Diagnosis of Reflexivity» by A. Karpov to determine the level of development of reflexivity; questionnaire and questionnaire «Detecting

schoolchildren's willingness to choose a profession» by V. Uspensky to determine the senior schoolchildren readiness to choose a profession. 14 psycho-diagnostic techniques were used totally.

Results

The results of the research of the type of motivation in the process of choosing a profession by the method of Ovcharova R. showed choosing a profession, individually significant motives (personal importance; satisfaction that the job brings) are important for 42%. For 33% of the personal and public importance of the future profession – its social and personal importance, the opportunity for communication, guidance from other people, etc. Although most responders seek to meet their own needs for future activity, a significant percentage have external positive motivation – 22%. The main motives for the activities are: material incentives, prestige, work promotion, etc. 3% of responders feel pressure from the environment, fear of condemnation and failure.

Choosing a profession is seen as a means of achieving something guided by external motives. External motivation contains those motives that are outside the employee. Satisfaction with the profession and personal self-realization becomes impossible. Methodology «The level of correlation of «value» and «accessibility» in different spheres of life by E. Fantalova allows to diagnose the severity of 12 value orientations of the individual.

Despite the fact that schoolchildren are guided by external motives while choosing a profession, the majority of senior schoolchildren (82%) hope that their values can be realized in the interesting work. In the zone of «internal vacuum» (accessible but not significant) are the following value orientations: «active life» (27%), «beauty of nature and art» (22%), «knowledge» (16%), «creativity» (18%). In a state of «internal conflict» (are less «accessible» than «valuable») – «love» (23%), «material stability» (19%), «freedom» (18%), «family» (32%). Such results are explained by the peculiarities of teenagers – the desire for a sense of adulthood, that cannot be fully realized due to the age characteristics.

The results of diagnostics of volitional organization of personality by M. Hutkin, G. Mychalchenko, A. Prudylo for research of volitional sphere of personality showed that only 11% of senior schoolchildren demonstrated a high level of conscious willful self-regulation of behavior; 87% of schoolchildren had an average level of development of a volitional organization; 2% of senior schoolchildren had a low level. In order to choose a profession consciously and independently, to be prepared to exercise professional self-determination over the course of life and the difficulties that may arise, teenagers should develop

willpower.

In the result of the research, the dominance of senior schoolchildren of external locus of control was revealed (67%); only 33% of senior schoolchildren have internal locus control («Locus Control» test by J. Rotter). The obtained data indicate that a significant percentage of modern senior schoolchildren are responsible for shifting responsibility for making their professional choices and ways of their implementation to parents, teachers, friends and others. One third of senior schoolchildren are aware that choosing a profession is their responsibility.

A low level of reflectivity development was found in 40% of respondents. It testifies the difficulty of creating a rationally structured internal position, that is necessary for professional self-determination of personality. 59% of responders have an average level of reflectivity development. Only 1% has a high level of development of reflexivity («Diagnosis of Reflexivity» by A. Karpov). The obtained results indicate the need for the development of reflexivity of senior schoolchildren to create a coherent «I-concept», reasonable self-esteem, rationally structured internal position of the personality, identity. In turn it will allow to make conscious professional choice.

Low and average levels of reflexivity lead to difficulties in identifying personal goals and finding ways to achieve them. Thus, it is revealed that 86% of the respondents have unstable, not always justified goals that are formed under the influence of the environment; while choosing a profession, responders don't have their own position, but take the position of others (parents, teachers, friends) regarding the choice of future profession. There is an inability to set design goals in 2%; only 12% have conscious, personal goals, that is, goals that are conscious and shaped according to the needs, aspirations of personality («Goal-Means-Result» test by A. Karmanov).

It is grounded that 45% of senior schoolchildren have difficulties in choosing the means, 8% have a chronic lack of achievement (the lack of their own, conscious goal leads to difficulties in choosing the means to achieve it). Only 39% have sufficient freedom to choose the means to achieve the goal. Goals adoption from the outside is a feature of adolescence. It is conditioned by the need to be recognized, belonging to a specific reference group (see Table 1). Therefore, it is important to take into account this feature of teenagers and through the group interaction to influence the formation of skills, to set real goals. The senior schoolchildren learn to take responsibility for their own lives and professional choices while developing a program of psychological and pedagogical support for the formation of professional self-determination.

Table 1 Results of psychological diagnostics of the formation of psychological factors of professional self-determination of senior schoolchildren

№	Factors of professional self-determination of senior schoolchildren	Psychological features	Levels of development,% (n=330)
1	Updated motives	Individually significant motives	42
2	Updated value orientations	Ability to realize values in the interesting work	82
3	A sufficient level of development of volitional regulation of personality	High level of persistence development	14
		High general level of development of volitional regulation of personality	11
4	Locus of control	Internal locus of control	33
5	A sufficient level of development of reflectivity	The average level of development of reflectivity	59
		The high level of development	1
		The presence of real, own goals	12
		Sufficient freedom to choose the means to accomplish the goal	39

A regression analysis was used to determine the influence of a personality psychological properties on the willingness to make a profession. It was found that the following psychological properties have a direct influence on the willingness to make a professional choice: the internal locus of control (+0.575); reflexivity (+0,488); high level of development of volitional regulation (+0.359); high level of persistence development (+0.327); internal individually significant motives (+0.288); the presence of real, own goals (+0,285); sufficient freedom to choose the means to achieve the goal (+0.281). The inverse effect on the willingness to make a professional choice is an indicator of internal socially significant motives (-0.254).

Non-formation of psychological factors of professional self-determination leads to unwillingness to make conscious, independent choice of profession. It has been found that only 8% of respondents are ready to make their professional choices; 37% of respondents show the average readiness; internally not ready to make a choice – 38%; 17% of respondents indicate a low level of willingness to make a choice. The results of the research show the need to introduce a program of psychological and pedagogical support for the formation of professional self-determination of senior schoolchildren. The purpose of the program is to develop the psychological characteristics of the personality. It ensures the readiness of senior schoolchildren to make professional choices. The program is based on the following principles: consistency and continuity, comprehensiveness and systematicity, openness, correctness and balance. The

program should include systematic work with schoolchildren, parents and teachers in three areas: psychodiagnosis, formation and development, psychoprophylaxis and psycho-correction (see Figure 1).

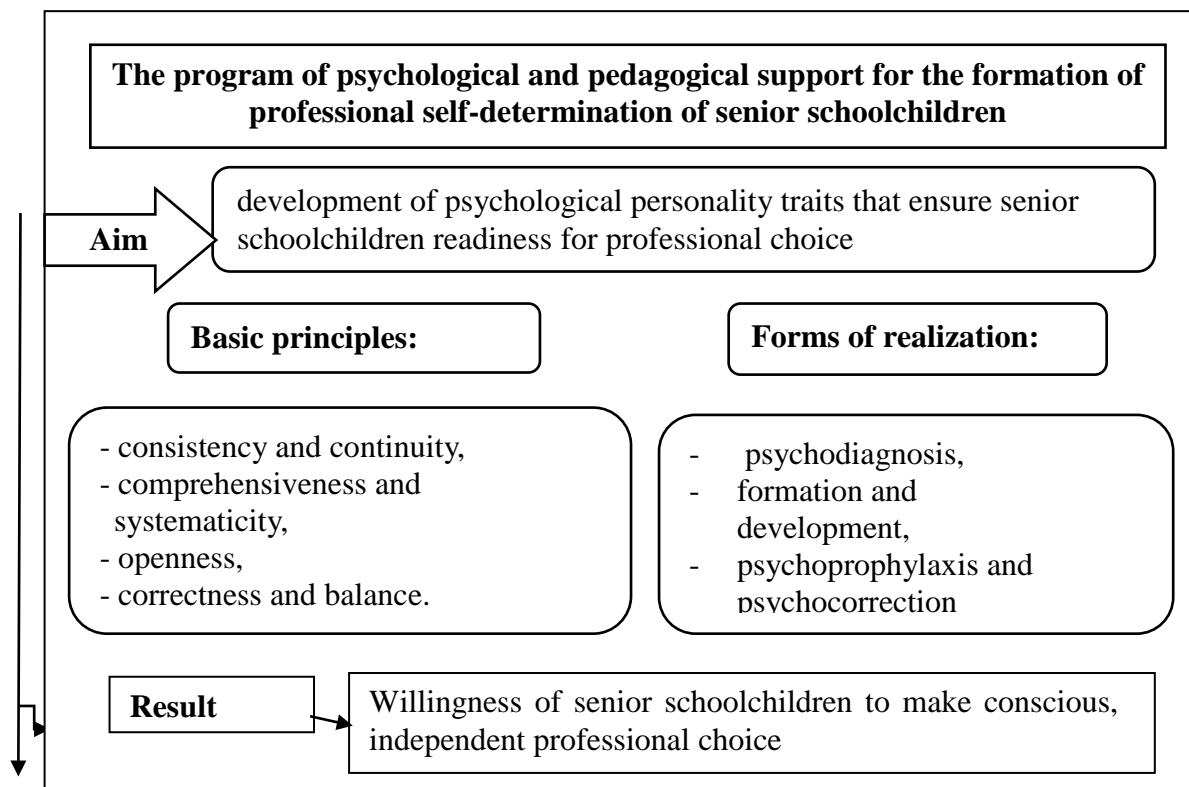


Figure 1 Structure of the program of psychological and pedagogical support for the formation of professional self-determination of senior schoolchildren

Each of these section is a preparation for the next and the continuation of the previous one. The psychodiagnostic – contains research tools for identifying the level of internal factors of professional self-determination (before and after psychological and pedagogical support) and individual diagnostics, observation, collage for work with parents and teachers.

Formation and development includes training sessions, individual consultations, facilitation sessions, workshops, seminars aimed at targeting the development of psychological factors of professional self-determination.

Psychoprophylaxis and psycho-correction were implemented in the form of individual consultations, business games, training sessions, collages, thematic circles for students, parents, teachers and aimed at providing timely support in difficult situations.

Conclusions

The presented theoretical analysis of scientific sources in our article has shown that there are different approaches to understanding the phenomenon essence of the professional self-determination. It prompted us to give the author definition of this concept as a stable, value-oriented complex of professionally important personality traits. It has the appropriate structure, determines the willingness of senior schoolchildren to choose a profession. It is formed under the influence of certain psychological factors.

The main attention is paid to the establishment and analysis of psychological factors of professional self-determination of senior schoolchildren: the level structure is singled out and the possibilities of direct influence on the formation of such mental properties as actualized motives are investigated; sufficient level of development of volitional regulation of personality; locus of control; a sufficient level of reflectivity development. It is established the psychological characteristics, in the light of which the factors of professional self-determination are manifested: high level of development of volitional organization of personality and perseverance; actualization of internal individually significant motives and value orientations; internal locus of control; high level of development of reflexivity, presence of real, own goals, free choice of means for realization of purpose to ensure readiness for realization of conscious and independent choice of profession.

The arguments about the need to develop and introduce into the educational process a program of psychological and pedagogical support for the formation of professional self-determination of senior schoolchildren. It is based on the laws and mechanisms of age development and also provides the development of psychological factors of professional self-determination of senior schoolchildren.

Gratitude

The authors express the gratitude for the support in conducting the research to Borys Grinchenko Kyiv University; staff and administration of Kyiv Comprehensive School № 286, where the experimental work on the theme: «Openning and developing the potential of the personality in the school environment as an tool for individualization, socialization and professionalization of senior schoolchildren» took place in 2013–2017 (Order of Ministry of Education and Science, Youth and Sports 30.10.2013, № 814).

Particularly express the gratitude to Lebid N.K. – for comprehensive support in organizing empirical research, creative ideas and recommendations

and Marchenko L. Yu. – for creating the necessary conditions for the implementation of research work.

References

- Hinzburh, M. (1998). Lychnostnoe samoopredelenye kak psikhologicheskaya problema. *Voprosy psikhologii*, 2, 19–27.
- Honcharenko, S. (1997). *Ukrainskyi pedahohichnyi slovnyk*. K.: Lybid.
- Zakatnov, D. (2001). Tekhnologii aktyvizatsii profesiinoho samovyznachennia starshoklasnykiv. *Naukovi zapysky Ternopilskoho derzhavnoho pedahohichnoho universytetu. Seriya: Pedahohika*, 6, 99–104.
- Kaliuzhna, I. (2017). Teoretychnyi analiz psikhologichnykh chynnykiv profesiinoho samovyznachennia starshoklasnykiv. *Humanitarnyi visnyk DVNZ «Pereiaslav-Khmelnytskyi derzhavnyi pedahohichnyi universytet imeni Hryhoriia Skovorody»*, 74, 350–359.
- Kuznetsova, I. (2011). Predstavleniia starsheklassnykov o profylnoi shkole. *Sovremennaia psikhologiya: teoriia y praktyka*. M.: Ynstytut stratezhicheskyykh yssledovanyi.
- Karpov, A. (2003). *Psikhologiya menedzhmenta: Ucheb. posobye dlia stud. vuzov*. M.: Hardaryky.
- Miliaieva, V., & Kaliuzhna, I. (2019). Osoblyvosti psikhologichno-pedahohichnoho suprovodu profesiinoho samovyznachennia starshoklasnykiv. *Problemy suchasnoi psikhologii: zb. nauk. pr. Zaporizkoho natsionalnoho universytetu ta Instytutu psikhologii imeni H.S. Kostiuka*, 2(16), 79–84.
- Priazhnykov, M. (1996). *Professyonalnoe y lychnostnoe samoopredelenye*. M.: Yzd-vo ynt praktycheskoi psikhologii. Voronezh: NPO «MODЭK».
- Rubynshtein, S. (2003). *Bitye y soznanye. Chelovek y myr*. SPb.: Pyter.
- Tytarenko, T. (2013). *Suchasna psikhologhiia osobystosti*. 2-e vyd. K.: Karavela.
- Chystiakova, S. (1987). *Professyonalnaia oryentatsyia shkolnykov: orhanyzatsyia y upravlenye*. Moskva.
- Shavyr, P. (1981). *Psikhologiya professyonalnoho samoopredelenyia v rannei yunosti*. M.: Pedahohyka.
- Nikitina, L. (1998). *Kak vospytat zdorovoho rebenka*. Znanye.
- Klymov, E. (2004). *Psikhologiya professyonalnoho samoopredelenyia*. M.: Yzdatelskyi tsentr «Akademyia».
- Sappa, M. (2011). Protses profesiinoho samovyznachennia uchnivskoi molodi: modelnyi analiz. *Visnyk KhNUVS*, 2(53), 343–351.

DEVELOPMENT OF PERSONALITY VALUES IN A GLOBALIZED WORLD

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Abstract. *The modern world is extremely diverse. The processes of globalization in it contribute to the disappearance of borders: political, economic, religious, informational, etc. Personality is continuously facing the values of other cultures and other religions. By the way, he or she is not always able to properly evaluate and interpret them, what in its turn leads to the situation of conflict of values. The choice of necessary values becomes a complicated task and it definitely arises the need of pedagogical support of the process of values developing. Therefore, the situation described makes the problem of looking for the best ways of developing the values of the modern individual who lives in the world of values, where the chaos dominates, really topical, and that was the purpose of our research. Our poll conducted among teenagers and adolescents (n=120) proved an orientation towards their own and their family's problems, especially material ones. Instead, the decline in morality is an important social and personal problem for only a quarter of respondents, which makes the necessity to acquaint modern children and young people with higher values even more urgent. Educational institutions are challenged to assist students in the process of values choice in the complex axiological situations existing in the world, which is in the constant process of globalization. The search for ways of developing the values of the modern personality allowed us to identify the specific methods that contribute to the mastering of socially and personally significant values. These include text analysis (artistic, documentary, etc.), biographical methods, crystallization of values, problem solving, and more. These methods imply the active work of the pupil in the selection, mastering and appropriation of values, which will contribute to the formation of a highly moral personality with an active life position.*

Keywords: *values, material values, spiritual values, development of values, conflict of values, globalization.*

Introduction

Life in the modern world is difficult and unpredictable. Rapid development of science and technics, knowledge (cognizance) and technology often creates the conditions a modern man can hardly orient in. Thanks to informatization and globalization the political, economic, religious, informational borders are being obliterated. A man gets into the zone of influence of values that are not inherent in the native culture. Under such circumstances, it is difficult for him to adequately analyze and evaluate everything around, as the assessment criteria he got often don't work in another culture.

The situation is complicated by the fact that modern well-developed societies have faced the problem of the cultural crisis and as we know the cultural models form the values, what allows scientists to speak about the rise of a crisis of values. However, it should be noted at once that, in our opinion, it is not so much worth talking about the crisis of values as the crisis in the perception of values by modern people. Thus the relativization of values led to different perceptions, as well as different understandings and interpretations.

The world today is seen as a single whole, being developed on the basis of universal laws. As the leader of the economic, scientific and technological process is the West, other countries, to "catch up" with it, must reasonably adopt Western forms of social life organization and Western values. Such a transition from traditional to modern (Western) society involves the implanting of liberal individualistic ideology in the sphere of the spiritual culture, the fundamental value of which is the will, which is perceived in the context of radical liberalism as permissiveness. It is liberal values that form the basis of the market economy, civil society and a law-governed state as the result. They are also found to be antipodes of traditional values (Skotnyi, 2004, p.280-281).

According to W. Brezinka, the current cultural crisis is, first and foremost, the crisis of orientation and ability to evaluate. Therefore, one can claim the existence of a crisis of beliefs in the modern world, concepts of values, moral views of people, as well as a crisis of social norms and institutions (Brezinka, 2005).

One can associate this state of affairs with the pluralism of the hierarchy of values recognized in society, which encompasses different norms, ideals, concepts that regulate human behavior. At the same time, it is important to realize that at the adolescence and young age one intensely learns values, chooses ideals and makes life plans. And in the situation of vague understanding and attitude towards the same values in society, young people are experiencing some disorientation of values.

Therefore, educational institutions face the task of developing the values of the modern individual under the conditions of variable world which is

characterized by value chaos. Taking that into consideration, the aim of our study is to find the best ways of axiological education of modern children and young people in the conditions of educational institutions.

Theoretical framework

In the modern sciences of man there is no unanimous opinion on the formation of an upright (righteous) personality. After all, in a pluralistic society, there can be no such consensus. Proponents of religious and nonreligious, democratic, liberal and authoritarian education have their own views on this process. However, it is worth noting that more and more scholars are trying to draw the attention of educators to the traditional to Europeans Christian values as a basis for the formation of a moral personality (moralist). In particular, this view is kept to by O. Vyshnevskiy (Vyshnevskiy, 2003), W. Brezinka (Brezinka, 2005) and others.

However, it is difficult for the citizens of modern secular societies in which the notion is formed that scientific and technological activity cannot be restricted by moral or religious requirements to accept the views outlined above. "The dominance of such ideas leads to such a state of affairs when scientific and technological development comes under the control of human passions, above all vanity, pride, the desire for ever greater comfort, etc., which destroy the spiritual harmony of life and entail all the negative consequences. That is why, to ensure a normal human life, it is now necessary to return to the lost over the past century connection of scientific knowledge with religious, spiritual and moral values. It is education itself that is now intended to (called for) become the unifying core around which the formation of the fundamental spiritual values of humanity is possible" (Skotnyi, 2004, p.287).

According to R. Farmer's point of view, the axiological education lies in the development of the person's ability to think over the values and understand their role both in the private life of a person and the life of the society on the whole (Farmer, 1988).

The content component of the education of values is viewed differently by scientists. In particular, there is a view that the axiological anthrosphere is composed of the following groups of values: a) biotic, which encompass utility, productivity, etc.; b) cognitive, to which belong truth, authenticity, independence, agreement with the actual state, etc.; c) moral, among which are kindness, love, loyalty, devotedness, honesty, etc.; d) aesthetic, which include beauty, ugliness, tragic situation, comism, poetic character, etc. (Śliwerski, 2006).

There are other classifications of values that must be assigned to the individual. In particular, by their content values are divided into aesthetic, scientific, educational, economic, political, and social values, by their

extensiveness into societal, national and global values. One may definitely talk about modern and traditional values too (Türkkahraman, 2014, p.634).

However, we strongly believe that one of the most successful attempts to construct a hierarchy of educational values was made by O. Vyshnevskyi. The scientist laid in its basis the spheres of human activity (humanity, nation, community, family, man). Besides he draws our attention to such an important area as Nature, the nature in itself and the nature of environment, which is a prerequisite for the existence of human society. According to the author, human behavior in each of these spheres is governed by a specific group of values that each individual must adopt (or master) in order to achieve harmony in public, family and personal life. O. Vyshnevskyi distinguished a number of groups of values:

- 1) absolute eternal (faith, hope, love, truth, mercy, wisdom, etc.);
- 2) national (state independence of Ukraine, patriotism, love of native culture, language, etc.);
- 3) civil (freedom, respect for the Law, sovereignty of the person, human rights, etc.);
- 4) of family life (childcare, harmony between family members, many children, etc.);
- 5) of personal life (inner freedom, self-esteem, will, wisdom, moderateness, optimism, hard work, etc.);
- 6) valeo-ecological (healthcare, healthy lifestyle, love and caring attitude to all living things on earth, caring attitude towards natural resources, etc.). Particular groups of values express the content of the main directions of education: a) absolute eternal values – moral education; b) national values – national education; c) civic values – civic education; d) family values – family education; e) values of personal life – education of character; f) valeo-ecological values – valeo-ecological education (Vyshnevskyi, 2003).

The processual component of the development of personality values consists of a number of stages, which in particular include the following:

- a) presentation of values to the pupil;
- b) perceiving of value orientations by personality;
- c) adoption of value orientation;
- d) implementation of value orientations in activity and behavior;
- e) consolidation of the value orientation in the personality orientation and its transition to the status of personality quality;
- f) actualization of potential value orientation (Astashova, 2002). Actually, this algorithm has to do first of all with an educator, who presents to the pupils certain values, creates proper

conditions for their understanding, acceptance, adoption, realization and fixation.

From the point of view of the pupil, the question is about: a) discovery / recognition of values, which requires the ability to recognize good and evil, to achieve what is valuable; b) understanding of values, which implies knowledge of values, as well as the ability to think logically; c) recognition / acceptance of values, which requires the ability to accept values as their own; d) using the accepted values in the behaviour; e) creation of values, which implies creative activity, development of abilities, overcoming stereotypes (Śliwerski, 2006).

This approach to definition of the stages of the development of values of the individual maximally takes into account the needs, opportunities, desires of the person being educated, and certainly gives them the status of the agent of their own formation.

Since life in the Ukrainian society is complex and dynamic, scholars are trying to capture and understand the values the youth is governed by. According to O. Skorynina-Pohrebna, values determine the daily consciousness and everyday conceptions of present and future of starting their life generations. The researcher surveyed 649 young people and found the significance of life values in their estimates. As a result of ranking the values by their significance, fourteen positions (from the most to the least significant) were formed: achieving life success (41.96%), healthy lifestyle (38.35%), starting a strong family (34.55%), representation of abilities to the employer (30.10%), conflict resolution (29.64%), self-improvement (29.27%), work within the law (29.01%), self-realization in the professional sphere (28.8%), leadership (27.9%), adaptability to the environment (23.94%), cooperation with colleagues (23.84%), priority in setting goals (19.8%), independence in the process of extending their knowledge (19.31%), the division (parting) of their own effort (19.22%) (Skorynina-Pohrebna, 2015). Actually, the analysis of the results of the study conducted by O. Skorynina-Pohrebna showed a focus on their own success, starting their own strong family and so on. The values associated with the future professional self-determination, working activity, and in particular for the benefit of the Motherland, occupy the lower levels of the hierarchy of values.

However, O. Fliarkovska conducted a survey of teenagers' value orientations (n=2432). The researcher found that students focus mainly on their life prospects, and among the dominant values predominate the following: "happy family life", "interesting work" and "career". In the triad of the most important values for teenagers we can obviously see two values related to professional activity. Actually, O. Fliarkovska gave the respondents a question "What is most important to you in your future profession?" and received the following answers: salary level (65%), comfortable working conditions (50%),

career and professional growth opportunities (47%), convenient working hours (46%), and job stability (30%) (Fliarkovska, 2013).

On the one hand, it seems that teenagers are caring and thinking about their future, but it is quite noticeably, that they associate it with the most comfortable conditions that obviously someone else has to create for them.

These results are causing concern, as there is a noticeable focus of teenagers and young people on the materialistic type of values, their focus on their own success, their own families and their own health. It is obvious that harmonious coexistence in human society requires from the individual the presence of other values associated with the ability to yield or to compromise. After all, we must speak in our most technologically developed and rationalistic time about the spiritual values that are the pledge of the survival of the whole mankind.

Taking this into consideration, we have also conducted a survey of the values of secondary school students to find out their similarities or differences from those of other scholars and to find ways to overcome the difficulties of value formation of children and young people in the changeable world.

Methodology

The study was being conducted during 2019. 120 teenagers and adolescents participated, these were the students of secondary schools in Drohobych, Lviv region (Ukraine). The selective totality consisted of 58 boys and 62 girls respectively. The aim of the survey was to find out the priority values for kids and the young and on their basis to look for the ways of their effective formation. Respondents were given a questionnaire that contained closed and open-ended questions with the help of which the information about the values of children and young people was received. In particular, it was suggested to identify problems that particularly disturb the respondents, to evaluate the importance of different spheres of life (public and personal), to name what they would like to achieve in life. Thanks to verbalization were established the values inherent to kid's and young people's mind. The methodology of studying of value orientations by D.O. Leontev was also used, which is based on the statement, that the ground for self-interaction, the interaction with others and the environment is the system of value orientations of a person. The methodology contains two lists of values – terminal and instrumental (Leontev, 1992). Respondents were asked to rank them from the most significant to the least significant. The results processing was carried out separately for every value for all participants by calculating an average grade of each value. As a result, the hierarchy of values was divided into three groups: from 1 to 6 rank – significant values, 7 to 12 – indifferent and 13 to 18 – insignificant.

Research results

The results of the survey proved that the basis of the value consciousness of teenagers and adolescents is the material well-being, their own health and the health of relatives, proper education, as well as family. Among the problems that are most worrying for the respondents today, in the first place were mentioned the following: the declining living standards, low parental income, family relationships, lack of friends etc. The decline in morality is an important social and personal problem for only 25% of respondents. Civic values are perceived as personally significant for 27.5% of the respondents, which in the conditions of building a democratic society seems rather insignificant. Properly speaking, the results obtained indicate the orientation of children and young people on the materialistic type of sociocultural values, which is a result of living in conditions of the ensuring of physical survival, their own and their families security, etc. Thus, our findings are completely correlated with the results of the study of children's and young people's values of other national scholars (Fliarkovska, 2013; Skorynina-Pohrebna, 2015).

This state of affairs (situation) makes the need to acquaint children and young people with higher (spiritual) values really urgent (vital). It means that educational institutions are tasked to find the most optimal and most effective ways to help educators in the process of choice of values which is made in the world under constant globalization.

It is important to realize that under the conditions of values chaos, this task gets much more complicated. The modern world is full of problems, which include the poverty of a large part of the world population, environmental problems, wars and the increasing number of acts of terrorism etc. In particular, today we also have a military conflict in the center of the European continent, in Ukraine, which has directly or indirectly affected millions of citizens, including a large percentage of children. In addition, there are tendencies of aspiration for the world of enjoyment, an easy life, the avoidance of problems and responsibility for one's own actions etc. Actually, growing up in such a difficult situation, it is obvious that children are spontaneously learning mismanagement, cruelty, intolerance, etc. And the task of educational situations is refocused on the education of members of society who will be able not to exacerbate these problems, but to solve them.

Regarding this V. Scotnyi wrote: spiritual, moral and psychological culture of the student / student's personality depends on the content and orientation of the educational disciplines and the educational process. Taking into account the state of the personality, ambiguous socio-cultural influence on it, the orientation of the educational process in the state should be aimed at the spiritual enrichment and creative activity of the individual, that reveals his or her abilities

for self-realization and creation of conditions for self-disclosure of other people (Skotnyi, 2005).

Modern educational institutions have significant educational opportunities. In particular, they can create proper conditions for the growing generations to adopt the hierarchy of values in which the traditional values hold the highest rank, and to make the analysis of the values that each person chooses, since the picture of the world which surrounds this person mainly depends upon it.

Educational institutions also have the opportunity to help a child learn to make independent choice of values. It is extremely vital for the development of the subjectivity of the individual, his / her ability to live consciously and solve problems that appear. Unfortunately, today we still face a situation where everything is decided by the parents for the children, justifying it as “good for the child”. However, it should be understood that if you do not put the child in a situation of choice of values, and decide everything for her, she will later respond to treatment of the environment, the media, etc., expecting for their instructions how to act, not analyzing and evaluating the information received.

The development of values of an individual in the conditions of educational institutions one can realize with the help of traditional pedagogical tools. However, you can also use specific methods, such as text analysis, dialogue, biographical method, metaphor, crystallization of values, problem solving (Jedynak & Kojkoł, 2009). The value of every method mentioned lies primarily in the fact that their use involves the active position of both the educator and the pupil (disciple).

Text analysis can be widely used both at the lessons and in extracurricular activities. Lessons of literature, history, foreign language, etc. provide students with texts that represent the values of their own and other cultures. And in this context one should remember that the values of the text under analysis must be properly perceived and understood, which implies that the students have their certain life experience. Besides, the educator should be prepared to use this method, give a correct presentation of values, and teach children to identify and understand them quite unobtrusively.

As it is difficult for children to orient themselves in the world of relatable values, when assessing a particular situation or phenomenon, it is necessary to be guided by the context, metaphorical texts (fairy tales, fables) play an important role in the process of values education, enabling them to make judgments within the measures of good and evil. In these genres of fiction, good and evil are clearly identified and clearly polarized. It allows us not only to adopt socially significant and approved values, but also to understand their antipodes and to realize the inadmissibility of being ruled by them in different situations of life.

The essence of the biographical method lies in the discovery of values through the knowledge (perception) of other people's biographies. Properly in this context, it is worth noting that biographies of people can be learned /studied as a sequence of life milestones, but it is more productive to do it in the light of values that have provoked life changes. Moreover, identification with the hero whose biography is being studied helps to assimilate values. In this way, people can form not only individual values, but also their own ethical system.

We consider the method of values crystallization to be as well productive in the development of values, it lies in the performing of individual written exercises, the purpose of which is to help the pupil to put his own impressions, experiences, thoughts into a verbal form. This method allows the child to realize their own values, to reinterpret them and to correct if it is necessary. Returning to earlier works allows one to trace the evolution of the development of one's values and value systems (Jedynak & Kojkoł, 2009).

The method of dialogue creates the best opportunities for the realization of subject-subject relations. By the way, each participant of the dialogue has the right to his or her own point of view, and at the same time must be disposed to mutual understanding. Through dialogue, every person has the opportunity to see oneself in the background of the other, and thus, having penetrated into the world of another, to better understand and know oneself. Discussion of complex moral dilemmas, own interpretation of the problem and the ability to listen and adopt a different point of view, contributes to the formation of tolerance, awareness of the existence of different views and points of view, but at the same time the integrity of moral and ethical laws.

The adoption of values is also ensured through the use method of problem analysis. Conflict situations from fiction, real life, observations of children, etc. can be selected for the analysis. In the process of work on the problematic situations, the pupils accumulate ethical knowledge and their own experience of designing their behavior in different life situations.

Table 1 Results of ranking of values by pupils of secondary schools (according to the methods of studying the value orientations by D.O. Leontev (1992))

Rank	Value name			
	Before the experiment		After the experiment	
	Terminal values	Instrumental values	Terminal values	Instrumental values
1	health	independence	health	independence
2	love	joy of life	love	education
3	well-off life	education	creativity	joy of life
4	happy family life	responsibility	happy family life	honesty
5	the existence of friends	honesty	the existence of friends	sensitiveness
6	entertainment	managing	happiness of others	tolerance

The above mentioned methods of teaching values were used by teachers both at the classes and in the extra-curricular activities. Special attention was given to the inculcation of higher (spiritual) values upon the pupils. The results of the study are shown in table 1.

The analysis of the obtained results showed that after the conducted experimental work, the values of interpersonal relationships appeared among the priority terminal values of the students of secondary schools, displacing individual values (well-off life and entertainment) to the group of indifferent ones. Altruistic values and the values of interpersonal communication prevail among priority instrumental values. While the group of indifferent values included conformist values (responsibility and managing). Therefore, we can see that the predominant orientation of children and young people to the materialistic type of socio-cultural values has undergone some changes and higher (spiritual) values have already emerged in the priority system.

Conclusions

The person's absorption of basic values will enable her to find her place in life and feel comfortable in it. It is important to keep in mind that values need to be taught. The situation of a changeable world, in which a child is often faced with the relativization of values, should not become an obstacle to the development of values of the individual. On the contrary, it should be the catalyzer which has to quicken the search for ways of taking the child into the world of spiritual values. In this situation the use of the following specific methods will be very helpful: text analysis, crystallization of values, biographical method, etc. Their value lies, first of all, in the fact that it involves the active work of pupils who carry out the operations of analysis, synthesis, generalization, make conclusions, etc. Moreover, the implementation of these methods allows a pupil to actively engage in the activities where the conditions for the display of the acquired values are created. Providing the active work of a pupil on the selection, absorption and perceiving of values contributes to the development of a righteous (highly moral) personality with an active life position.

In order to avoid problems in the process of axiological formation of the individual, it is also important to maximally avoid imposing values and to remember that one of the mechanisms of their formation is imitation. Therefore, the educator in his own behavior should be guided by the values that he wants to impart to the pupil.

References

- Brezinka, W. (2005). *Wychowanie i pedagogika w dobie przemian kulturowych*. Kraków: Wydawnictwo WAM.
- Farmer, R. (1988). Values Education: An Argument for the Defence. *The Educational Forum*, 52(1), 69-75. DOI: 10.1080/00131728809335508
- Jedynak, S., & Kojkoł, J. (Eds.). (2009). *Encyklopedia filozofii wychowania*. Bydgoszcz: «Branta».
- Śliwerski, B. (Ed.). (2006). *Pedagogika. Podstawy nauk o wychowaniu. Tom 1*. Gdańsk: Gdańskie Wydawnictwo Oświatowe.
- Türkkahraman, M. (2014). Social Values and Value Education. *Procedia – Social and Behavioral Sciences*, 116, 633-638. DOI: 10.1016/j.sbspro.2014.01.270.
- Astashova, N. (2002). Konceptualnye osnovy pedagogicheskoy aksiologii. *Pedagogika*, 8, 8-13.
- Fliarkovska, O. (2013). Tsinnisni oriientsii u pidlitkovomu vitsi. *Naukovyi visnyk Uzhhorodskoho natsionalnoho universytetu. Serii: Pedagogika. Sotsialna robota*, 26, 221-224.
- Leontev, D. (1992). *Metodika izucheniya cennostnykh orientacij*. Moskva: Smysl.
- Skorynina-Pohrebna, O. (2015). Zhyttievi tsinnosti v uiavlenniakh abiturientiv ta yikh batkiv v suchasnomu ukrainskomu suspilstvi. *Visnyk ONU im. I. I. Mechnykova. Psykholohiia*, 20(4), 124-130.
- Skotnyi, V. (2004). *Filosofii osvity: ekzystentsiia irratsionalnoho v ratsionalnomu*. Drohobych: Vymir.
- Skotnyi, V. (2005). *Filosofii: istorychni i systematychni kurs*. Kyiv: Znannia Ukrainy.
- Vyshnevskiy, O. (2003). *Teoretychni osnovy suchasnoi ukrainskoi pedagogiky*. Drohobych: Kolo.

SKOLOTĀJU KOMUNIKATĪVĀS KOMPETENCES VEICINĀŠANA MEDIĀCIJAS MĀCĪBĀS DZĪVES KVALITĀTES KONTEKSTĀ

Promoting of Teachers' Communicative Competence in Mediation Studies within the Life Quality Context

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Abstract. *Living in a society, people cannot avoid communicating with others. Communication accompanies us in all spheres of life. Consequently, it is important to develop our communicative competence over a lifetime. Teacher is one of the professions where communicative competence determines the efficiency of activity. Communicative competence can be developed in various ways. Mediation was introduced in the justice system at the end of the 20th century as a method of dispute solving with the participation of a mediator. In recent years, mediation knowledge and skills are also gradually taking a rightful place in the field of education. Experience acquired during the mediation studies is valuable for the promotion of the communicative competence: knowledge and skills on conflict solving, dialogue maintenance, active listening etc., which helps in creating of positive psychological environment in any organisation (including schools). Consequently, teachers must be able to solve conflict situations, and, which is equally important, to pass on their experience to their colleagues, students and their parents. The aim of the research: based on the results of theoretical researches, to make a survey aimed at finding out the opinion of teachers concerning the importance of the communicative competence in the life quality improvement. 97 % of respondents believe that there is a link between the communicative competence and the quality of life.*

Keywords: *communicative competence, mediation, teacher communicative competence, quality of life.*

Ievads

Introduction

Dzīvojot sabiedrībā, cilvēks nevar iztikt bez saskarsmes ar citiem cilvēkiem. Saskarsme pavada visas cilvēka dzīves jomas. Tāpēc ir svarīgi dzīves laikā attīstīt

komunikatīvo kompetenci. Vairākos dokumentos, ziņojumos un rakstos ir izceltas 21.gadsimta prasmes globalizētā pasaulē: kreativitāte un jaunrade; kritiskā domāšana un problēmu risināšana; komunikācija, sadarbība, datorprasmes; tehnoloģiju izmantošana; karjeras/dzīves prasmes; personiskā/sociālā atbildība (Framework for 21st Century Learning, 2019; McKeeman & Oviedo, 2013). Neskatoties uz to, ka komunikācijas prasmes ir izceltas kā būtiskas 21.gadsimtā, tomēr arī pārējas prasmes nevar apgūt un attīstīt bez komunikācijas. Viena no jomām, kurā ir nozīmīga komunikatīvā kompetence, ir profesionālā darbība. Mūsdienu situācija izvirza prasību pēc tādiem rādītājiem, kuri iepriekš bija nozīmīgi, bet netika izcelti kā būtiskas personības kvalitātes. Tie ir: uzskatu plašums, zinātņu integrācija, jebkuras problēmas apjēgšana kopveselumā. Darba tirgū ir pieprasījums pēc speciālistiem, kuri ir spējīgi risināt problēmas savā darbības jomā un izprast problēmas faktoru daudzveidību (Novikov, 2012). Tas attiecināms arī uz skolotāja profesiju, kuram komunikatīvā kompetence ir jāattīsta mūža garumā. Kā viens no risinājumiem ir komunikatīvās kompetences veicināšana mediācijas mācībās.

21.gadsimta sākumā ASV mediācijas pētnieks L. Bīkmans (Beekman, 2016) definēja mediāciju kā *neformālu, konfidenciālu procesu, kurā konfliktā iesaistītās personas ar īpaši apmācītas neitrālas personas palīdzību mēģina atrast abpusēji pieņemamu risinājumu savām domstarpībām*.

Tomēr mūsdienās mediācijas loma tiek uzsvērta daudzu problēmu risināšanā, t.sk. arī izglītības vidē. Skolotāji savā profesionālajā darbībā sadarbojas ar kolēģiem, skolēniem, viņu vecākiem un dažādu institūciju pārstāvjiem, tāpēc skolotājam ir svarīgi arī pašam prast risināt problēmsituācijas, palīdzēt to darīt vecākiem un skolēniem (Grafskiy, 2017; Horoshevskaya, 2019), jo tas ne tikai uzlabo savstarpējo saskarsmi, bet arī dzīves kvalitāti. Pēdējo gadu pētījumi dzīves kvalitātes jomā liecina, ka tie ir starpdisciplināri (Leontyev, 2011; Rubanova, 2014). Dzīves kvalitātes jautājumi tiek pētīti gan pedagoģijā, gan psiholoģijā.

Pētījuma mērķis: balstoties uz teorētisko pētījumu rezultātiem, veikt aptauju, lai noskaidrotu skolotāju viedokļus par komunikatīvās kompetences nozīmi dzīves kvalitātes uzlabošanā.

Komunikatīvās kompetences loma dzīves kvalitātē mūsdienu sabiedrībā un skolotāju profesijā: literatūras apskats

The role of the communicative competence in the life quality of modern society and in the profession of a teacher: review of literature

Lai sasniegtu izvirzīto mērķi, sākumā tika veikts teorētiskais pētījums. Šim nolūkam tika izvēlētas sekojošas teorētisko pētījumu metodes:

- 1) pedagoģijas un psiholoģijas teorētisko atziņu analīze par izvēlēto pētījuma tematu;

2) dažāda līmeņa normatīvo dokumentu analīze.

Jautājums par cilvēka labklājību tika skatīts vēl Antīkajā pasaulē. Aristotelis bija viens no pirmajiem, kurš nedefinēja labklājības jēdzienu.

Dzīves kvalitātes jēdziena izpratnē laika gaitā ir notikušas izmaiņas kopš zinātnieki pievērsās tā izpētei un definēšanai 20.gadsimta 60.gados (Almakayeva, 2018; Rubanova, 2014). Minēsim dažus no tiem:

- dzīves kvalitāte ir vairāk subjektīvs un mazāk materiāls jēdziens nekā dzīves līmenis (Fontinelle, 2019);
- dzīves kvalitāte ir iedzīvotāju apmierinātība ar savu dzīvi no dažādu vajadzību un interešu skatupunkta (Vorobyev, 2016);
- dzīves kvalitāte ir labklājības subjektīvs vērtējums, kas balstās uz labklājības subjektīvu vērtējumu, kas veidojas uz atšķirību pamata starp esošo un vēlamo dzīves stāvokli; indivīdu dzīves stāvokļa uztvere kultūras un vērtību sistēmas kontekstā, kurā viņi dzīvo atbilstoši saviem mērķiem, gaidām, standartiem un rūpēm (Kachestvo zhizni i ego povedencheskiye sostavlyajushshije, b.g.);
- dzīves kvalitāte ir sarežģīts starpdisciplinārs jēdziens, kas apvieno cilvēka dzīves būtisko īpatnību teorētiskās un empīriskās izpētes mēģinājumus no labvēlīguma skatupunkta (Subjektivnīje indikatori i psihologicheskiye prediktori kachestva zhizni , 2019);
- dzīves kvalitāte ir saistīta ar spēju adaptēties mainīgajos apstākļos (Svence, 2013);
- dzīves kvalitāte ir cilvēka fiziskās, psiholoģiskās un sociālās funkcionēšanas integrālais raksturojums, kas balstās uz viņa subjektīvo uztveri (Rubanova, 2014);
- dzīves kvalitāte ir apmierinātība ar veselību, komfortu, labām savstarpējām attiecībām u.c. (Longman dictionary of contemporary English, 2001).

Tātad dzīves kvalitāte ir starpdisciplinārs jēdziens, kas ir saistīts ar indivīda vajadzību un interešu apmierināšanu un ietver sevī objektīvos un subjektīvos kritērijus (Almakayeva, 2018). Citi zinātnieki pievieno vēl integrālos (Judina, 2017). Dzīves kvalitātes objektīvie rādītāji ir sekojoši: veselība, izglītība, vides kvalitāte, personīgā drošība, pilsoniskā iesaistīšanās un darba un atpūtas līdzsvars. Savukārt subjektīvie dzīves kvalitātes rādītāji ir apmierinātība ar dzīvi un emocionālais līdzsvars (Kõrreveski, 2011; OECD, 2014). Abas rādītāju grupas jāizmanto kompleksā (Almakayeva, 2018; Judina, 2017). Var piekrist A. Judinas (Judina, 2017) viedoklim, ka dzīves kvalitāte ir objektīvo un subjektīvo raksturojumu kopums. Pie kam indivīdi biežāk piešķir nozīmi nemateriālajiem kritērijiem (Judina, 2017; Leontyev, 2011; Subjektivnīje indikatori i psihologicheskiye prediktori kachestva zhizni, 2019; Zarakovskij, 2000). Tas atspoguļojās arī raksta autoru veiktajā pētījumā. A. Zakharova (Zakharova, 2014)

min pie dzīves kvalitātes kritērijiem kulturālo attīstību, veselības uzlabošanu, ekoloģisko un citu dzīves apstākļu uzlabošanu, partnerattiecību veidošanos starp dažādiem sabiedrības slāņiem. Arī mediācijas pieredze un prakse ir virzīta uz indivīda labklājības veicināšanu.

Latvijas sociālo zinātņu pārstāvji pievērsās mediācijas izpētei un definēšanai 20.gadsimta 90.gadu beigās. Mediācijas jēdziena izpratne Latvijas pētnieku vidū ir relatīvi vienota. J. Bolis (Bolis, 2011) definē mediāciju kā ārpustiesas procesu, kur kāda profesionāli izglītota neitrāla persona, kas nav iesaistīta strīdā, palīdz pusēm pašām rast strīda risinājumu. Latvijā praktizējošs vācu speciālists A. Trossens (Trossen, Hofmans, & Rotfišere, 2007) raksturo mediāciju kā konfliktu risināšanas procesu, kurā konfliktā iesaistītās puses ar mediatora atbalstu pašas rod konflikta atrisinājumu un līdz ar to visas procesā iesaistītās puses ir uzvarētājas.

2014.gada 18.jūnijā spēkā stājās Mediācijas likums (Mediācijas likums, 2014), kurā mediācija tiek definēta kā brīvprātīgs sadarbības process, kurā puses cenšas panākt savstarpēji pieņemamu vienošanos savu domstarpību atrisināšanai ar mediatora starpniecību. Tomēr mediatori ne tikai piedalās strīdu risināšanā, bet arī dažādu profesiju pārstāvju mācīšanā. Viena no tādām mērķgrupām ir skolotāji. Mediācijas mācībās pilnveidojas skolotāju komunikatīvā kompetence, t.sk. konfliktoloģiskā kompetence, kas ir komunikatīvās kompetences sastāvdaļa (Horoshevskaya, 2019).

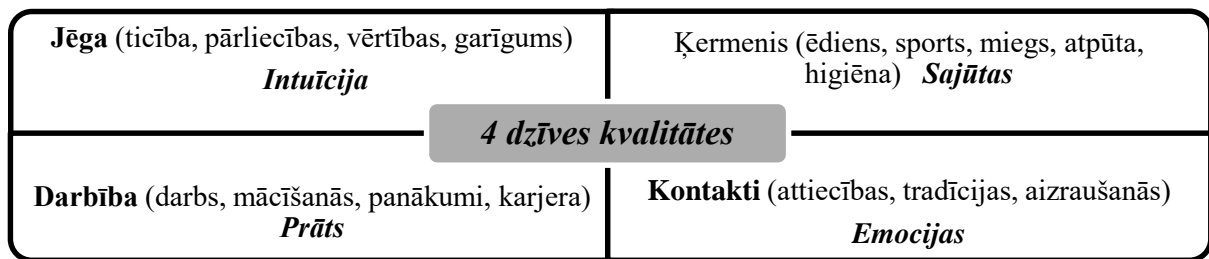
Cilvēkam ir daudzšķautnainas attiecības ar pasauli. Psihosomatikas virziena pārstāve N. Vitorskaja (Vitorskaya, 2006) cilvēka attiecības ar to atspoguļo sekojoši (1. tab.).

1. tabula. *Cilvēku mijiedarbība ar pasauli* (Vitorskaya, 2006)
Table 1 *People's relationships with the world* (Vitorskaya, 2006)

Nº	Līmenis	Raksturojums
1.	7	<i>Konceptuālās attiecības</i> (pasaules uzskats, dzīves jēga, integrācija, attīstības un radošuma bezgalība, apvienošanās perspektīva)
2.	6	<i>Cilvēka hierarhiskās attiecības ar pasauli, dabu, sabiedrību</i> (sociālais statuss, sabiedriskie kontakti, vērtību sistēma, universālu likumu zināšana un pielietošana)
3.	5	<i>Kolektīvi pārveidojošās attiecības</i> (vadība kā spēja veidot noturīgas attiecības, balstoties uz individualizāciju)
4.	4	<i>Starppersonu attiecības</i> (tolerance, autoritāte, sociālā atzinība, pilnveidošanās)
5.	3	<i>Izziņas aktivitāte</i> (darbību plānošana, bāzes vajadzību vadība)
6.	2	<i>Emocionālā attieksme pret sevi un pasauli</i> (vēlme apmierināt vajadzības)
7.	1	<i>Dzīves telpa</i> (ēdiens, sadzīve, materiālie faktori, dzīves elementu esamība un lietošana)

Var redzēt, ka nevienā no līmeņiem cilvēks nevar iztikt bez komunikācijas. Arī N. Pezeškians (*Peseshkian*), balstoties uz saviem pētījumiem (20 dažādās kultūrās visos 5 kontinentos), nonāca pie secinājuma, ka uz laimi ved četri ceļi:

- 1) Sajūtu ceļš (ķermenis);
- 2) Intuīcijas ceļš (jēga);
- 3) Tradīciju ceļš (kontakti);
- 4) Prāta ceļš (darbība) (Sostavljushchije schastja. Balansnaya model – 4 kachestva zhizni, b.g.) (1. att).



1. attēls. N. Pezeškiana kristāls – 4 dzīves kvalitātes

Figure 1 N.Peseshkian's crystal – 4 life areas

(Sostavljushchije schastja. Balansnaya model – 4 kachestva zhizni, b.g.)

Līdzsvara modeļa galvenās atziņas ir sekojošas. Cilvēkam ir 4 pasaules izziņas kanāli. Dzīves aktivitāte ir harmoniska un pastāv enerģijas (emocionālais) līdzsvars, kad visām jomām tiek piešķirta apmērām vienāda uzmanība (**Jēga** – nākotnes plāni, sapņi, mērķi, ticība, vērtības, principi, dzīves jēga. **Ķermenis** – fiziska veselība un fiziska aktivitāte, sajūtas un pašsajūta, āriene. **Kontakti** - tuvas emocionālās attiecības, ģimene, draugi, radi, saskarsme. **Darbība** – profesionālie un biznesa panākumi, mācības, zinātne, panākumi, karjera). Harmoniskai, aktīvai un laimīgai dzīvei jāsadala savu dzīves aktivitāti (enerģiju) vienmērīgi starp 4 jomām. Lai uzturētu šo līdzsvaru cilvēkam ir nepieciešama komunikatīvā kompetence. Jāprot veidot dialogu ne tikai ar apkārtējiem cilvēkiem, bet arī ar sevi. Tātad komunikatīvo kompetenci var nosaukt par personības kodola kompetenci.

Viena no jomām, kurā cilvēks īsteno sevi, ir profesionālā darbība. Saistībā ar profesionālo darbību izdala tās divus aspektus - darbu un jaunradīšanas darbību. Laika gaitā tie tika lietoti kā sinonīmi, bet tiem ir pretējā nozīme. Darbs un jaunradīšanas darbība papildina viens otru, jo psiholoģiski nav līdzvērtīgi. Iekšējā būtība (darbība) dominē par ārējo pusi (darbu) un ir pārāka par to. Darba rezultāti nerodina cilvēka mēģinājumus iziet no izveidojušās situācijas. Savukārt darbības mērķis ir tāda stāvokļa sasniegšana, kas pārveido cilvēku, veicina visu viņa iespēju attīstību (Problemi konsultirovanija po voprosam upravlenija personalom, 2014). Tātad, veicina cilvēka potenciāla realizāciju. Personības

potenciāls, kas īstenojas darbībā, sastāv no sekojošiem komponentiem (Problemi konsultirovanija po voprosam upravlenija personalom, 2014):

- a) **motivācijas** (ietver motīvus saistītus ar karjeras plānošanu un profesionālo darbību (vispārējās un radošās aktivitātes, sociālā lietderīguma motīvs);
- b) **vērtību** (vērtību orientācijas, kas orientē speciālistus uz karjeras veidošanu (profesionālās, sociālās);
- c) **personības** – personības raksturojumi, kas ir orientēti uz profesionālajiem panākumiem un karjeras veidošanu (adekvāts pašvērtējums, pašpieņemšana, konkurētspēja);
- d) **sociālais** - iemaņas, kas veicina karjeras veidošanu (sociālā kreativitāte, virzība uz mērķu sasniegšanu);
- e) **gribas** – augsts paškontroles līmenis, koncentrēšanās uz problēmu un rezultāta sasniegšanu;
- f) **emocionālais** – prasme atšķirt citu cilvēku un paša emocijas, emocionālā izglītība;
- g) **intelektuālais** – satur kreativitātes elementus, kas ļauj apskatīt problēmu no dažādiem aspektiem, piedāvājot oriģinālos risināšanas veidus.

Mūsdienu cilvēkam jābūt gatavam darboties dinamiskā darba tirgus apstākļos. Tas izvirza prasību prast strādāt ar informācijas plūsmām, analizēt apkārt notiekošo, būt dinamiskam, vieglam, komunikablam u.c. (Novikov, 2012). Tas attiecas arī uz skolotājiem, jo skolotājs nevar mācīt skolēnus, balstoties tikai uz šodienas prasībām un neieskatoties nākotnē. Minētās pazīmes liecina, ka sabiedrība savā attīstībā ir pārgājusi jaunā līmenī – postindustriālā, zināšanu. Informācijas procesu ietekmē būtiski mainās sabiedrības struktūra un notiek cita tipa sociālo saišu veidošana. Sakarā ar to palielinās komunikatīvās kompetences nozīme. Pēc raksta autoru viedokļa, kompetence ir zināšanu, prasmju un pieredzes integrāls kopums, kas izpaužas atbildīgā patstāvīgā darbībā, respektējot konkrētās vides un situācijas specifiku (Baltušīte, 2013). Kompetence raksturo cilvēka sagatavotību noteiktas darbības veikšanai un ietver sevī kognitīvos (iemaņas, zināšanas) un nekognitīvos (vērtību orientācijas, motīvus u.c.) komponentus un nodrošina darbības veiksmīgumu mainīgajos apstākļos (Zakharova et al., 2015).

Katram cilvēkam jāprot savā darbavietā un sabiedrībā profesionāli izturēties pret apkārtējiem. Viena no svarīgām īpašībām ir pareiza un kulturāla komunikācija. Tas izpaužas personības komunikatīvā kompetencē, kas veidojas mūža garumā. V. Kabrins (no Muravjova, 2012) uzskata, ka komunikācija ir universālais informatīvi enerģētiskais un jēgas – radošuma process. Komunikabilitāti zinātnieks skata kā integrālo personības raksturojumu, kuram ir lielāks dziļums un darbības attālums, nekā pieņemts uzskatīt, jo tajā var iekļauties iepriekšējo paaudžu un dzīvju ģenētiskā pieredze, kurai nevar atrast atslēgu

ierastajos apstākļos. Komunikatīvās kompetences nozīmi skolotāja profesionālajā darbībā ir skatījuši zinātnieki no dažādām valstīm (Bakic-Tomic, Dvorski, & Kirinic, 2015; Hartono, Saleh, Warsono, & Anggani, 2017; Okoli, 2017; Zlatic, Bjekic, Marikovic, & Bojovic, 2014).

Komunikatīvās kompetences jēdzienu ieviesa D. Haimss 1966.gadā pretstatā N. Čomska 1965.gadā lietotajam lingvistiskās kompetences jēdzienam (Bagaric & Mihaljevic-Djigunovic, 2007). Komunikatīvās kompetences jēdzienu papildināja un pētīja L.F. Bahmans, D. Haimss, M. Kenels, A.S. Palmers, M. Sveins, H.G. Viddovsons (Bagaric & Mihaljevic - Djigunovic, 2007; Fang, 2010), J. Habermas (Habermas, 1981), J.A. Jemeljanova, L.A. Petrovskaja, I.N. Zotova u.c. (Zakharova et al., 2015).

T.V. Zakharova (Zakharova et al., 2015) ar kolēģiem, apkopojot vairāku autoru atziņas, komunikatīvo kompetenci raksturo sekojoši:

- a) personības spēja veidot sociālos kontaktus, regulēt mijiedarbības atkārtotojās situācijas, starppersonu attiecībās sasniegt komunikatīvos mērķus;
- b) starppersonu pieredze, kuras pamatu veido socializācijas un individualizācijas procesi;
- c) komunikācijas spēja, spēja mijiedarboties ar citiem savā audzinātības, attīstības līmenī, uz humānistisko personības īpašību pamata, ievērojot sarunas biedra komunikatīvās iespējas;
- d) īpašības veicinošas saskarsmes procesa veiksmīgumu (īpašības tiek pielīdzinātas komunikatīvām spējām);
- e) komunikatīvo darbību sistēma, ko pamato zināšanas par saskarsmi un nodrošina brīvu orientēšanos un darbošanos kognitīvajā telpā.

S. Ušča un V. Ļubkina (Ušča & Ļubkina, 2013) komunikatīvo kompetenci skata kā sistēmu, izceļot lingvistisko, psiholoģisko un metodoloģisko aspektus. Tās pamata raksturojums ir indivīda pieredze izmantot lingvistiskās, sociolingvistiskās, diskursa un stratēģiskās zināšanas un prasmes daudzveidīgās komunikācijas situācijās.

Vairāki autori komunikatīvās kompetences struktūrā izcel gramatikas (lingvistisko) kompetenci, diskursa kompetenci, sociolingvistisko kompetenci un stratēģisko kompetenci (Bagaric & Mihaljevic-Djigunovic, 2007; Ušča & Ļubkina, 2013). D. Bjekiča un L. Zlatiča (Bjekić & Zlatić, 2006), balstoties uz K. Reardonu, izdala komunikatīvās kompetences struktūrā kognitīvo un uzvedības dimensijas. Kognitīvā dimensija ietver informācijas izpratni un tās kognitīvo apstrādi. Uzvedības dimensija norāda uz dažādām saziņas izpausmēm komunikatīvā kompetencē. Savukārt G. Volkera (Walker, 2007) izdala trīs komunikatīvās kompetences dimensijas:

- a) pielāgošanās;
- b) piemērotība;

- c) efektivitāte. G. Volkera (Walker, 2007) minētās dimensijas sasaistās ar mūsdienu neparasto situāciju, kurā atrodas dažādu profesiju pārstāvji, jo pārmaiņas notiek visās jomās – ekonomikā, politikā, izglītībā, medicīnā u.c., kurā komunikācija ir viens no ceļa rādītājiem. Notika izmaiņas komunikatīvās kompetences saturā, sabiedrībai pārejot no industriālā tipa uz postindustriālo.

Čankova J.V. (Chankova, 2016) min sekojošus pārmaiņas komunikatīvā kompetencē ietekmējošos faktoros:

- a) informācijas tehnoloģiju attīstība pazemina sociālo institūtu lomu sabiedrības atražošanas procesos un veicina nelineāro tīkla struktūru rašanos lineāro vietā (nelineārās (rizomās) tīkla struktūras veido postindustriālās informācijas sabiedrības uzbūvi un citādāk organizē sociālos kontaktus);
- b) mezglu tīkla struktūrā sistemveidojošais faktors ir darbības subjekts – tīkla personība, kura, veidojot sociālās attiecības, izveido sociālās sistēmas tīkla lauku;
- c) informācijas tehnoloģiju lomas palielināšana sabiedrības funkcionēšanā izmaina stratifikācijas pazīmes sabiedrības sociālā struktūrā (sociālo statusu nomaina kompetences faktors – horizontālie sociālie kontakti);
- d) pāreja no masu lomas industriālā sabiedrībā uz postindustriālās sabiedrības personalizāciju (nenoteiktības situācijās elastīgi situatīvie lēmumi tiek pieņemti personības līmenī);
- e) komunikācija ir noteicošais faktors visos sociālos procesos. Nosauktie faktori nosaka izmaiņas komunikatīvā kompetencē un izvirza noteiktu prasību komunikatīvās kompetences veicināšanai, kas būs atbilstoša ne tikai šodienas, bet arī nākotnes situācijām.

Jebkuru skolu varam raksturot, lielākoties, kā atvērtu sistēmu, kura ir saistīta ar ne tikai ar savu vidi, bet arī ar tām vidēm, no kurām skolā ienāk skolēni. Tas rada dažādas problēmas savstarpējā saskarsmē, t.sk. konfliktsituācijas, ko nosaka novērtēšana, socializācija un izvēle; laiks, ko skolēni pavada skolā (Will & Ramdohr, 2015). Mediācijas mācībās skolotāju iegūtā pieredze veicinās vardarbības mazināšanu, skolēnu komunikācijas prasmju un spēju apguvi, kas savukārt palīdzēs veidot labvēlīgāku ne tikai konkrētās skolas vidi, bet arī pasauli, kurā mēs dzīvojam. Tas nosaka komunikatīvās kompetences nozīmi mūsdienu mainīgajā pasaulē.

Metodoloģija *Methodology*

Skolotājiem komunikatīvā kompetence tiek uzskatīta par pamatkompetenci profesionālā darbībā, tāpēc noskaidrojām, kā skolotāji izprot saskarsmes aspektus. Respondentiem tika piedāvāta anketa, ar kuras palīdzību noskaidrojām respondentu zināšanas par to, kas ir mediācija, komunikatīvā kompetence, dzīves kvalitāte un vai pastāv komunikatīvās kompetences saikne ar dzīves kvalitāti. Pēc mācībām anketa tika papildināta ar jautājumu, kur skolotāji varēs izmantot iegūtās zināšanas.

Tika veikts pedagoģiskais eksperiments, kura laikā tika aprobēta skolotāju profesionālās pilnveides izglītības programma. Mediācijas mācību programma tika izstrādāta 32 stundu apjomā un ietvēra sekojošus tematus: saskarsmes verbālie un neverbālie līdzekļi, nevardarbīgas saskarsmes pazīmes, konflikta situācijas raksturojumi un atpazīšana, mediācijas procesa struktūra.

Pirms un pēc profesionālās pilnveides programmas mediācijas jomā aprobācijas tika veikta aptauja ar autoru veidoto anketu. Programmas aprobācijā piedalījās 35 skolotāji profesionālās pilnveides kursu dalībnieki. Anketu aizpildīja 35 respondenti (Vidzemes un Latgales reģionu skolotāji). Pētījuma laiks - no 2018.gada oktobra līdz 2019.gada martam.

Pētījuma metodes:

- 1) datu ieguvei tika izmantota anketēšana un iegūto anketu kontentanalīze;
- 2) datu apstrādē tika izmantots Vilkoksona tests un hī kvadrātā kritērija tests secinošās statistikas ieguvei.

Skolotāju viedoklis par komunikatīvās kompetences saikni ar dzīves kvalitāti: pedagoģiskā eksperimenta rezultāti

Opinion of teachers regarding the link between the communicative competence and life quality: the results of the pedagogical experiment

Atbildot uz jautājumu, kas, pēc respondentu domām, ir mediācija, visbiežāk tika minētas atbildes, ka tas ir sarunu vadīšanas process (43%), konfliktu risināšana mierīgā ceļā (26%), rezultatīva konfliktu risināšana (20%), izmantojot starpnieka dalību (11%). Pēc novadītām nodarbībām respondenti raksturoja mediāciju kā strukturētu sarunu konflikta risināšanai mierīgā ceļā (34%), piedaloties trešajai personai – starpniekam (28%) (2. tab.).

2. tabula. *Atbildes uz jautājumu: Kas ir mediācija?* (autoru veidota)
Table 2 *Answers to a question: What is mediation?* (created by authors)

N	Vērtēšanas kritēriji	Pētījuma rezultāti (pozitīvo atbilžu biežums un īpatsvara rādītāji)		Diferences
		Pirms	Pēc	
1.	Sarunu vadīšanas process/ Strukturēta saruna	15 (43%)	12 (34%)	- 3 (9%)
2.	Konfliktu risināšana mierīgā ceļā	9 (26%)	12 (34%)	+ 3 (9%)
3.	Rezultatīva konfliktu risināšana	7(20%)	9 (26%)	+ 2 (6%)
4.	Starpnieka esamība	4 (11%)	10 (28%)	+ 6 (17%)

Tālāk izvērtējam respondentu atbildes par to, kas raksturo komunikatīvo kompetenci (3.tab.).

3.tabula. *Komunikatīvās kompetences raksturojumi pirms un pēc mācībām* (autoru veidota)
Table 3 *Characteristics of the communicative competence before and after studies*
(created by authors)

N	Vērtēšanas kritēriji	Pētījuma rezultāti (pozitīvo atbilžu biežums un īpatsvara rādītāji)		Diferences
		Pirms	Pēc	
1.	Aktīvā klausīšanās	18 (51%)	28 (80%)	+10 (39%)
2.	Skaidra savu domu izteikšana	15 (43%)	19 (54%)	+4 (11%)
3.	Ieinteresētība sarunā	15 (43%)	11(31%)	-4 (12%)
4.	Sadarbība	13 (37%)	15(43%)	+2 (6%)
5.	Pozitīva attieksme	12 (34%)	16 (46%)	+4 (12%)
6.	Dialoga veidošana	11 (31%)	13(37%)	+2 (6%)
7.	Jautājumu uzdošana	10 (28%)	11 (31%)	+1 (3%)
8.	Sarunu partnera izpratne	8 (23%)	13 (37%)	+5 (14%)
9.	Empātija	8 (23%)	24 (68%)	+16 (45%)
10.	Savu emociju vadīšana	7 (20%)	15 (43%)	+8 (23%)
11.	Konstruktīva konfliktu risināšana	7(20%)	13 (37%)	+6 (17%)
12.	Neverbālo komunikācijas līdzekļu izmantošana	4 (11%)	15 (43%)	+11 (32%)
13.	Cieņa	4 (11%)	12 (34%)	+8 (23%)
14.	Elastīga domāšana	4 (11%)	11 (31%)	+7 (20%)

Nākamajā datu apstrādes posmā iegūtie dati tika apstrādāti ar Vilkoksona (*Wilcoxon*) testu, kas deva iespēju izvērtēt secinošās statistikas rezultātus atbildot uz jautājumu, cik statistiski būtiskas ir izmaiņas respondentu atbildēs par komunikatīvo kompetenci pirms un pēc programmas aprobācijas (4. tab.).

4. tabula. **T kritiskie rādītāji (n=35)** (autoru veidota)
 Table 4 **T-critical values** (created by authors)

n	T _{kr.}	
	35	0.01
	173	213

Dati iegūti, izmantojot tiešsaistē Vilkoksona t-kritērija aprēķināšanu (Avtomaticeskij raschet T-kriterija Vilkoksona, 2007). Iegūtais $T_{emp.}=62 < \alpha=0,01(173)$. Tādējādi, var noraidīt nulles hipotēzi un pieņemt H_1 hipotēzi, ka komunikatīvās kompetences rādītāju skaitā atbilstoši saturam pirms un pēc mācībām pastāv nozīmīgas atšķirības.

Turpinot darbu, respondentiem vajadzēja uzrakstīt 10 dzīves kvalitātes raksturojumus. Šo uzdevumu viņi veica arī pirms un pēc mācībām. Tabulā apkopoti biežāk minētie rādītāji, kas saistās ar dzīves kvalitāti (5. tab.)

5. tabula. **Dzīves kvalitātes raksturojumi pirms un pēc mācībām** (autoru veidota)
 Table 5 **Characteristics of the life quality before and after studies** (created by authors)

N	Vērtēšanas kritēriji	Pētījuma rezultāti (pozitīvo atbilžu biežums un īpatsvara rādītāji)		Diferences
		Pirms	Pēc	
1.	Sakārtota dzīves vide	18 (51%)	14 (40%)	-4 (11%)
2.	Veselība	17 (48%)	26 (74%)	+9 (26%)
3.	Atbalsts	16 (46%)	14 (40%)	-2 (6%)
4.	Psiholoģiskā un materiālā stabilitāte	15 (43%)	14 (40%)	-1 (3%)
5.	Drošība	14 (40%)	13 (37%)	-1 (3%)
6.	Ģimene	13 (37%)	14 (40%)	+1 (3%)
7.	Darbs	12 (34%)	15 (43%)	+3 (9%)
8.	Hobiji, brīvais laiks	10 (28%)	14 (40%)	+4 (12%)
9.	Attiecības	9 (26%)	23 (66%)	+14 (40%)
10.	Miers	7 (20%)	7 (20%)	0 (0%)
11.	Līdzsvars starp darbu un atpūtu	6 (17%)	7 (20%)	+1 (3%)
12.	Izglītība	6 (17%)	3 (9%)	-3 (8%)
13.	Mīlestība	5 (14%)	12 (34%)	+7 (20%)
14.	Pašrealizācija	5(14%)	16(46%)	+11(32%)

Respondenti kā svarīgus dzīves kvalitātes rādītājus nosauca sakārtotu dzīves vidi (51%; 40%), veselību (48%; 74%), atbalstu (46%; 40%), psiholoģisko un materiālo stabilitāti (43%; 40%), drošību (40%; 37%), ģimeni (37%; 40%), hobiju un brīvā laika esamības un pavadīšanas iespējas (28%; 40%). Katrs piektais respondents nosauca mieru kā dzīves kvalitātes raksturojumu. Apkopojot datus,

pievērsām uzmanību tam, ka ļoti maz tika nosaukta izglītība (9%) kā dzīves kvalitātes rādītājs. Var izvirzīt pieņēmumu, ka skolotājiem visiem ir augstākā izglītība un papildus maģistra grādi un vairākas kvalifikācijas, tāpēc šīs dzīves kvalitātes raksturojums viņu dzīvē ir īstenots.

Šo pieņēmumu apliecina to pedagoģijas un psiholoģijas pētnieku atziņas, ka dzīves kvalitātes raksturojumi konkrētam indivīdam ir saistīti ar vajadzību apmierināšanu (Judina, 2017). Viennozīmīgi būtisks cilvēka dzīves kvalitātes raksturojums ir veselība (74%). Tā kā skolotāji ir tie, kuri pastāvīgi mācās, tad pašrealizācija un pašizaugsme (14%; 46%) viņu dzīvē arī ir nozīmīgas.

Respondentiem tika jautāts, vai pastāv saikne starp komunikatīvo kompetenci un dzīves kvalitāti (6.tab.). Pēc datiem tabulā var redzēt, ka lielākā respondentu daļa (97%) pirms un pēc mācībām saskata saikni starp dzīves kvalitāti un komunikatīvo kompetenci.

6. tabula. Respondentu viedoklis par komunikatīvās kompetences saikni ar dzīves kvalitāti (autoru veidota)

Table 6 Opinion of respondents regarding the link between the communicative competence and life quality (created by authors)

Atbildes	Jā	Vairāk jā, nekā nē	Vairāk nē, nekā jā	Nē
Aptaujas				
Pirms mācībām	17	17	1	0
	34(97%)		1 (3%)	
Pēc mācībām	22	12	1	0
	34 (97%)		1 (3%)	

Runājot par to, kā komunikatīvā kompetence ietekmē dzīves kvalitāti, skolotāji uzsvēra gan uzlabojumus saskarsmē darbā, ģimenē un citās jomās, kas savukārt rada mazāku stresu un palīdz atrisināt daudzas problēmsituācijas, kas rodas dzīvē. Labs komunikatīvās kompetences līmenis veicina pašcieņu, pašrealizāciju, sadarbību, palīdz labāk saprast apkārtējos cilvēkus un kolēģus.

Pēdējais anketas jautājums bija par to, kā skolotāji varētu izmantot mediācijas mācībās iegūtās zināšanas un prasmes. Respondenti atbildēja, ka tās varētu pielietot: a) iemācīt skolēniem (31: 88%); b) konfliktu risināšanā (30: 85%) c) sadarbībā ar skolēniem un viņu vecākiem (25: 71%); d) kopumā savstarpējo attiecību uzlabošanā un vardarbības mazināšanā (18: 51%); e) saskarsmes problēmu risināšanā darba vietā (15: 43%); f) demonstrēt kā paraugu ikdienas situācijās (15: 43%); g) skolotājs var uzņemties mediatora lomu konfliktsituācijā (10: 28%).

Lai noskaidrotu izmaiņas respondentu viedokļos eksperimenta laikā, tika aprēķināts χ^2 – kvadrāta kritērijs (Preacher, 2001).

Kaut arī aprakstošās statistikas rezultāti liecina, ka pēc mediācijas mācībām palielinājās respondentu skaits, kuri viennozīmīgi uzskata, ka pastāv saikne starp komunikatīvo kompetenci un dzīves kvalitāti (22: 63%), tomēr iegūtie secinošās statistikas rezultāti: $p\text{-vērtība} = 0.681 > \alpha = 0,05$ liek secināt, ka nav statistiski būtisku izmaiņu starp respondentu atbildēm pirms un pēc eksperimenta, jo pastāv mērena sakritība (Gutjahr, 1974) starp respondentu viedokļiem par komunikatīvās kompetences un dzīves kvalitātes saikni pirms un pēc mācībām.

Tātad izstrādātās un eksperimentāli aprobētās pedagogu profesionālās pilnveides izglītības programmas rezultātā skolotājiem tika veicināta gan komunikatīvā kompetence, gan izpratne par tās saikni ar dzīves kvalitātes uzlabošanu.

Secinājumi **Conclusions**

Komunikatīvā kompetence ir lingvistiski, psiholoģiski un metodiski organizēta sistēma, ko raksturo subjekta pieredze izmantot lingvistiskās, sociolingvistiskās, diskursa un stratēģiskās zināšanas un prasmes daudzveidīgās komunikācijas situācijās. Komunikatīvās kompetences struktūrā ietilpst lingvistiskā, diskursa, sociolingvistiskā un stratēģiskā kompetences. Rietumu autori pieturās pie šāda skatījuma uz komunikatīvo kompetenci, savukārt krievu zinātnieku pētījumos vairāk likts uzsvars uz komunikatīvām zināšanām, prasmēm un spējām, izceļot komunikatīvās kompetences psiholoģisko komponenti. Izvērtējot zinātnieku atziņas, komunikatīvo kompetenci var definēt kā integrālo veidojumu, kas ietver zināšanas, prasmes, spējas un pieredzi īstenot saskarsmes procesu komunikācijas, sociālās percepcijas un interakcijas līmeņos.

Sabiedrības pāreja no industriālās sabiedrības uz postmoderno sabiedrību (informācijas tehnoloģiju lomas palielināšana, akcentu pārvietošana no statusa uz kompetenci un no masas uz personību) ietekmēja komunikatīvās kompetences saturu, kad iepriekšējās shēmas ne vienmēr dod vēlamu rezultātu. Robežu paplašināšanās ļauj komunikatīvo kompetenci skatīt starpkultūru kontekstā.

Komunikatīvai kompetencei ir svarīga loma skolotāju profesionālā kompetencē, tāpēc šīs profesijas pārstāvjiem pastāvīgi tā jāpilnveido, jo skolotājs ir tas, kas piedalās saskarsmes procesā ar skolēniem, viņu vecākiem. Mediācijas prasmes pilnveido skolotāja komunikatīvo kompetenci, kas savukārt mazina vardarbību skolas vidē, dod iespēju skolēniem apgūt jaunas zināšanas un prasmes konstruktīvas saskarsmes veicināšanai, ko apliecināja arī pētījuma rezultāti. Vilkoksona t-kritērijs uzrādīja būtiskas izmaiņas respondentu atbildēs par komunikatīvās kompetences raksturojumu skaitu un to atbilstību būtībai pēc mediācijas mācībām (iegūtais $T_{emp.} = 62 < \alpha = 0,01(173)$).

Pēdējo gadu normatīvie dokumenti izceļ tādu cilvēka dzīves rādītāju kā labklājība. Visu zinātņu (t.sk. pedagogijas un psiholoģijas) sasniegumiem ir jābūt vēršiem uz cilvēka labklājības vai dzīves kvalitātes veicināšanu.

Kā būtiskus dzīves kvalitātes raksturojumus respondenti minēja fizisko un garīgo veselību (74%), attiecības (66%), pašrealizācija (46%), darbs (43%), ģimene (40%), sakārtotā dzīves vide (40%), psiholoģiskā un materiālā stabilitāte (40%) u.c. Respondentu nosauktajos raksturojumos mijas objektīvie un subjektīvie raksturojumi.

Komunikatīvā kompetence ir saistīta ar dzīves kvalitāti. Tā uzskata 97% respondentu. Pēc respondentu domām, komunikatīvās kompetences pilnveidošana ietekmē cilvēku savstarpējas attiecības, paaugstina apmierinātību ar dzīvi, pašcieņu, mazina stresu. Var secināt, ka mediācijas mācības veicina gan skolotāju komunikatīvo kompetenci, gan dzīves kvalitāti.

Summary

Living in a society, people cannot avoid communicating with others. Communication accompanies us in all spheres of life. Consequently, it is important to develop our communicative competence both during studies and within a lifetime. A wide range of documents, reports and articles point out the skills topical for the 21st-century globalized world: creativity and innovation; critical thinking and problem-solving; communication; collaboration; information literacy; technology usage; career/life skills; personal/social responsibility. Despite the fact that communication as such is marked out as a separate essential skill of the 21st century, all the other skills cannot be acquired and developed without the communication. Consequently, it can be qualified as a key skill in the structure of personality. Professional activity is one of the areas where the communicative competence is of high importance.

Correct cultural communication is one of the most important features. It is reflected in personal communicative competence, which is forming throughout the lifetime. As it follows from V. Kabrin, communication is a multi-purpose process featuring a combination of information and energy, meaning and creativity. For a scientist, communication skills are the integral characteristic feature of a personality, which effect goes deeper and wider than it is commonly believed, as it can include a genetic experience of previous generations and lives, which cannot be revealed in usual conditions.

Chankova J.V. mentions the factors influencing changes in communicative competence:

- a) development of information technologies reduces the role of social institutions in the processes of social reproduction and determines the replacement of linear network structures by the non-linear ones (non-linear (rhizome) network structures form the post-industrial information society and result in different kind of arrangement of social contacts;
- b) in a knotted network structure, the system-defining factor is a subject of activity – a personality of the network, who creates a field of the social system network when forming social relations;
- c) the increase of the role of information technologies in the activity of the society changes the stratification features in a social structure of the society (the social status is replaced by the competency factor – horizontal social contacts);

- d) transition from the role of the masses in the industrial society to the personalization of the post-industrial society (flexible situational decisions in the situations of uncertainty are taken on the personality level);
- e) communication is the defining factor in all social processes. The above factors define the changes in communicative competence and set up certain requirements for the promotion of communicative competence, which will be appropriate not only for current, but also for future situations.

Communicative competence is a linguistically, psychologically and methodologically organised system characterised by the experience of a person in using linguistic, discourse and strategic knowledge and skills in various communicative situations. The structure of communicative competence includes the linguistic, discourse, sociolinguistic and strategic competences. This is the opinion expressed about communicative competence by Western authors, while Russian scientists lay greater emphasis on the communicative knowledge, skills and abilities, underlying a psychological component of communicative competence. Evaluating the insights made by various scientists, competence can be defined as an integral formation, which includes knowledge, skills, abilities and experience in carrying out the communication process on a level of communication, social perception and interaction.

The transition from the industrial to post-modern society (the increase of the role of information technologies, shifting of focus from status to competence and from masses to personality) affected the content of communicative competence, and the existed schemes not always ensure the desired result now. The expansion of borders allow for considering communicative competence within a multicultural context.

Communicative competence plays an important role in the professional competence of teachers, therefore, the representatives of this profession have to constantly improve their communicative competence, as a teacher is the one who participates in the process of communication with students and their parents. The mediation skills improve a teacher's communicative competence, which in its turn minimizes violence in school environment, allows students to acquire new knowledge and skills, contributing to constructive communication, which is also approved by the research results. The Wilcoxon signed-rank test demonstrated substantial changes in the answers given by respondents about the number of communicative competence features and the correspondence to their essence after the mediation studies (acquired $T_{emp.}=62 < \alpha=0,01(173)$).

In recent years, regulatory documents point out such a factor of our life as welfare. All the scientific achievements (incl. pedagogical and psychological) must be aimed at the promotion of social welfare or life quality.

Among the substantial life quality features, the respondents mentioned physical and spiritual health (74%), relationships (66%), self-fulfilment (46%), work (43%), family (40%), arranged life environment (40%), psychological and financial stability (40%) etc. The answers given by the respondents included both objective and subjective ratings.

Communicative competence is linked with life quality. This is the opinion of 97 % of respondents. As it follows from the respondents, the improvement of the communicative competence influences mutual relations of people, promotes life satisfaction, self-respect, reduces stress. It can be concluded that the mediation studies promote both the communicative competence of teachers and the life quality.

Literatūra References

- Almakajeva, A. (2018). *Kak issledujut kachestvo zhizni?* Retrieved from <https://postnauka.ru/faq/86535>
- Avtomaticeskij raschet T - kriterija Vilkoksona.* (2007). Retrieved from <https://www.psychol-ok.ru/statistics/wilcoxon/>
- Bagarić, V., & Mihaljević-Djigunović, J. (2007). Defining communicative competence. *Metodika*, 8(1), 94-103. Retrieved from <https://hrcak.srce.hr/file/42651>
- Bakic-Tomic, L., Dvorski, J., & Kirinic, A. (2015). Elements of teacher communication competence: An examination of skills and knowledge to communicate. *International Journal of Research in Education and Science (IJRES)*, 1(2), 157-166.
- Baltušīte, R. (2013). *Pedagoģijas studentu gatavība profesionālai darbībai skolas vidē.* Promocijas darbs. Jelgava: LLU.
- Beekman, L. (2016). *Mediation Plus Options To Resolve the "Real" Problems Underlying Disputes.* Retrieved from <http://files.eric.ed.gov/fulltext/ED451644.pdf>
- Bjekic, D., & Zlatić, L. (2006). *Effects of professional activities on the teachers' communication competences development.* 31 annual atee Association of Teacher Education in Europe conference. Retrieved from <http://www.pef.uni-lj.si/atee/978-961-6637-06-0/163-172.pdf>
- Bolis, J. (2011). *Mediācija: pielietojums Amerikas Savienotajās Valstīs un perspektīvas Latvijā.* Rīga: Latvijas Zinātņu Akadēmijas vēstis.
- Chankova, E.V. (2016). *Kommunikativnaja kompetentnost lichnosti v postindustrialnom obshhestve (teoretiko-metodologicheskoe issledovanie): monografija.* Moskva: Izdatelstvo RGSU.
- Judina, N.A. (2017). Psihologicheskie podhody k izucheniju subyektivnogo kachestva zhizni. *Psihologija*, 104 -110. Retrieved from <https://elibrary.ru/item.asp?id=29458641>
- Fang, F. (2010). A Discussion on Developing Students' Communicative Competence in College English Teaching in China. *Journal of Language Teaching and Research*, 1(2), 111-116. doi:10.4304/jltr.1.2.111-116
- Habermas, J. (1981). *Theorie des kommunikativen Handelns.* Band. 1. Handlungsrationaliät und gesellschaftliche Rationalisierung. Frankfurt am Main: Suhrkampf.
- Hartono, H., Saleh, M., Warsono, W., & Anggani, D. (2017). *Towards Teachers' Communicative Competence Enhancement: A Study on School Preparation for Bilingual Programs.* DOI: 10.24167/celt.v17i1.1135
- Horoshevskaya, I.V. (2019). Formirovanie mediativnoy kompetentnosti budushhih pedagogov kak psihologo-pedagogicheskaya problema. *Izvestija VGPU, Pedagogicheskije nauki*, 113-118.
- Fontinelle, A. (2019). *Standard of Living vs. Quality of Life: What's the Difference?* Retrieved from <https://www.investopedia.com/articles/financial-theory/08/standard-of-living-quality-of-life.asp>
- Framework for 21st Century Learning.* (2019). Retrieved from <http://www.battelleforkids.org/networks/p21/frameworks-resources>
- Grafskiy, V.P. (2017). Shkolnaja mediacija kak inovacionnij socialnij projekt obshhestva konstruktivnih vzaimodeistvij. *Mediacija: teorija, praktika, perspektivi razvitija. Sbornik tezisev nauchno-prakticheskoy konferencii*, 65-67. Moskva: FGBU "FIM".
- Gutjahr, W. (1974). *Die Messung psychischer Eigenschaften.* Berlin: VEB.

- Kachestvo zhizni i ego povedencheskie sostavljajushhie.* (b.g.). Retrieved from <https://www.dgr.ru/psychology/researches/42>
- Kõrreveski, K. (2011). Measuring well-being and quality of life using OECD indicators. *Quarterly bulletin of statistics Estonia*, 38-44.
- Leontyev, D.A. (2011). Subjektivnoe blagopoluchie i kachestvo zhizni: podhody, kriterii i indikatory. Retrieved from <https://www.hse.ru/org/projects/47266005>
- Longman dictionary of contemporary English. (2001). 3rd ed..Harlow: Longman.
- McKeeman, L., & Oviedo, B. (2013). *Enhancing Communicative Competence Through Integrating 21st Century Skills and Tools*. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.697.8596&rep=rep1&type=pdf>
- Mediācijas likums.* (2014). Retrieved from <http://likumi.lv/doc.php?id=266615>
- Muravjova, V.I. (2012). *Psihologija komunikativnoj kompetentnosti: uchebnik*. Tomsk: Tomskij universitet.
- Novikov, A.M. (2012). Professional'noe obrazovanie: ustremlenie v budushhee. *Problemy sovremennogo obrazovanija*, 3, 5-10.
- OECD. (2014). *How's Life in Your Region?: Measuring Regional and Local Well-being for Policy Making*. Paris: OECD Publishing.
- Okoli, A. (2017). Relating Communication Competence to Teaching Effectiveness: Implication for Teacher Education. *Journal of Education and Practice*, 8(3), 150-154. Retrieved from www.iiste.org
- Preacher, K.J. (2001). *Calculation for the chi-square test: An interactive calculation tool for chi-square tests of goodness of fit and independence* [Computer software]. Retrieved from <http://quantpsy.org>
- Problemy konsultirovanija po voprosam upravlenija personalom: monografija* (2014). Pod red. Bjundjugovoj T.V. Taganrog: Izd-l A.N.Stupin.
- Rubanova, J.Y. (2014). Teoreticheskiye aspekty kachestva zhizni v kontekste psihologii zdorovja. *Elektronnoje nauchnoje izdanije „Uchonije zametki TOGU”*, 5(3), 108 – 115. Retrieved from <http://pnu.edu.ru/ru/ejournal/about/ejournal@pnu.edu.ru>
- Sostavljajushhie schastja. Balansnaja model – 4 kachestva zhizni.* (2013). Retrieved from <https://psycabi.net/psikhologiya-samorazvitiya/466-sostavlyayushchie-schastya-balansnaya-model-kristall-n-pezhshkiana>
- Subjektivnije indikatory i psihologicheskiye prediktory kachestva zhizni.* (2019). Retrieved from http://quality-of-life.tsu.ru/?page_id=747
- Svence, G. (2013). Latvijas iedzīvotāju izlases dzīves kvalitātes rādītāju izpēte. RSU zinātniskā konference *Bioloģisko novecošanas procesu faktori un dzīves kvalitāte Latvijas populācijā*. Rīga, 21.-22.marts.
- Trosens, A., Hofmans, R., & Rotfišere, D. (2007). *Mediācija. Mediācijas pamati teorijā un praksē*. Tulkojums no vācu valodas uz latviešu valodu ES Twinning projekta Strīdus izšķiršanas sistēmas un praktizējošu juristu apmācība. Rīga: Tiesu namu aģentūra.
- Ušča, S., & Ļubkina, V. (2013). *Pusaudžu ar valodas traucējumiem komunikatīvās kompetences attīstība*. Rēzekne: Rēzeknes Augstskola.
- Vitorskaya, N. (2006). *Prichiny boleznej i istoki zdorovja*. 5-e izdanie: Obshherossijskaja obshhestvennaja organizacija NAUMP i KP. Moskva: Amrita – Rus'
- Vorobyev, A.A. (2016). Kachestvo zhizni kak pokazatel effektivnosti gosudarstvennogo upravleniya. *Ekonomicheskiye nauki*. Retrieved from <https://research-journal.org/economical/kachestvo-zhizni-kak-pokazatel-effektivnosti-gosudarstvennogo-upravleniya/>

Nicmane et al., 2020. *Skolotāju komunikatīvās kompetences veicināšana mediācijas mācībās dzīves kvalitātes kontekstā*

- Walker, G. (2007). *Communication Competencies and Conflict Management: Skills for Mediators and Facilitators*. Retrieved from <http://oregonstate.edu/instruct/comm440-540/MedCommSkills.html>
- Will, H.D., & Ramdohr, S. (2015). *Ievads mediācijai skolā. Rokasgrāmata*. Rēzekne: Rēzeknes Augstskola.
- Zaharova, A.N. (2014). Mezhdisciplinarnaja problema kachestva zhizni v kontekste sovremennyh nauchnyh issledovanij. *Vestnik psihiatrii i psihologii Chuvashii*, 10, 141.
- Zaharova, T.V., Basalayeva, N.V., Kazakova, T.V., Ignatyeva, N.K., Kirgizova, E.V., & Bahor, T.A. (2015). Kommunikativnaja kompetentnost': ponjatie, harakteristiki . *Sovremennye problemy nauki i obrazovanija*, 4. Retrieved from <http://www.science-education.ru/ru/article/view?id=20413>
- Zarakovskiy, G.M. (2000). *Kriteriji kachestva zhizni kak orijentiry socialno-ekonomicheskogo razvitija obshhestva*. Moskva: VNIITE.
- Zlatic, L., Bjekic, D., Marikovic, S., & Bojovic, M. (2014). *Development of Teacher Communication Competence*. Retrieved from <https://www.sciencedirect.com/science/article/pii/S1877042814002821>

CULTURE OF PEDAGOGICAL INTERACTION IN EDUCATIONAL PROCESS MANAGEMENT

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***Abstract.** In the publication the necessity of comprehensive educational establishment teachers' mutual systemic and structured interaction with the school administration has been raised. The need for teachers' professional proficiency development and collaboration with methodological work doers for an efficient educational process provision are especially emphasized, as well as urgency for new productive cooperation models has been marked out, which, providing pedagogical interaction, gives an opportunity to increase in a qualitative way pupils' achievements, the study process outcome improvement in the education content during the time of changes or transformation. The authors of the article raise a hypothetical question whether interaction among the subjects involved in intervention actually exist and how efficient it is, in order to move towards common goal implementation and qualitative development of pupils' outcomes in the discourse of multistage cooperative relationships. Observing and analysing the course of educational establishments' different pedagogical and management processes, features have been detected that the aspects of interaction culture are uncertain, which reveals challenges for search of a new approach to collaborative models.*

***Keywords:** collaboration, interaction, teacher, administration.*

Introduction

Few people know very much about why schools exist as they do today; the intellectual traditions that have shaped education seem to be invisible to most observers. What are children and young people in school for? This has dominated discussion about education not just for the last 50 or 100 years, but, as we have seen, for ever (Thomas, 2013). We have continually to think about the aims and ideals of education and not just the processes by which it is provided. The aims and ideals are at the core of the debate about progressive education. It is not just our abilities and talent that bring us success – but whether we approach our goals with a fixed or growth mindset. With the right, we can motivate our children to raise their grades, as well as reaching our own goals – both personal and professional.

The quickly changeable 21st century offers various challenges to the modern human being – the individual's choice is either to get involved in the change offers or observe the changes remotely – without any self-involvement, participation and equality. The educational process and institutions which provide education acquisition are characterized by globalization, constant development of information technologies and diversity of values. In future pupils will have to create themselves the economic, political, social and cultural environment, which has been unprecedented so far and unknown for us.

During the times of changes teachers are also invited to work differently, being aware of individualization, personalization and differentiation approach in education. The teacher's task has always been to direct pupils to understand their potential, be aware of their abilities and reveal new capitals and qualities in themselves. However, the authors of the article would like to emphasize that the teachers' mutually purposeful work planning is part of pupils' success factors in skills and knowledge performance. The learning process should be organized in a collaborative manner. *Collaboration* - a joint action; mutually coordinated action, in case of a necessity helping each other, supporting each other (Pedagoģijas terminu skaidrojošā vārdnīca, 2000) in such a way that the pupil would be forced to act proactively, getting involved fully, taking responsibility, learning cooperation and communication face to face on all levels of intervention.

The purpose of the article is to understand on an interinstitutional level the efficiency of action by the parties involved in the mutual interaction and quality in the process of educational content change.

In the research the interview method has been applied during which new information was obtained from the administration representatives of educational establishments and selectively chosen teachers of class groups. The results of the research will be carried out at the end of this study year.

For the collecting empiric data acquisition 12 administrations of Liepaja comprehensive educational establishments and the teachers' interview were used in order to find out whether the pedagogical interaction culture exists in the management processes of the institutions.

Topicality of Education Process Management

In formal education in every country each part of human development is essential. It is meant to shape pupils competitive in the world market and it has a potential to be a tough social progress tool. Qualitative education can make a human stronger and happier, make more peaceful societies and sustainable societies with a wider economic progress and honesty consisting of people who are fulfilled in all welfare dimensions.

Acquisition of universal values and different social or life skills is implemented in the whole education process in compliance with the national education and subject standards. In classes and extracurricular activities in the educational establishment studying and upbringing activities are implemented, which is a mutually related, undividable and united process. During the education process the pupils' learning success is assessed: pupils' knowledge, skills and abilities. However, assessment (measurement) of pupils' attitudes causes confusion. Also, pupils' behaviour is not assessed, as there is not consensus in the society and among teachers about the fact whether behaviour should be assessed in general, how objectively and according to what criteria it can be carried out.

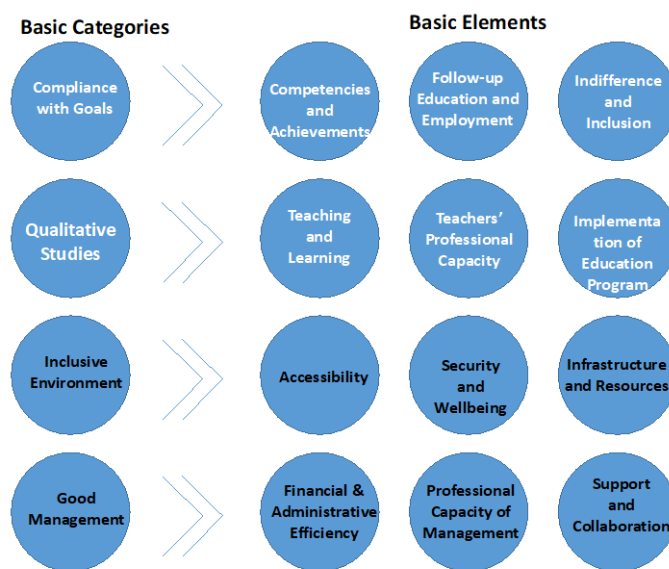


Figure 1 Criteria of educational process quality assessment (Skola 2030)

Thinking globally, the development of sectors will depend on the specialists in the field, who will need multidisciplinary skills. The modern life rhythm requires the human to be flexible to adapt to changes and create qualitative relationships based on multiform interaction. *Interaction*- mutual impact of existing objects, phenomena, processes, their conditionality, change of condition and interdependence of transition processes. People's mutual impact, which creates a certain model of relationships and changes in the persons' goals, motives, attitudes, action (Psiholoģijas vārdnīca, 1999).

Interaction is one of the communication sides that states the interactive aspects so that it could be possible to develop own knowledge and skills and adapt to the needs which determine the necessity for the paradigm change. Priorities are focused on the amount of knowledge and skills and quality, as they are important human resources and a prerequisite to promote the individual and national growth,

acquiring the necessary skills and knowledge, working in a competitive workplace, implementing business or creating new practical/theoretical knowledge.

Teaching and Learning International Survey (TALIS) defines teaching as a profession underpinned by five pillars:

1. The knowledge and skills base, which includes shared and specialised knowledge, as well as standards for access to the profession and development of specific skills through pre-service training and in-service professional development;
2. The status and standing of the profession, captured through the ethical standards expected of professional workers, the intellectual and professional fulfilment of the job, and the working regulations applying to teaching (such as competitive reward structures on par with professional benchmarks and room for career progression);
3. Peer control, which relies upon self-regulated and collegial professional communities that provide opportunities for collaboration and peer feedback to strengthen professional practices and the collective identity of the profession;
4. Responsibility and autonomy, captured through the degree of autonomy and leadership that teachers and school leaders enjoy in their daily work, to make decisions and apply expert judgement and to inform policy development at all levels of the system, so that professionalism can flourish;
5. The perceived prestige and societal value of the profession (TALIS, 2018).

Description of Interaction Culture in Educational Process Management

Do teachers spend more time on actual teaching and learning in a typical lesson compared to previous years? Do they feel prepared to teach when they start teaching? What sort of continuous professional development programmes do they participate in and how does it impact their practice? The study is needed to look first at how teachers apply their knowledge and skills in the classroom in the form of teaching practices, with an accompanying assessment of the demographic makeup of those classrooms and the school climate to provide context on learning environments. The volume then assesses the way in which teachers acquired their knowledge and skills during their early education and training, as well as the steps they take to develop them through continuous professional development over the course of their career.

Education systems, as well as school leaders, should strive to give teachers greater flexibility in designing effective learning environments that optimise

classroom time. During the interview process randomly asking questions the authors were willing to find out the responses about criteria describing effective school management practices (Table 1).

Table 1 Framework for Effective School Management Competencies

Category	Criteria describing effective school management practices	Criteria dimensions
I Vision, mission, goals, values, their embodiment	Vision, mission, goals – their embodiment	The essence is directed towards school development, better pupils’ learning outcomes and complies with the topical educational policy context, The goals are important for the very implementers themselves, Vision, mission and goals are mutually consistent Mission reflects the unique positioning of the school in the local community, Goals are cascaded (school -> school management -> teacher), Goals comply with SMART, Management and communication of new goals - changes, implementation.
	Embodiment of values	They are formulated, Awareness (everybody knows them), Congruence of values, Clearly noticeable in daily action, Scale of values: adherence to usual activities – openness to development.
	Work on data	Variety of data sources and tools; data on pupils, teachers, school management, Depth of data analysis, Purposefulness of data analysis, Data applicability, Data communication.
	Manager as a role model, “Leadership”	Conducts classes in which the desired practice can be seen Participates in the school staff’s trainings, Participates in pupils’ activities, Ethics, values, congruence of speech with work, Before anything is communicated and implemented in school, first of all acquire and try it out yourself.
II Creating a learning supportive environment	Involvement (school visions, missions in goal setting; in other processes at school)	Involved ones’ awareness (about the particular process, procedure), Significance (for the involved parties), Participation (opportunities to participate), Involved people, Number of the developed, implemented processes, procedures, involving different parties.

	Accessibility to resources and procedures (rules, regulations, etc.)	Awareness, Essence of documents (not formally) and quality, Practical implementation of the procedures – compliance of the real activity with the procedure documents, Relation of attracted resources to the target, Active attraction of different resources (from entrepreneurs, etc.), Available resources of the community – number of the involved parties.
	Decision making	Clear and delegated assignments, balanced responsibility, separated and mutually complementary roles, What and to what extent something has been delegated outside the school management team.
	Environment	Emotional environment – pupils and staff feel safe, Physical environment – suitability to special needs; suitability to modern learning process and pupils, artefacts are placed about pupils and learning; appropriate rooms for teachers, School culture
III Learning management	Learning content	Opportunities of common planning, Systems for the good practice – goal, purpose, action, responsibility, structure and procedures.
	Learning	Involvement of school management in lesson observation, Feedback from pupils, parents, Systems for good learning practice, Monitoring.
	Evaluation	Summative evaluation – awareness, practice, structure; Number of hours devoted to summative evaluation from the total amount of study; Formative evaluation – awareness, practice, structure, Monitoring.
	Learning organization	Management and surveillance regarding the learning content, learning and evaluation, Structure regarding the learning content, Structure regarding learning, Structure regarding evaluation, Surveillance – lesson observation, Surveillance – feedback from pupils, teachers and parents, Organizational function – in how many lessons the teacher is present/teaches and how substitution takes place (form, order).

	Support for every pupil	Support addressing pupils' needs, Respect for diversity and application of diversity as a resource, High expectations form all pupils, Cooperation and relationships with parents for pupils' support
IV Staff's development	Microclimate, relationships	"We and them" or "we," Solving problem situations and conflict situations, Relationships between the school management and teachers are professional, Relationships in the management team.
	Number of teachers	Missing teachers, Attracted new teachers, Teachers' replacement (in the particular period), Percentage of teachers who have received high evaluation in relation to the total number.
	Support for staff's professional development	Complies with topical and individual needs, Availability of professional development, Compliance with the goal, purposefulness, Volume (number of involved people, number of lessons), Form, how learning is carried out (learning, projects).
	Learning communities	Number of the involved, its increase, Forms, regularity, purposefulness.
	Individualized approach to work management and support	Planning of teacher's individual work; from good-bad to personal profile development, Motivation system (is there; what kind), Defence ("bumper").
V School inclusion in the community, application of community resources	Position in municipal social hierarchy	Segregation risks, Relations with the municipality, Pupils and parents' socioeconomic condition, status, etc., Involvement in other cooperation networks

School leaders could also be given increased discretion to use human resources in more flexible ways at the school level, to enable teachers to work with smaller groups at least part of the time. An additional advantage of such an approach could be to provide an opportunity to trial new ways of working in teams with other teachers and support staff to assess the impact of such arrangements on students and teachers.

Studying the work principles of educational establishments processes, the authors of the article developed mutual intervention model of the educational establishment level based on activities, if one of the main performance indicators is the pupils' learning achievements.

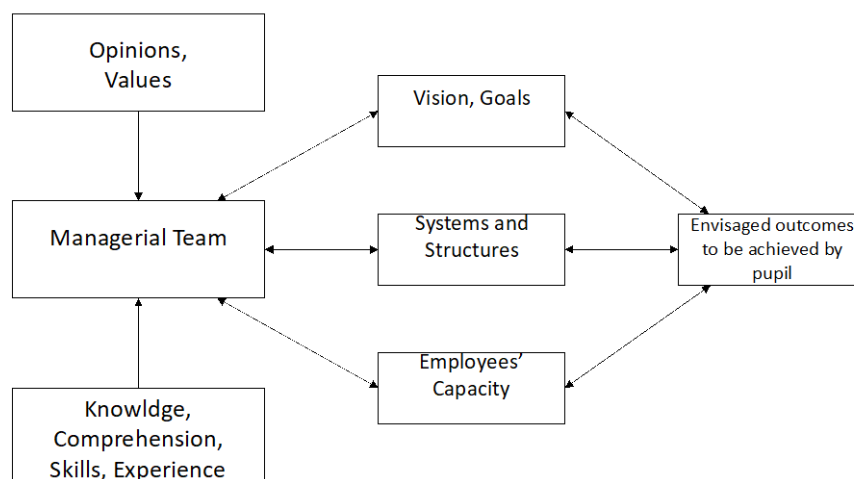


Figure 2 *Level of Educational Institutions*

The teacher's proficiency criterion states the teachers' implicated and formulated responsibilities, expectations and functions, working with a theory that has not been approbated or fully acquainted, where it has emerged from, why it is being used and sometimes even who has been its author historically. Innovations related to the change of paradigms affect the administrative and educational process, good management quality and sustainability, credibility to qualitative achievable result enhancement by the participants involved in the interaction.

The authors of the article, when analysing the efficiency and quality of the processes of pedagogical interaction culture of educational establishments, mention the most essential factors set by K. Ganeshan (Ganeshan, 2019) that influence pupils' learning outcomes according to the management model of educational establishments and compliance policy.

1. *Teachers' mutual collaboration directed towards a common goal achievement*

To drive the success of teaching and learning through initial training and continuous professional development:

- Promoting quality teaching for every student examines whether teachers' and school leaders work and working conditions shape environments conducive to student learning and well-being and also how to ensure quality teaching for every student.
- Supporting the professional growth of teachers and school leaders throughout their careers analyses whether teaching is becoming increasingly professionalised in terms of knowledge and skills and how to support the professional growth of teachers and school leaders.

- Attracting quality teachers and school leaders and monitoring workforce dynamics describes the teacher and principal workforces and suggests direction for attracting quality teachers and school leaders and monitoring workforce dynamics.

2. *Multilevel relationship discourse of school management activities in the educational process management*

Bryk and Schneider's notion of "relational trust" refers to the interpersonal social exchanges that take place in a school community (in the classroom and staffroom) and is based on four criteria (Hattie, 2012).

- Respect involves the recognition of the role that each person plays in the learning.
- Competence in the execution of a role relates to the abilities that one has to achieve the desired outcomes.
- Personal regard for others is the perception of how one goes beyond what is required in his or her role in caring for another person.
- Integrity is the consistency between what people say and what they do.

For efficient empirical data acquisition, analysing the situation in 12 Liepaja municipal comprehensive educational institutions, the interview and discussion methods were applied both for school administrations and teachers in order to give an opportunity to all parties involved to provide an immediate feedback on the problem identified or purposefulness of the set vision in a successful collaboration context.

The authors of the article can come to a conclusion from the interviews with the teachers that the burn-out, ageing reason, also the problems of training and support availability are the most often emphasized. Efficient professional development and methodological support activities are missing.

From the interviews with the school principals and deputies it can be seen that for them the most difficult questions are about the purpose of school in general, what results are expected from the pupils, about the mission or main task of the school. It can be concluded that in separate schools the mentioned goals even differ from the three participants of the school management team; in most cases the teachers' goals are not subordinated to the school goal or there is a weak link between them.

Progress towards the school goal is not tracked, the data are neither accumulated nor their analysis performed in order to make its activity more effective and implement the necessary improvements, changes. Analysing the responses received from the interviews, it can be concluded that in schools the awareness of interaction culture among the subjects involved in the educational process is missing.

In every school a training system directed to the goal and clear pupils' result based on the proficiency principle has to be created and implemented. The goals set by the school management/administration have to state every teacher's goals and action policy.

Priorities must be achieved so that in every teacher's lesson the basic activities performed are at least on a sufficient level, creating a personalized professional development, including development and implementation of individual development plans for the work with teachers.

Discussion

Collaborating in a mutually dependent synergy, favourable conditions have been created to obtain new knowledge, find new solutions and create new methods/models whose implementation and practical application in daily professional duties performance is an essential prerequisite for success. Joint responsibility in interaction culture is an eco-system that supports amalgamated teamwork and provides a greater engagement in the process development in outstanding result performance.

Participation means the change of power, authority and control. The pedagogical collaboration culture of successful action politically challenged management, based on mutual trust and complete delegation of functions which is stated in the job descriptions and professional standards, is like a linking element for a progressive and efficient co-responsibility development. The authors of the article, getting in touch with the education expert G. Ganeshan from New Zealand and having had a discussion about progressive cooperation of the educational establishments' administrations with their teachers, can conclude that it is so sad that in schools exist administration, separate from educators. In many countries senior teachers become principals and manage schools. These people know and understand education. Bringing in MBAs and other managers with little or no experience in education is the main problem - these people learn some outdated management theories and ruin education.

Instead of thinking within the bubble, K. Ganeshan suggests to consider what is the best and most efficient way of helping students with education and, what management structures would best meet this overarching purpose and be aware what sort of people will fit in the roles. The relevant way of thinking is that pleasurable experiences tend to be repeated whereas actions that lead to unpleasant consequences tend to be avoided.

Summary

It is very relevant to drive organizational change and improvement by developing your people with essential competences such as time management leadership, and strategy execution. Where relationship is present, then expertise is recognized and errors are not only tolerated, but even welcomed. First of all, one has to be sure why it is important to raise the issue of interaction culture of pedagogical processes which is like a mandatory prerequisite for formation and strengthening of new values. The school administration has to make a collegially accepted decision – develop a school culture based on values. A group of people, who represent the school and community, have to take responsibility. A particular and for everybody clear schedule of implementation, criteria of interaction quality, according to which it will be determined how to notice and how to assess what works and what is still in the development and improvement phase, should be stated. What is the colleagues' reaction to the change of the paradigms – does everybody understand that the interaction based on values means changes in the school culture? Three foundational principles showed in the Figure 3 stated by Franklin Covey have to be emphasised in order to launch successful mutual collaboration in school environment.

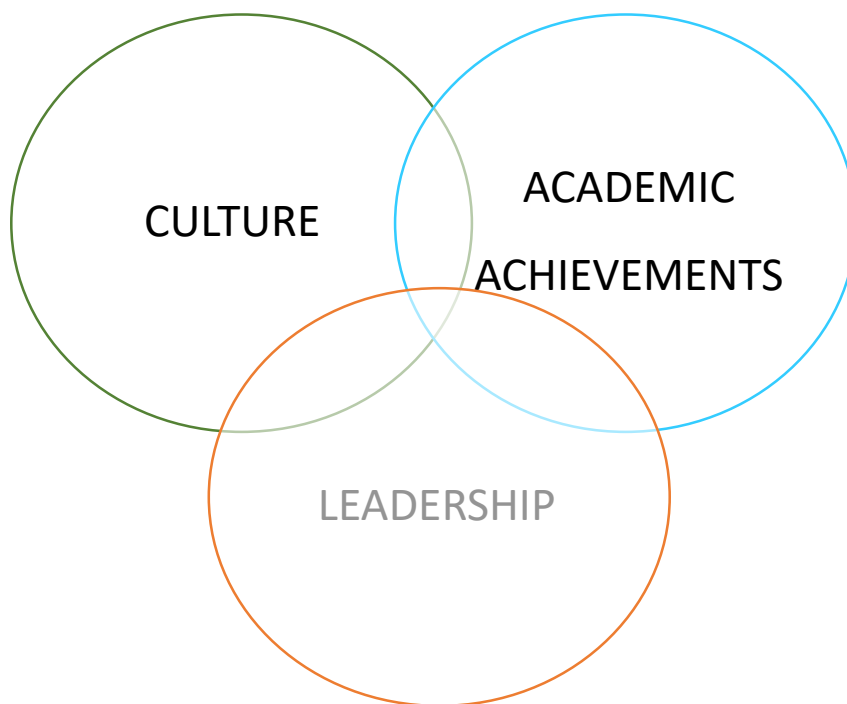


Figure 3 Foundational principles (Covey F. Leader in Me)

The whole school staff should be engaged and jointly responsible, also fully determined to become the role model of the values. When the principal and all staff (teacher and support staff) with their attitude and action approve the values, the school can experience sustainable improvements. The agreement on values observation can also be reasoned in the work description and included in the work duties (Hoks, 2019).

In order to ensure compliance with value education policies, the school has to assess their own values as an organization: how it is perceived by the people related with the particular schoolwork and what their pedagogical and civic participation in the development provision is.

Modern education seeks to achieve its goals through the richest development of all aspects of human personality, and through the discovery and development of new technologies, processes, skills, and bodies of knowledge. For growth mindset to bear fruit is needed to keep setting goals – goals for growth. Every day presents us with ways to grow and to help the people you care about grow.

References

- Covey, F. (2012). *The 7 Habits Foundational Principles: Powerful Lessons in Personal Change*. London: Simon & Schuster.
- Dweck, S.C. (2017). *Mindset: Changing the way you think to fulfil your potential*. Great Britain: Robinson.
- Ganeshan, K. (2019). *Education: Making that paradigm shift*. Great Britain: Amazon.
- Hattie, J. (2012). *Visible learning for teachers*. New York: Routledge.
- Hoks, N. (2019). Vērtības skolā neienāk ar rīkojumu, līdz tām ir jāizaug. *Domāt. Darīt. Zināt.*, 9, 37.
- Pedagoģijas terminu skaidrojošā vārdnīca. (2000). Rīga: Zvaigzne ABC.
- Psiholoģijas vārdnīca. (1999). Rīga: Apgāds “Mācību grāmata”.
- Talis 2018 Results, Teachers and school leaders as lifelong learners, 1*, OECD 2019.
- Thomas, G. (2013). *Education*, U.K.: Oxford University Press.
- Valsts Izglītības un saturs centra projekta „Skola 2030” koncepcija*. Retrieved from www.skola2030.lv

MOTIVATION ASPECTS IN FOREIGN LANGUAGES' ACQUISITION

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***Abstract.** Although foreign languages are broadly used in all spheres of life nowadays, not all students know foreign languages well. The study of students' needs in the personal realm results in a discussion of motivation, which is a very topical issue for teachers. Empirical, quantitative and information processing methods were used in the research process. The questionnaire was worked out and the data was analysed. The aim of the pilot research is to find out the students' motivation to acquire foreign languages. Several conclusions and implications were worked out. Students' attitude to the foreign languages' acquisition is positive in general. Students would like to acquire a very broad range of foreign languages, but the offer of the schools is rather limited. The role of the teacher is to encourage students' interest and motivate them to acquire foreign languages.*

***Keywords:** motivation, language acquisition, foreign languages, questionnaire, students' attitude.*

Introduction

Although foreign languages are broadly used in all spheres of life nowadays, it can often be heard and read (the results of the centralised exams in foreign languages, information from foreign students in Latvia, university students' knowledge level of foreign languages) that foreign languages' competences are not so good as it could be thought. It causes many problems, the question arises what the problems are, and therefore the authors of the paper decided to do the pilot research in the framework of the project on the motivation factors, which influence the acquisition of the foreign languages from the students' point of view. The conclusions and ideas of various researchers of the field form theoretically- methodological basis of the practical research.

Theoretical substantiation of foreign languages acquisition's motivation

The motivation encouraging factors are essential for school students in order to learn foreign languages successfully and with interest. The authors of the research investigated the several theoretical aspects of motivation before the developing of the questionnaire and they are as follows:

- What internal and external circumstances determine it?
- Do only the aims and the needs determine motivation of foreign languages' learning?
- Can the teachers of foreign languages arise interest in other languages?
- Can the foreign language chosen also influence learning of other languages?

Bernard Spolsky considers that developed and international languages have a higher status (Spolsky, 2009, p. 106). English is the most widespread example nowadays. It is taught in most countries where it is not the first or the second language. Schools teach the literary, spoken and written standard forms of a language under the influence of different language teaching approaches, like the communicative approach.

The choice of the foreign language varies considerably all over the world. In most of the world English is now the first foreign language. B. Spolsky says that in Asia the main foreign language taught is Chinese, in the countries with Romance languages Spanish and French are emphasised and in the former Soviet Union it is still Russian. The main reasons for the choice are historical, geographical and economic. Schools are most often influenced by the availability of teachers. Richard Lambert investigated the traditional patterns in English speaking countries and found out that in Britain and Ireland students mainly study French, although Ireland is trying to expand the study of German. In the United States more and more students are studying Spanish but the acquisition of French and German is declining. Japanese is becoming very trendy. In Europe and much of the rest of the world most emphasis is put on English (Lambert, 1994, p. 54).

The European Community and the Council of Europe try to persuade member nations to teach additional languages in order to add other languages. National language diffusion agencies, for example, the British Council, the Goethe institute, the Alliance française, the Confucius institute, the Japanese foundation offer schools and universities in other countries to acquire their languages.

B. Spolsky considers that the school environment is the final test of a theory of language management, because schools' task is basically to manage the languages of their students (Spolsky, 2009, p.114).

Motivation is an abstract notion that is not easy to define. Richard I. Arends defines motivation as "the process by which behaviour is directed toward important human goals or toward satisfying needs and motives" (Arends, 2011, p. 530). The study of students' needs in the personal realm results in a discussion of motivation, which is a very topical issue for teachers. It is internal to everybody. However, experienced teachers know that it is one of the essential forces that guides students' actions. R.I. Arends considers that three most essential ideas guide modern thinking on motivation and each of them can be restated into practical strategies for teachers to think about: Need Disposition Theory, Attribution Theory and Flow. Need Disposition Theory displays the point of view, which learners are motivated to participate in and fill energy in achieving of three outcomes: achievement affiliation and influence. Achievement motives expose themselves in teachers as they strive to ensure good instruction and perform as qualified professionals. Affiliative motives become essential when students and teachers understand the worth of their peers' support and friendship. The motivation toward influence can be observed in the students who devote serious efforts for their learning and in the teachers who wish to contribute into schools' management and administration. Achievement motivation is the most essential in this theory. Attribution theory is an alternative explanation of achievement motivation. It is based on assumption that the way the learners perceive and explain the reasons of their achievements and failures of their success motivation. Teachers can contribute a lot and it can result in increase of students' effort. Flow experiences are based on the states of optimal experiences – involvement, concentration and positive feelings of enjoyment. It stresses the importance of developing challenging and enjoyable learning experience (Arends, 2011, p. 114 – 116).

Robert Gardner and Wallace Lambert were the first researchers who showed statistically essential and favourable relations between motivation, positive attitudes to the second language and its speakers and mastery of the second language aspects that are less subjected to conscious manipulation (Gardner & Lambert, 1959, p. 266 – 272). John Carroll (1962) demonstrated that, after aptitudes, attitudes were the second most essential of variables for foreseeing the second language learning achievements. By time passing, language attitudes appeared to be one of the key affective variables, which explained the second language mastering outcomes via their links to motivation. R. Gardner considers that motivation is "the combination of desire and effort to achieve a particular goal, which linked individuals' rationales for particular

activities with the range of behaviours and degree of effort employed in achieving their goals” (Gardner, 1985).

R. Gardner and W. Lambert pointed out the difference between two types of attitudes and resulting motivation: integrative when the learners are motivated by their eagerness to identify with the second language group and instrumental when the learner is motivated to learn the second language for practical purposes. The authors concluded that the integrative attitudes or combination of both attitudes predominantly will result in the higher achievements (Gardner & Lambert, 1972). By time passing, several models of the second language acquisition integrated attitudes as an essential efficient factor that can explain the differences in the second language outcomes. The Monitor Model is the most popular among them. It is the first comprehensive theory of the second language acquisition. It consists of five components and one of them is the Affective Filter, which contains such factors as attitude, motivation and anxiety. The hypothesis of the Affective Filter formulates that efficient factors do not influence language mastering directly but that they either promote or deter input from achieving the language-mastering tool (Krashen, 1994). Learners who have a positive attitude and low anxiety will have a “low” filter and therefore reach a high language command but those who have a negative attitude and a high anxiety will have a “high filter” and it will cause difficulty for the input and the second language learning (Pavlenko, 2005, p. 32). Aneta Pavlenko discusses attitudes and motivation as dynamic phenomena. (ibid.)

Methodology

The authors of the paper participate in the implementation of the European Social Fund (ESF) co-funded project: “Strengthening the academic staff of Rezekne Academy of Technologies in the study field “Education, pedagogy and sports”. The aim of the project is to strengthen the academic staff of Rezekne Academy of Technologies in the study field “Education, pedagogy and sports” by developing professional competence of RAT academic staff. The RAT academic staff have an internship at different secondary schools in Latvia and they will use knowledge and experience acquired in the perfection of their courses.

The aim of the pilot research: to find out the students’ motivation to acquire foreign languages. 102 students were surveyed. Their age range was from 13 through 19. The questionnaire was carried out at Baltinava Secondary School (BSS) where students acquire the English and Russian languages as foreign languages and at Rezekne State First Grammar School (RSFGS) where the students master the English and German or Russian languages. The foreign languages, which have been mastered are the English language as the first

foreign language, the German language or the Russian languages as the second foreign language.

Empirical, quantitative and information processing methods were used in the research process. The questionnaire was worked out and the data was analysed.

Results and Discussion

The choice of the foreign languages has been determined by the school offer, which in its turn results from the number of the lessons allocated for the foreign languages, the professionals available at school and the number of the students in the group – if it justifies financially the costs of the foreign language's acquisition in a small group. However, the data of the questionnaire prove that the students' interest in foreign languages' acquisition is much broader, which states that a modest offer of the schools and a limited financing do not correspond to the steadily increasing requirements of the age. Except the languages offered, the students would like to acquire Estonian, Polish, Lithuanian, Bulgarian, Latin, Danish, French, Portuguese, Finnish, Swedish, Norwegian, Korean and Chinese. And the Spanish language is at the top of the languages' rating, which the students would like to acquire.

One of the motivating factors to acquire as many foreign languages as possible is an opportunity to travel. The mobility of the 21st century offers to almost anyone who wants it, opportunities to visit both near and far-off countries. It has been proved also by the results of the questionnaire: 84% of the students surveyed have been abroad. The most visited countries, of course, are the neighbour countries (Lithuania, Estonia, Russia, Belarus), but most students have also been in Poland, Sweden, Germany, Great Britain, France, the Czech Republic, Switzerland and others. The number of the countries visited is varied and broad that points out that there is not only an opportunity but also a desire to become acquainted with other countries.

Answering the question what encourages to visit foreign countries, the dominating answer is a desire to get acquainted with the culture of other countries and to see famous sightseeing objects, more rarely – visiting of the relatives and seeing nature. It has been noted in the answers that the knowledge of the foreign languages (Russian and English) determines the choice as opportunity to communicate and correspondingly the feeling of safety in a strange/unknown country, in its turn, results from it. The question on the communication language abroad has been answered mentioning English as the dominating language, then the Russian the German languages follow.

The main module of the questions in the questionnaire is related to students' attitude to the learning of foreign languages. The majority of the students surveyed (78.6% (BSS), 79.7% (RSFGS)) attests that they like foreign languages. Students' general attitude to the acquiring of the foreign languages has been reflected in the table below and it can be concluded that it is positive in general, and possibly it is determined by the fact that the process of foreign languages' acquisition at these schools is well-considered, interesting and implemented at a high level (see Table 1).

Table 1 Students' attitude to acquisition of foreign languages

Statement of questionnaire	Total number of answers at BSS (total number of the students surveyed – 28)	Total number of answers at RSFGS (total number of the students surveyed – 74)
I like foreign languages and I am interested in them.	22	64
I learn in independently, outside school assignments.	14	44
I don't study anything additionally.	12	21
Acquisition of foreign languages is not necessary.	1	0
I am keen on learning foreign languages.	19	50
Learning of foreign languages does not cause any difficulties.	14	27
Acquisition of foreign languages does not come easy for me as it is complicated.	11	22
Acquisition of foreign languages is boring.	5	17
Learning of foreign languages leaves me indifferent.	2	11

The results, which bring about contemplation were acquired in the group of the question “Mastering of foreign languages/knowledge and the future plans.” 96 out of 102 students surveyed consider that knowledge of foreign languages could influence the development of their career. 26 BSS students and 66 RSFGS students recognize that they will need foreign languages after graduating of school. However, 2 BSS students and 5 RSFGS students are not sure about it. The students from both schools surveyed consider English and Russian as the prior languages for their future: 2 BSS students and 11 RSFGS students have also named German, 1 RSFGS student – Spanish. In the questionnaire, students also revealed the motives why they would need foreign languages (see Table 2).

Table 2 The internal motivating factors of foreign languages’ acquisition

Statement of questionnaire	Total number of answers at BSS (total number of the students surveyed – 28)	Total number of answers at RSFGS (total number of the students surveyed – 74)
It is the tendency of the epoch – everyone has to know foreign languages.	25	66
Desire to travel, to get acquainted with other nation, cultures.	28	70
The plans and intention are linked with studies, learning abroad.	6	35
The plans are concerned with work abroad.	13	44
Foreign languages will not be necessary in the profession.	3	7

The authors of the research propose the following ideas as the methodological discussion of foreign languages’ acquisition:

- Students’ attitude to the foreign languages’ acquisition is positive. They see different opportunities to apply this knowledge in the future – during travelling, studying and work. It means that an opportunity to apply the competence of foreign languages encourage their acquisition. It would help to influence positively the fact that the acquisition of foreign languages causes difficulties, is boring or leaves students bored, makes to draw conclusion that these factors influence motivation and decreases desire and enthusiasm to master foreign languages.
- In the process of foreign languages’ acquisition a teacher has to correlate the put forward aim and the content according to the profile of the students’ group (skills, abilities, knowledge), as well as to get feedback A low self- esteem and weak results irreversibly destroy student’s motivation to learn a particular foreign language. As foreign colleagues precisely point out: “Positive feedback not only from teachers, but also from other learners, different methods of self-assessment of learners, avoidance of social comparisons and promotion of individual reference standards, avoidance of competitive tasks are important aspects of feedback and assessment.” (Karagiannakis & Taxis, 2017, 8)
- Students would like to acquire a very broad range of foreign languages, but the offer of the schools is rather limited, it is determined by different circumstances. However, the opportunities to offer other learning forms and potentialities have to be found via

positive influencing on students' desire to learn. Students have various different opportunities to use different digital tools (for example, *duolingo.com*, *busuu.com*, *memrise.com* etc.) and other opportunities (for example, there is an opportunity to learn Chinese at Rezekne Academy of Technologies).

- Individual acquisition of a foreign language (also via digital instruments) is valuable and efficient when a student is highly motivated. As a language and socialisation are closely linked, foreign languages' teachers are advised to leave an individual work for home assignments but during the classes to practice cooperative learning more. It shows the following interfaces between motivation and the principles of cooperative learning: social inclusion, feedback, competence experience, autonomy of the learners. (Thelen, 2017, 31) It is an opportunity for students via teamwork to apply their foreign languages' knowledge in practice, learn from others, but the main task was to do the task with responsibility as its result is a part of the group's common work.
- Textbooks and other teaching materials and aids not always keep students' attention and are topical and up-to-date. Teachers should constantly think how to update topics, instruments and programmes (for example, *kahoot.it*, *quizizz.com*, *google apps* etc.) and make them more modern.
- Teachers should use positive examples and stories more, which are linked with foreign languages' role in the development of career, for example the skype meeting with someone who knows foreign languages well and it has helped him/her in the development of the career.
- The role of the teacher is not only to popularize their topic but also to encourage students' interest and motivate them to acquire other foreign languages.

Conclusions

The authors have managed to outline the basic essence of motivation as the result of the pilot research: motivation is complex and varying, as it consists of several mutually linked components and it is individual for every student, although external influencing factors can be identical or similar. As the authors of the paper noted before, it is a pilot research, and it revealed the current tendencies in motivation of foreign languages' acquisition and let propose the issues for discussion. It is a good start for a broader research. It is the first stage

of the pilot research as both schools are located in the same region. The research can be developed by a comparative research via a broader regional view. The teachers of foreign languages with their opinions and vision on the factors, which influence students' motivation to acquire foreign languages and teacher's role in this process could be involved in the research.

References

- Arends, R.I. (2011). *Learning to Teach*. New York: McGraw –Hill.
- Carroll, J. (1962). The prediction of success in intensive foreign language training in R. Glazer (Ed.) *Taining, Resarch and Education*. Pittsburgh: University of Pittsburgh Press.
- ESF projekti: Rēzeknes Tehnoloģiju akadēmijas akadēmiskā personāla stiprināšana studiju virzienā “Izglītība, pedagoģija un sports” 8.2.2.0/18/I/002 Retrieved from https://www.rta.lv/esf_lidzfinansetie_projekti?project_id=113
- Gardner, R. (1985). *Social Psychology and Second Language Learning: The Role of Attitude and Motivation*. London: Edward Arnold
- Gardner, R., & Lambert, W. (1959). Motivational variables in second language acquisition. *Canadian Journal of Psychology*, 13, 266 – 272 .
- Gardner, R., & Lambert, W. (1972). *Attitudes and Motivation in Second Language Learning*.
- Karagiannakis, E., & Taxis, S. (2017). Motivation im Deutschunterricht. *Fremdsprache Deutsch*, 57, 3 – 9.
- Krashen, S. (1994). The input hypothesis and its rivals. In N. Ellis (Ed.), *Implicit and Explicit Learning of Languages*. New York: Academic Press.
- Lambert, R. (1994). Problems and processes in US foreign language planning. *Annals of the American Academy of Political and Social Sciences*, 532, 47 – 58.
- Pavlenko, A. (1995). *Emotions and Multilingualism*. Cambridge: Cambridge University Press.
- Spolsky, B. (2009). *Language Management*. Cambridge: Cambridge University Press.
- Thelen, von J. (2017). *Motivation von lernenden durch kooperative Unterrichtsformen*. *Fremdsprache Deutsch*, 57, 30 – 34.

CORPUS ANALYSIS OF HIGH SCHOOL LEARNERS’ RESEARCH PAPERS IN HEALTH SCIENCE (2016-2019)

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Abstract. *In Latvia, the learners of secondary school as a requirement gets acquainted with basics of research – selection of literature, data collection and processing, communication and presentation skills.*

The present article deals with an analysis of the themes and texts (corpus) of the research papers (RP) in Health Science worked out by the authors of the top-ranked RP presented in the Scientific Conference of High School Learners of Latvia from 2016 to 2019. A logical inductive content analysis of features specific to each RP, and sequential categorization and grouping into a higher level of components were performed. The quantitative data were processed by using AntConc, IBM SPSS Statistics 22 and Microsoft Excel software.

The aim of the research was to find out the themes and content variations of RP, and the characteristics of the language – tokens, types and keywords.

The results show that there is a thematic uniformity in RP. The statistical characteristics of language differ in terms of lexical diversity and the frequency of keywords and their collocations. Mostly individual keywords dominate.

The results obtained can be used to develop recommendations for learners and teachers as a model for theme selection, presentation of research and criteria for evaluating RP.

Keywords: *components, corpus, Health Science, high school learners’ research, themes, tokens, types.*

Introduction

The need to develop research at the secondary school level in Latvia has been identified as one of the indicators of general secondary education. Owing to successfully elaborated research work, the high school learner has mastered certain basics of research work – literature selection, data processing, communication and presentation skills. It is gratifying that in recent years there has been a significant increase in the interest of high school learners of Latvia in

research into Health Science in particular. If initially, for example, in 2016, there were 23 research papers, then, in 2018, there were already 69 that had already passed a certain quality test at district and regional conferences. This shows that the today's young person (14/15 - 18 year old) seriously considers about health issues, and is therefore concerned about his/her own health and the health of family members, and is not indifferent to the processes that take place in his/her body, in the environment and society as a whole.

One of the criteria for the evaluation of research papers (hereafter, RP) for the Latvian High School Learners' Scientific Conference is the quality of their written language – a logical presentation of the content of the paper, precise use of terms according to the chosen research theme, lexical diversity, correct use of morphological and syntactic means. For further university studies and research, high school learners will need the ability to lay out a theoretical framework of research in a clear and understandable way, formulate hypotheses and research questions, describe methods, conduct a research analysis and draw conclusions.

Within the framework of the present study, the RP in Health Science submitted to the National Conference in 2016 (23), 2017 (29), 2018 (69) and 2019 (24) were used for the analysis of the language corpus.

The aim of the study was to carry out a study of the content of high school learners' RP, to find general characteristics of RP language corpus - tokens (total word count), types (word type, including derivatives), keywords, their frequency and correlations, and to gather the topics of RP in Health Science, which had been chosen by high school learners.

Discussion

Nowadays, the language corpus is widely used for a linguistic analysis of authentic written and spoken language, using technological capabilities. The language corpus is a digitized body of text that contains large volumes of text about a particular discourse or language use. Developing a RP for a learner first involves studying and combining different texts into a single coherent (related) narrative that reflects the nature of the topic. In the RP, the learner's task is to write a coherent text (10-20 page long) both in the literature review and in the practical part. Given the opportunities offered by the Internet, finding, researching and evaluating the quality of materials is of great importance. Often, the learner has problems in choosing material in a practically opaque abundance of information without certain selection criteria. At the same time, it is necessary to practice planning a sequential scientific structure, exerting relevant information, narrowing the subject to the desired volume. At this point, the support of the supervisor or the advice of the scientific adviser (Berhman, 2006) plays an important role (Berhman, 2006); deliberate and well-founded university-school

cooperation has become a necessity in the development of RP (Aizsila, 2012). At the same time, we can talk about the necessity and importance of developing not only research but also literary or linguistic competences of the high school learner, which was studied in more detail in the articles of Latvian and foreign authors, for example, (Skalberga, 2012; Kony & Rimpelä, 2012; Pace, 2017; Bañez et al., 2019).

Research shows that high school learners rate the school as a place to conduct research projects and develop RP on specific health topics, meaning both health-promoting school environments (Basch, 2011; Peralta & Rowling, 2018) and health education issues in the curriculum (Begoray et al., 2009). In turn, specific research in Health Science, as well as its analysis, is one way of studying learners' health literacy from the perspective of learners themselves rather than adults (Stars, 2019). Such studies reveal the subjective experience and views of young people as well as topics young people find relevant, and help to understand whether a young person has been able to evaluate information correctly and assess its reliability (Peralta & Rowling, 2018) and the way he/she would like not only to receive information about his/her health but also to pass a message on to others.

In the studies (Stars, 2019) that examine adolescents' views on health literacy and health education at school, it was concluded that adolescents would like more information on health topics such as depression, eating disorders, first aid, teenage pregnancy, bioterrorism, alternative lifestyles (vegetarianism, veganism), heredity and genes, how to get health care service, common diseases, including oncological diseases and HIV/AIDS. These are the issues that led them to independently search for and find information and evaluate it (Begoray et al., 2009). At the same time, these are the themes that appear as dominant in RP in the framework of our study.

Methodology

The initial data set is the texts (corpus) of the RP in Health Science submitted for the National Competition of Latvian high school learners in the period from 2016 to 2019. Using a logical, inductive content analysis by a number of features specific to each RP, there has been developed, in accordance with the current regulatory framework (Ministru kabineta noteikumi, 2013), a typology or components of RP in Health Science, to explore each of these components individually (in depth) as part of a divided whole.

Initially, through the use of the inductive content analysis (Elo & Kyngäs, 2008), RP were read several times and understood; moving from the specific one read and understood to the general. The process of the inductive content analysis included: open coding – creating codes or descriptive phrases for a selected unit of the analysis; creating of categories – combining meaningful

codes; grouping – reducing categories into broader and higher level categories (composition elements); generalizing – general describing of the research topic using categories.

The information about the composition elements was obtained through instrumental methods – the free corpus analysis software *AntConc* (version 3.5.8), available online, and the statistical data processing software *IBM SPSS Statistics 22*.

The statistical linguistic tool or text analysis free software *AntConc* as a digital analysis tool is used for a text analysis of the usage of words and phrases. The method is based on referring a text item to a set of texts (corpus). For the purpose of this study, the text must be reformatted in the *AntConc* readable format – from *Microsoft Word* or pdf to txt in plain-text file format. The texts of all the RP are prepared together (the corpus) in an appropriate format and each RP (the item or unit of analysis) is analysed separately. By applying each unit of analysis to the corpus, keywords and essential expressions (collocations) were found. Specific, very commonly or rarely used terms were also selected. The number of keywords, collocations and other parameters in the software at the end of processing were obtained as numerical values. The significance of keywords and collocations is illustrated by their specific distribution. For each RP, a specific (unique) word (term) was found. Types of different combinations related to this word mentioned throughout the corpus as a whole were analysed in the present study.

If the logarithmic probability value (p) with *Bonferroni* correction is $p < 0.01$, the level of significance of the analysis unit is 95%.

From the primary logical analysis of the data and the secondary electronic analysis using *Microsoft Excel* software, keywords were extracted and selected.

Results and Analysis

The result of the development of high school learners' RP is new data. In 125 RP out of 145 developed from 2016 to 2019 (Table 1A), the authors emphasize the novelty of the data obtained. Most often the practical part of research was carried out in schools – during the period under review there is twice as much research done in schools than in other places (Table 1B).

Of the 145 RP, only 30 were developed in laboratories or in out-of-school institutions over a four-year period (Table 1C). Surveys or questionnaires were used as a method to obtain data in almost half of all RP (Table 1D).

Table 1A Number of RP by years: secondary data used

Year	Secondary data used		Total
	No	Yes	
2016	21	2	23
2017	27	2	29
2018	60	9	69
2019	17	7	24
Total	125	20	145

Table 1B Number of RP by years: practical part carried out in schools

Year	Practical part carried out in schools		Total
	No	Yes	
2016	8	15	23
2017	8	21	29
2018	15	54	69
2019	15	9	24
Total	46	99	145

Table 1C Number of RP by years: practical part carried out in laboratories

Year	Laboratories		Total
	No	Yes	
2016	18	5	23
2017	23	6	29
2018	60	9	69
2019	14	10	24
Total	115	30	145

Table 1D Number of RP by years: surveys Used

Year	Surveys		Total
	No	Yes	
2016	10	13	23
2017	14	15	29
2018	29	40	69
2019	17	7	24
Total	70	75	145

The data acquisition during interviews was twice as rare as surveys (75 surveys (Table 1D) and 37 interviews (Table 1E)). Consultants were available for 58 RP developers (Table 1F).

Table 1E Number of RP by years: interviews used

Year	Interviews		Total
	No	Yes	
2016	14	9	23
2017	25	4	29
2018	50	19	69
2019	19	5	24
Total	108	37	145

Table 1F Number of RP by years: recruitment of consultants

Year	Consultants		Total
	No	Yes	
2016	16	7	23
2017	19	10	29
2018	43	26	69
2019	9	15	24
Total	87	58	145

If personal data are used in research, the procedure of their processing presupposes observance of ethical norms. Only 13 authors in their research followed this aspect (Table 1G).

Table 1G Number of RP by years: ethical norms followed

	Ethical norms followed		Total	
	No	Yes		
Year	2016	22	1	23
	2017	29	0	29
	2018	61	8	69
	2019	20	4	24
	Total	132	13	145

Health education is included in the Standard of General Secondary Education in the domain of “Sport and Health” (National Standard for General Secondary Education, 2013). In the scope of the present study, the themes of the RP were initially combined into three components of the curriculum: “Individual and Society”, “Social Environment in Time and Space” and “Activity”.

The component “Social Environment in Time and Space” was the focus of most of the RP (59 authors). Similarly, this was also the most frequently researched component by years (Table 2).

Table 2 Number of RP by years and components

Component		Year				Total
		2016	2017	2018	2019	
1	Social Environment in Time and Space	2	10	34	13	59
2	Individual and Society	4	7	10	2	23
3	Activity	17	9	5	0	31
4	Learner/Specific data	0	3	20	9	32
	Total	23	29	69	24	145

The research interest of the youth went far beyond the scope of compulsory topics of the school curriculum. From the set of all the RP, several were selected and an additional component 4 - “Learner/Specific Data” was created. This component included 32 RP, covering almost one quarter of the total number of RP.

Looking at the distribution of components into separate themes, the largest number of RP was for component 1 - “Social Environment in Time and Space”, covering such themes as “Identifying Unfavourable Factors Affecting Physical Health of the Body” and “Health Care and Preventive Measures” (24 RP in total). For the component “Activity”, 11 research works were carried out on the theme “Providing Beneficial Factors for the Physical Health of the Body” (Table 3).

Table 3 Number of RP by themes and components

Theme	Component				Total
	1	2	3	4	
Medicine / Technology improvements	0	0	0	2	2
Medicine / Health Improvement	2	0	0	3	5
Ethics of human action in modern society / Revision of ethical norms	0	0	1	0	1
Interest in a set of health and aesthetic parameters of the body	3	1	0	2	6
Identification of factors beneficial to physical and mental health of the body	10	1	1	1	13
Identification of factors beneficial to the physical health of the body	6	2	1	1	10
Providing factors beneficial to the physical health of the body	0	6	11	0	17
Identification of factors detrimental to physical health of the body	12	4	5	4	25
Study of physical (biochemical) parameters of the body	0	0	2	0	2
Knowledge of physical (genetic) parameters of the body	0	0	1	0	1
Examination of physical (visual) parameters of the body	1	0	1	1	3
Knowledge of physical parameters of the body	6	1	4	4	15
Study of mechanisms of regulation of body functions	0	0	0	1	1
Investigation of mechanisms of bodily functions (memory formation)	1	0	0	0	1
Investigation of bodily functions (brain function) mechanisms	0	0	0	1	1
Providing beneficial factors for body health	0	0	1	0	1
Identification of genetic factors unfavorable to body health	0	0	0	1	1
Health Care / Reproductive Health / Preventive Measures	1	0	0	0	1
Health care	1	0	0	0	1
Health care, preventive measures	12	8	3	8	31
Providing health benefits	4	0	0	3	7
Total	59	23	31	32	145

COMPONENTS: **1** Social Environment in Time and Space; **2** Individual and Society; **3** Activity; **4** Learner/Specific Data

The keyword analysis of RP was performed for each of the above components. The following is the list of the most frequently used keywords (terms) in the component 1 (“Social Environment in Time and Space”) by the authors of RP.

Alzheimer's, amalgam, amylase, antiperspirant, lighting, exchange, deflection, memory, refreshing, bacterium, whitening, non-alcoholic, insomnia, curd, breakfast, carrot, cigarettes, chips, computer, defect, deformity, deodorant, diastolic, dirol, beverages, elgydium, breathing, emulsifier, physical, florbol, air, meat, gamma, taste, gas, pearled, gum, hybrid, hypodynamic, HIV, yogurt, ionizing, belts, potatoes, legs, delicacy, kyphosis, kinesiological, caffeine, composite, correction, chewing, motion, quality, reading, lecithin, lordosis, bread, peak flow, wash, litter, tongue, sleepiness, sleep, microflora, microclimate, microorganisms, monitoring, spine, muesli, snacks, itch, occupation, fatigue, persistence, deviation, carbonic, orbit, habits,

paste, bathing, mouse stumps, mold, feet, lactic acid, contamination, filling, palms, lungs, ankles, antiperspirant, pulse, dust, radiation, regime, hands, ligaments, sweetbread, compression, sprain, face, fungus, cheese, systolic, oxygen, scoliosis, race, perfume, fragrance, smoking, soy, spearmint, strength, pressure, radiation, posture, shooting, chocolate, tobacco, butterfly, taping, tape, room, pace, trauma, tritan, nutrition, perception, reservoir, waffle, goalkeeper, vegetarian, vegetarianism, environment

The relationship between the number of tokens and types (Figure 1) proves a general regularity - as the number of tokens (for all RP) increases, the number of types increases (Spearman correlation coefficient 0.818; statistical significance level 0.01; $p < 0.000$ (two-sided); $N = 111$). Most RP contain up to 7,000 word types and 2,500 word types.

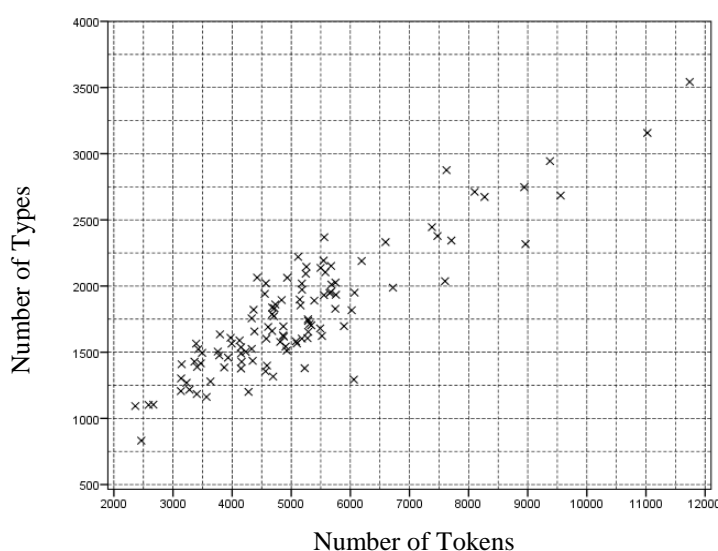


Figure 1 Relationship between the number of tokens and types

The relationship tokens/types (TTR) can be partially used to evaluate the lexical diversity of the language of RP, i.e., the variety of words and their derivatives (Jarvis, 2002). The histogram (Figure 2) shows that the frequency of the ratio types/tokens has a normal distribution (Shapiro-Wilk test: $p = 0.628$; $df = 111$; statistical significance level 0.05), with the mean of 35.68% and the standard deviation of 5.0184. Noteworthy are some of the lexically richest RP with relatively high TTR: 46-47% (tokens only up to 4400) and RP with low TTR 21.3% (tokens relatively high: > 6000). More lexically diverse RP are more comprehensive and nuanced in their description of the theme or problem being researched and are more exciting to read (Šišková, 2012).

The lexical diversity was analyzed using the Richards-Malvern method based on the calculation of the descriptive parameter (Malvern et al., 2004). Because the results obtained were stochastic, the calculations performed were time consuming and did not provide a sufficient differentiation in the evaluation

of the lexical diversity of RP. In the case of the RP containing more keywords or numbers, the parameter values were lower.

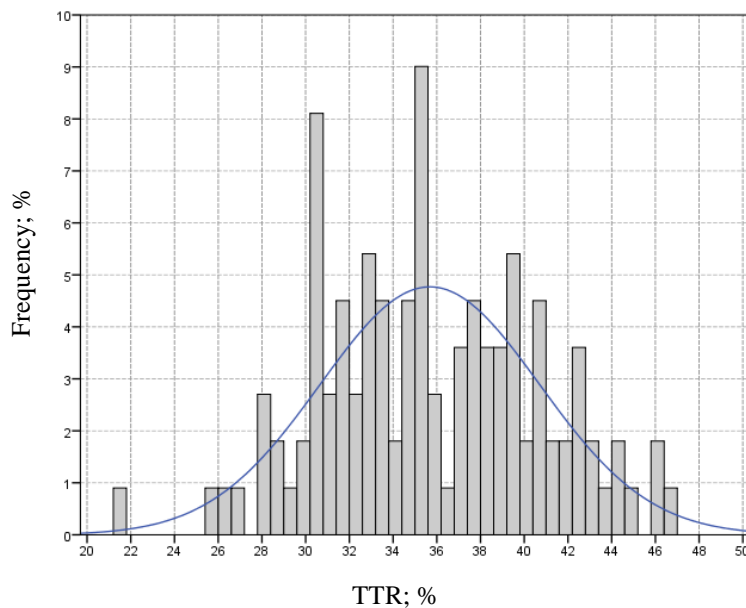


Figure 2 *Histogram of TTR*

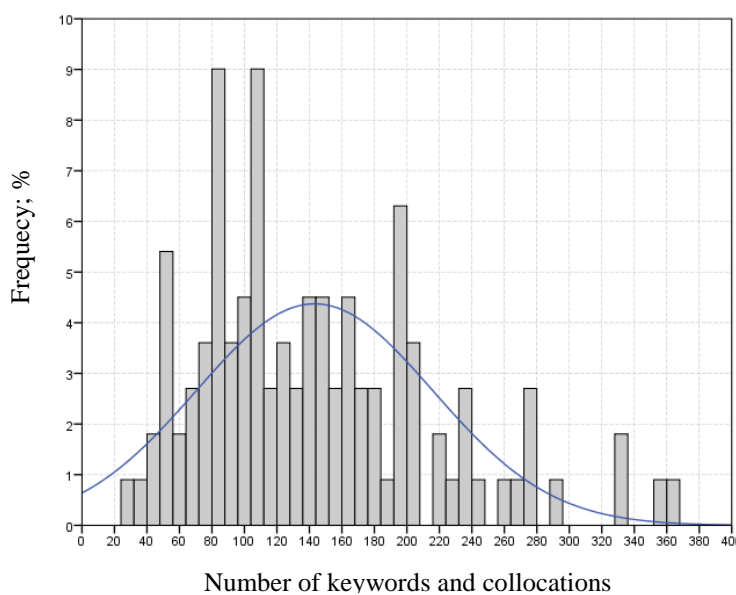


Figure 3 *Histogram of keywords and collocations*

AntConc software was used to find the keywords and collocations in RP. The entire set of the RP except the analysed one was used as a reference corpus. The keywords with their collocations (keyness) of each RP were determined by the logarithmic probability method ($p < 0.01$) (Gabrielatos, 2018). The histogram (Figure 3) shows the higher incidence of some keywords in RP (median 133).

The relationship between key words/tokens and TTR (Figure 4) shows that there is no correlation (-0.041; $p = 0.670$) that is statistically significant, and that the lexically diverse RP contained a relatively small proportion of keywords, and vice versa.

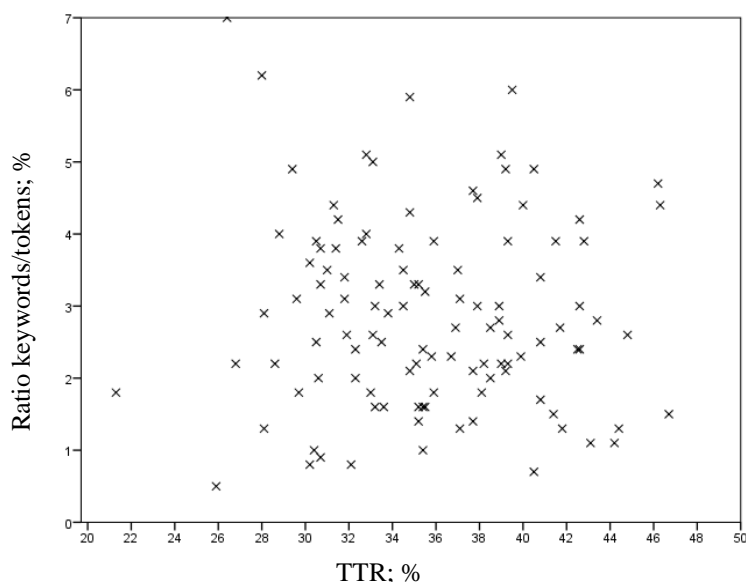


Figure 4 Relationship between the ratio keywords/tokens and TTR

The analysis resulted in a list of keywords (in bold) with the words associated with their collocations. The following are examples:

sheep / milk - **suncream** / sun - **Angelman** / syndrome - **alcohol** / beverage / usage - **lighting** / measurement / norm - **arthritis** / diagnostic / treatment - **blood** / circulation - **blood circulation** / system - **blood pressure** / change - **ascorbic acid** / quantity - **aspartam** / use - **fruits** / vegetables - **skin** / care / type - **ballet** / ballet dancer - **biorhythm** / regulation / disorder - **breakfast** / habit - **cigarette** / smoking - **sugar** / diabetes / level - **chips** / nutrition - **deodorant** / composition / characteristics - **drink** / refreshing - **hearing** / hygiene / disorder - **breath** / breathing - **breathing** / process / regulation - **energy** / drink - **physical** / health / activity / ability - **taste** / booster - **glucose** / concentration / level - **pregnant** / HIV positive - **gum** / chewing - **handball** / handbolist - **hypermobility** / joint - hypodynamics / risk - **homeopathy** / efficacy - **exhalation** / peak flow - **calcium** / reversal - **contraception** / agent / method - **cosmetics** / agent - **color** / recognition / vision / perception - **breast** / cancer - **reading** / speed - **lecithin** / soy / sunflower - **balance** / physical / activity - **bread** / taste / mold - **pasta** / product - **tongue** / anatomy / problem - **sleep** / apnea / disorder - **barley** / varieties / products - **spine** / strain - **mouth** / cavity / rinse - **music** / listening - **nitrate** / concentration - **fatigue** / grade - **norm** / menu - **orthodontics** / service - **overload** / emotional - **pectin** / quantity - **foot** / strain / footprint - **lactic acid** / bacterium - **finger** / footprints - **anti-inflammatory** / drug / usage - **teenager** / physiology - **dust** / concentration - **vision** / sharpness / perception / defect - **reitherapy** / method - **hand** / lean / wash - **bite** / type / disorder - **salt** / volume / use - **heart** / rhythm - **load** / physical / influence - **brain** / structure - **perfume** / properties / usage / composition / influence - **pressure** / blood - **sport** / clothing - **posture** / analysis / disturbance / problem / improvement - **shooting**

/ technique - **temperature** / body - **tattoo** / tattoo - **tea** / production / use - **noise** / level - **diet** / intake / type - **vaccination** / necessity - **goalkeeper** / game - **vegan** / nutrition - **vegetarianism** / concept / nutrition - **wave** / brain / delta - **vitamin** / D / quantity - **tooth** / anatomy / problem / whitening / paste / structure / health / cleaning

To find keywords throughout the RP corpus, a search for keyword morphemes or parts thereof was performed using *AntConc*. The most common (> 770) keyword morphemes (Figure 5) were: tooth, blood, physical, vitamin, load, nutrition, color, dig, sport, sugar, indicating a profound interest of learners in the themes.

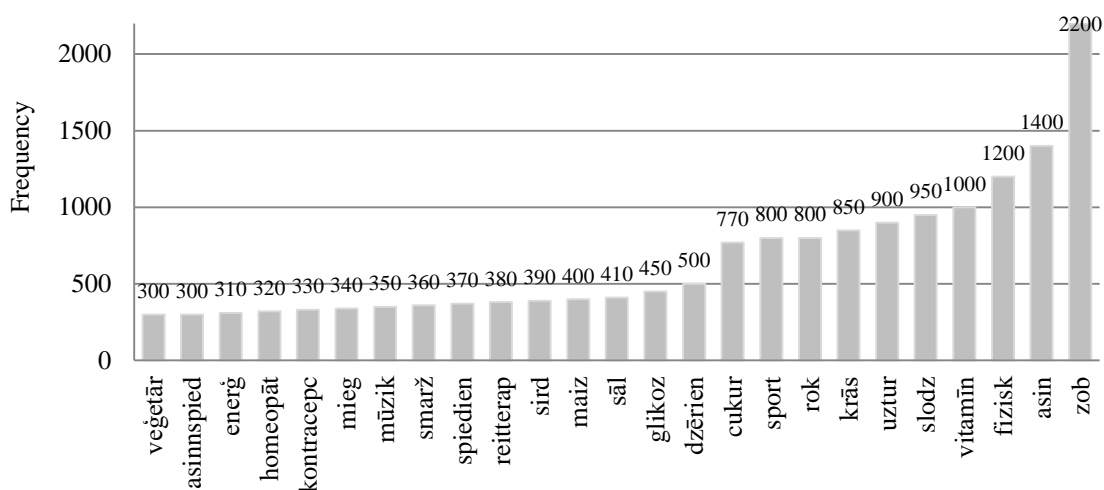


Figure 5 Frequency of keyword morphemes (in Latvian)

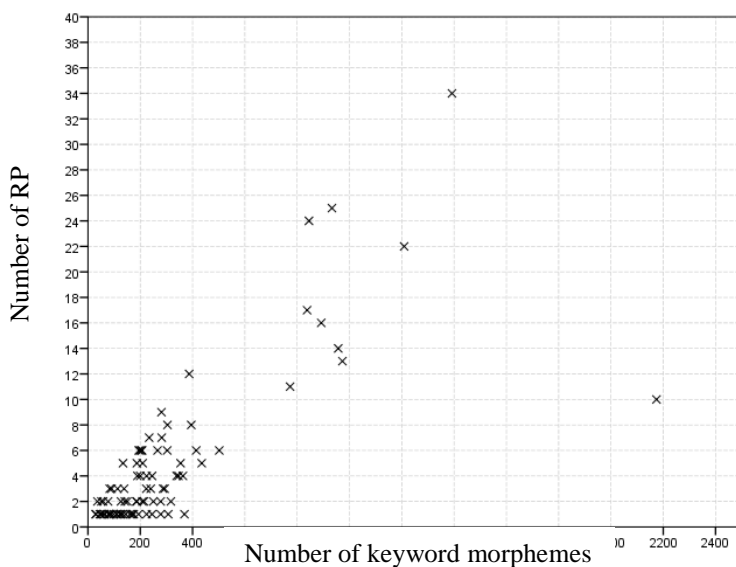


Figure 6 Relationship between the number of RP and keyword morphemes

There is a statistically significant Spearman correlation between the number of RP and keyword morphemes (0.718; $p < 0.000$; $N = 87$) (Figure 6). This indicates a tendency for most of the RP to have single-keyword morphemes, i.e. several RP had similar themes.

Conclusions

The number of RP (increase in number) in Health Science developed over several years confirms high school learners' interest in the health issues of society, not only of their own and their peers, and their desire to maintain and improve their health. The themes chosen reflect the priority values of the young people, their interest and their willingness to pursue research.

The analysis of the RP is the basis for drawing serious conclusions about the high school learners' 'empowerment', the support they were given (or the teacher was unable to), and on purposefulness in data processing techniques, including errors that may not have occurred.

By using the corpus of high school learners' RP, RP can be categorized according to a variety of criteria: theme, use of keywords (terms), diversity and length of collocations, etc. Several results of the corpus analysis can be used as criteria for assessing RP.

The results of the present study show that the general statistical characterization of the language used in RP of Latvian high school learners in Health Science is different, i.e., they differ in terms of lexical diversity and the frequency of keywords used and their collocations. Mostly individual keywords dominate, which allows us to judge about a frequent thematic uniformity.

The results of the analysis indicate that the use of general and special language tools is not very successful, thus necessitating the improvement of the writing quality of RP.

The resulting corpus of RP of high school learners can be used both for general information on the thematic content of developed papers in Health Science and for the development of dictionaries and glossaries, which in turn could serve as recommendations for learners and teachers in future work on the development of RP both in the choice of themes and in the presentation of research.

References

- Aizsila, A. (2012). Latvijas Lauksaimniecības universitātes sadarbība ar skolām. *Proceeding of the International Scientific Conference, Volume I*, 24-33. Retrieved from <https://pdfs.semanticscholar.org/dfb7/0b263825bdbbfca8443d208a615022e95aaa.pdf>
- Bañez, M.M., Sarmiento, M.B., & Bañez, R.M. (2019). Cognitive models and literary competence of junior high school students. *PUPIL: International Journal of Teaching*,

- Education and Learning*, 3(1), 258-280. Retrieved from <https://grdspublishing.org/index.php/PUPIL/article/view/1947>
- Basch, C.E. (2011). Healthier students are better learners: a missing link in school reforms to close the achievement gap. *Journal of School Health*, 81(10), 593–598.
- Begoray, D.L., Wharf-Higgins, J., & Macdonald, M. (2009). High school health curriculum and health literacy: Canadian student voices. *Global Health Promotion*, 16(4), 35–42.
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. First published: 18 March 2008. *Leading Global Nursing Research*, 62(1). Retrieved from <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1365-2648.2007.04569.x>
- Gabrielatos, C. (2018). Keyness Analysis: Nature, Metrics and Techniques. In Taylor, C., Marchi, A. (Eds.), *Corpus Approaches to Discourse: A critical review* (pp. 225-258) Oxford: Routledge. Retrieved from https://www.researchgate.net/publication/319208347_Gabrielatos_C_2018_Keyness_Analysis_nature_metrics_and_techniques_In_Taylor_C_Marchi_A_eds_2018_Corpus_Approaches_to_Discourse_A_critical_review_Oxford_Routledge_225-258
- Jarvis, S. (2002). Short Texts, Best-fitting Curves and New Measures of Lexical Diversity – Language Testing, 19(1), 57–84. Retrieved from https://www.researchgate.net/profile/Scott_Jarvis4/publication/278717839_Short_texts_best-fitting_curves_and_new_measures_of_lexical_diversity/links/55843b0308aeb0cdaddbb39a/Short-texts-best-fitting-curves-and-new-measures-of-lexical-diversity.pdf
- Konu, A., & Rimpelä, M. (2002). Well-being in schools: a conceptual model. *Health promotion international*, 17(1), 79-87.
- Malvern, D., Richards, B., Chipere, N., & Duran, P. (2004). *Lexical Diversity and Language Development: Quantification and Assessment*. Basingstoke: Palgrave Macmillan.
- Ministru kabineta 2013.gada 21.maija noteikumi Nr.218” Noteikumi par valsts vispārējās vidējās izglītības standartu, mācību priekšmetu standartiem un izglītības programmu paraugiem”. Pieejams <https://likumi.lv/ta/id/257229>
- Pace, M. (2017). Adapting literature to the language classroom. *PUPIL: International Journal of Teaching, Education and Learning*, 1(1), 01-12. DOI: <https://doi.org/10.20319/pijtel.2017.11.113>
- Peralta, L., & Rowling, L. (2018). Implementation of school health literacy in Australia: A systematic review. *Health Education Journal*, 77(3), 363–376.
- Skalberga, A. (2012). Vidusskolēna literārās kompetences veidošanās. Promocijas darbs. Rīga LU. 157. Pieejams https://dspace.lu.lv/dspace/bitstream/handle/7/4834/33573-Anita_Skalberga_2012.pdf?sequence=1&isAllowed=y
- Stars, I. (2019). Pusaudžu veselībratības konceptualizācija veselības izglītības diskursā. Promocijas darbs. Rīga, LU. 199. Pieejams https://dspace.lu.lv/dspace/bitstream/handle/7/48881/298-72764-Stars_Inese_is14130.pdf?sequence=1&isAllowed=y
- Šišková, Z. (2012). *Lexical Richness in EFL Students’ Narratives – University of Reading, Language Studies Working Papers*, Eds. Ciarlo C., D.S. Giannoni, Vol. 4, 26-36. Retrieved from <https://pdfs.semanticscholar.org/a93b/a9b8f746800dc06ebeda02284cd8148d238a.pdf>
- Valsts izglītības satura centrs. (2019). Vadlīnijas skolēnu zinātniskās pētniecības darbu izstrādei un vērtēšanai. Retrieved from https://visc.gov.lv/visc/projekti/dokumenti/esf_8321/20191210_zpd_vadlinijas.pdf

COMPARISON OF CONTENT AND LANGUAGE INTEGRATED LEARNING IN THE PRIMARY LEVEL IN SPAIN AND SLOVAKIA

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Abstract. *As many authors agree, positive associations of Content Language Academic Learning have attracted numerous researchers, administrators, teacher educators and teachers, particularly those in the field of English as a foreign language. One of the main goals of the presented article is to offer a comparative analysis of CLIL approach at primary level in Spain and in Slovakia. The need for elaborating this issue is related to the diversity of language and the fact that CLIL has become prolific phenomenon in recent years, especially in pedagogical communication. The paper responds to different claims of the proponents of CLIL emphasizing its numerous benefits. Apart from that, the following paper provides a critical empirical examination of the positive CLIL outcomes in order to identify better its strengths in EFL. Due to distance, a sample of five Spanish teachers and five Slovak teachers at the primary level has been chosen randomly to respond to the online interview elaborating the use of CLIL in the classroom. In order to gain the results of the qualitative nature, the online interview included open-ended questions. Benefits of CLIL could be reflected in the enhanced motivation inside and outside the classroom, the need of students and teachers for critical thinking, requirement for a better concentration and in many other areas. The article presents current findings and brings the possibilities for implementing CLIL into more classrooms and enhancing pedagogical communication in foreign language classrooms.*

Keywords: *benefits, CLIL, language, motivation, student, teacher*

Introduction

In recent years both, the area of foreign language teaching and the area of teaching in general have reflected that CLIL (Content and Language Integrated Learning) and its use in the classrooms might have a significant impact on the communication in the classroom. In spite of the fact that the approaches of this kind could carry with them various well-known limitations, use of CLIL could bring numerous benefits for teachers and students at the same time. By use of CLIL not only linguistic competence could be enhanced but also learners might be exposed to wider cultural context. This paper aims to contribute to this growing area of research by exploring the use of CLIL in the primary level classrooms in Spain and in Slovakia. In particular, the article is focused on the positive CLIL outcomes in order to identify better its strengths in EFL.

The main reason why Spain and Slovakia have been selected for this research is that the official language of both countries is different from English, whereas English is taught as a foreign language in both countries. This presupposes the ideal conditions for implementing CLIL into teaching and it is supported by the words of Cimermanová (2017, p. 1), who suggests that “its name directly indicates the aim of the methodology, namely to teach subjects as science, geography, arts through a foreign language.” In other words, if science, arts, geography or any other subject is taught in English or any other foreign language, the language possibilities, teaching and learning possibilities might be expanded for teacher educators and students.

The other reason for comparison of CLIL approach in Spain and Slovakia is to look for similarities and differences in teaching in these two European countries. This paper seeks to address the following question: To what extent are Slovak and Spanish teachers familiar with the application of CLIL approach in the primary level? For this research, especially due to distance, a sample of five Spanish teachers and five Slovak teachers at primary level have been chosen randomly to respond to the online interview elaborating the use of CLIL in the classroom. In order to gain the results of the qualitative nature, the online interview included open-ended questions.

Theoretical backdrop and Content and Language Integrated Learning in general

While a variety of definitions of the term CLIL have been suggested, this paper will use the definition suggested by Straková & Sepešiová (2015) according to whom CLIL is based on the common-sense belief that better learning takes place when learners are stimulated by the subject matter, hopefully out of interest but sometimes of necessity.

As McDougald (2018) notices, CLIL, if properly understood and used, should present ideal ways of focusing on language as a tool to access and share content knowledge. To be more explicit, in such ways, students are not merely exposed to the vehicular language, they also have opportunities to think in in the second language and produce meaningful content in the second language, supporting more rapid and practical acquisition of their second language skills in general. “CLIL represents the best framework for providing young learners the effective acquisition of some topics from the curriculum” (Bentley, 2010, p. 6).

CLIL applied in storytelling, for instance, could be one of the examples how to expose students to a variety of situations when students need to think in foreign language but is also provides students with the possibility to express themselves. On the top of that, storytelling and stories are a fundamental part of any literature and culture. With regards to CLIL and young learners, Bežilová (2019, p. 57)

illustrates this point clearly, “literature allows children not only to understand but also to appreciate cultures different from their own.”

With regards to foreign language teaching and learning, and on reviewing the last two decades from the initial inception of CLIL programmes in formal education at Primary and later Secondary levels, we are witnessing how the dual-focused approach of Content and Language Integrated Learning (CLIL) has been heralded as the lynchpin for change and success in language learning (Doiz, Lasagabaster, & Sierra, 2014; Pérez Cañado, 2014). To be more specific, Lasagabaster (2011) notes that the dual role of language and content implies that proficiency is to be developed in both the non-language subject and the language in which it is taught, even though to achieve a strict balance of language and content is quite a challenging task. Therefore, it is necessary to highlight a phenomenon also known as a lack of cohesion around CLIL pedagogies (Coyle, 2008; Cenoz, Genesee, & Gorter, 2014; Mehisto, 2008; Pérez-Vidal & Juan-Garau, 2010). This has thrown up many questions in need of further investigation of CLIL (Pérez Cañado, 2018). Highlighting the particular areas of the research, Wolff (2005) considers the following CLIL investigations, which should be articulated: the effects of CLIL on the foreign language, the first language, subject content competence, and motivational aspects.

A considerable amount of literature has been published on particular aspects and effects of CLIL. A number of studies have found that, for instance with oral production and oral and written comprehension, experimental and control groups performed equally well on these aspects of second language learning. In particular, Admiraal, Westhoff, & de Bot (2006), in Northern Europe, Serra (2007) conducted a longitudinal study in Switzerland, with Primary Education students. A similar focus on oral production has been put through Ruiz de Zarobe’s (2008) longitudinal study with Basque CLIL and non-CLIL groups in the third and fourth year of Compulsory Secondary Education and in the second year of post-compulsory education. Speech production was assessed in terms of pronunciation, vocabulary, grammar, fluency, and content, with statistically significant differences being detected in favour of the CLIL groups (CLIL and CLIL with extra English literature classes). Most importantly, all three studies increased exposure and the CLIL program was found to positively impact oral competence skills.

Research such as the one carried out by Rallo Fabra & Jacob (2015) who also worked with Secondary Education level in a Spanish bilingual community (in this case, the Balearic Islands), however, brought different results. In this study, the focus was put mainly on fluency and pronunciation within oral production, but the results were not as positive as with the study conducted by Ruiz de Zarobe (2008). The single most striking observation to emerge from the comparison of the studies was articulated by Pérez Cañado (2018, p. 54), “Over

the course of two years, no statistically significant differences emerged between the CLIL and non-CLIL branches on either fluency or pronunciation, casting doubt upon what can be considered sufficient time for CLIL to have an impact.” This quotation, however, needs to be interpreted with caution. Bearing in mind that interpretation of these results refers to one study, it cannot be considered as a general statement with regards to implementation of CLIL.

Content and Language Integrated Learning in Slovakia and in Spain

One of the Slovak scholars who devoted a significant amount of time to CLIL research, S. Pokrivčáková, (2015) summarizes the current situation in applying CLIL at Slovak schools. The author emphasizes the difference between integrating CLIL in bilingual and mainstream schools. Unfortunately, there is no official statistical data indicating exact numbers of primary and secondary schools applying CLIL. However, based on the number of school projects and published works it can be concluded that the number of primary schools applying CLIL is much higher than the number of CLIL secondary schools Pokrivčáková (2015).

As for Slovakia, teachers who apply CLIL in their classes are typically non-native teachers. According to Pokrivčáková (2015, p. 17), “most Slovak schools which apply CLIL integrate teaching in Slovak as a mother language and English as a foreign language.” The second most frequent foreign language that would be used within CLIL in Slovakia is German and just a few schools apply CLIL in Spanish and French or alternatively Russian and Italian, as these languages are considered as the second foreign languages (Pokrivčáková, 2015).

Trníková (2015, p. 49) identifies the goal of the CLIL methodology in primary school, which is to prepare learners for purposeful and intensive learning of foreign language in high school. Successful CLIL at primary level should fulfil the following principles:

- put the emphasis on communication,
- the basis for teaching process using CLIL is active listening,
- stimulate fluency of communication more than accuracy of language, accuracy is important only with pronunciation,
- teacher supports the creativity of learners by using open-ended or divergent assignments,
- teaching process is focusing on various learning styles of learners, teacher often switch various activities,
- special attention is focused on physical movement – motoric activity (e.g. TPR),
- teaching process is connected with the real world.

Pokrivčáková (2015) illustrates the following classification of the CLIL research in Slovakia:

- learner-oriented CLIL research,
- teacher-oriented CLIL research,
- language-based CLIL research.

Turning now to the situation of CLIL in Spain, Coyle (2010), for instance, highlighted the richness of Spanish cultural diversity, which has led to a wide variety of CLIL policies and practices. Moreover, this provided numerous examples of CLIL in different stages of development that are applicable to contexts within and beyond Spain. As more authors agree CLIL methodology is currently experiencing a rapid development in Spanish educational settings, Therefore, it is becoming a popular term in the teaching practice over the last years (Huguet, Lasagabaster, & Vila, 2008; Muñoz & Navés, 2007).

Similarly, as in Slovakia, Spanish primary teachers applying CLIL in teaching are generally non-native language specialists. The only exception is the programme, which is collaboratively run with the British Council with a significant number of native English-speaking teachers (Muñoz & Navés, 2007). Another similarity between CLIL in Slovakia and CLIL in Spain is that “the target language of CLIL is English, which is the first foreign language in most schools and for most students. French, which used to be the first foreign language, is also present but to a lesser extent” (Muñoz & Navés, 2007, p.164). The evidence presented in this section suggests that there are similarities between CLIL in Spain and in Slovakia. However, the aim of the article is not to provide a detailed description of similarities or differences, rather to present a brief outline of applying CLIL in the primary level in both countries.

Research materials and methods

The paper uses qualitative analysis in order to gain insights into teachers' perception of CLIL, particularly, to get information about CLIL application in the primary level. A sample of the primary school teachers from both countries was selected randomly. On purpose, the sample did not consist only of the teachers from the Primary Schools where CLIL is applied in teaching regularly or for a longer period of time. As for Spain, the sample of the respondents consisted of the teachers from Logroño, Madrid, Santander & Zaragoza. In Slovakia, the sample also included primary school teachers from the different parts of the country. In order to get reliability and validity of the research and, most importantly, to get data of the qualitative nature, the online interview with open-ended questions was used. The aim of the online interview was to get an insight into the reasons and possibilities of applying or not applying CLIL in the classes

of the selected teachers. The online interview consisted of the following questions:

1. What is CLIL?
2. What are the benefits of having a CLIL classroom?
3. What do you understand under the ‘four C’s of CLIL’?
4. What are the essential features of a CLIL curriculum?
5. How do you know if you are already a CLIL teacher?
6. What is the role of the instructor in a CLIL classroom?
7. What are the key elements of a CLIL lesson plan?
8. How popular is CLIL approach in your country? (0 – 100%)
9. Which subjects do you teach through CLIL?
10. What is the feedback of your students on the use of CLIL?

The data had been collected in December 2019 and early January 2020 and accordingly analysed. The questions were divided into two parts. The first part covers the questions 1-8 and provides general information about CLIL, its application in the classroom and similarities or differences that might occur within this approach in both countries. The aim of this part of the online interview was to get an insight into the respondents’ understanding of CLIL. Additionally, the questions were designed in a way that the respondents could have provided the answers based on their own experience. The second part of the questions, 9-10, is more personal, as each CLIL teacher might apply CLIL in different subjects and feedback from the students could also differ a lot.

Data analysis and discussion of the results

This part of the article discusses the interpretation of the results which emerged from the gathered data. Therefore, these results need to be interpreted with caution. The article does not comment on every single answer of each of the respondents, as many answers were similar. However, data analysis highlights the most significant parts of the online interview.

It would remiss not to elaborate the question, which relates to the benefits of CLIL. As the questions were open-ended, the aim of the questions was to get a proper insight, own ideas of the teachers and not definitions. One of the Spanish teachers brought an interesting point, “Thanks to CLIL, my students started talking aloud in the classroom. I have been trying to use this method for about three years now and I have been given the same groups of students within these three years. Not only they are more fluent and accurate, but I have observed how their personalities changed and they feel free to talk about any issue in English, as it is their second language.” Another Spanish teacher added that “It is really surprising to watch students if they are given a task when they need to argue. I consider the major benefit of CLIL that students use all sorts of vocabulary. It is

not geography only, for example. I appreciate that they try to think in the second language.” On the contrary, speaking of benefits of CLIL, one of the Slovak teachers noted, “I wish I had known more about CLIL and more of my colleagues would be open to try it. We don’t use it in our school.” Speaking of benefits of CLIL, majority of the teachers found its numerous benefits, mainly in creative ways of improvement of the second language. However, they expressed a need to talk about CLIL often and to learn more about CLIL. There have been provided a number of other similar examples and statements from Slovak as well as Spanish teachers struggling with similar issues and challenges.

Another point worth to mention was the question which dealt with the role of the instructor in the classroom. One of the teachers provided the following illustration of her role, “CLIL made me think that my role as a role of instructor is highly important. Once I set clear instructions for my students, things work well for us. Sometimes I feel like I need to be an interpreter, some parts I mean, but it always reminds me that a teacher might take a few different roles within one lesson.” However, in response to this question, one of the Spanish teachers indicated that CLIL should be learner-centred method and therefore teacher should act as facilitator.

Regarding the question of CLIL lesson planning, almost all teachers (those who apply CLIL in teaching as well as those who are not familiar with CLIL) noted that the major feature of CLIL lesson plan should be novelty of the tasks and engaging tasks. At the same time, all Slovak teachers expressed uncertainty related to CLIL lesson planning. Apart from that, three Spanish teachers considered authenticity of the tasks as the most important element of CLIL lesson planning.

When the participants were asked how popular CLIL teaching is in their country, four out of five Spanish teachers mentioned that CLIL is highly popular. As for Slovak teachers, three of them commented that according to them, CLIL is very popular because they attended CLIL seminars in Slovakia and abroad.

For the question related to subjects taught through CLIL, the answers included mainly geography, history, music and arts.

In response to the question “What is the feedback of your students on the use of CLIL?”, a range of responses was elicited. Obviously, feedback of the students who know CLIL, was very positive. On the other hand, two teachers from both countries emphasized that their beginnings of CLIL application into teaching were difficult and students were reluctant to get used to it.

To sum it up, the sample of the teachers from both countries indicated that even though CLIL is undoubtedly useful and beneficial in teaching, it requires a great amount of time to be confident in CLIL teaching. Almost two-thirds of the participants said that there should be more cooperation among language teachers

and subject teachers, since this might create suitable conditions for the application of CLIL approach.

Conclusion

The aim of the presented article was to introduce the current views on the use of CLIL in the primary level in Spain and in Slovakia. A sample of primary school teachers from both countries had been given a chance to comment objectively on CLIL approach, whether they apply CLIL in teaching and to provide the reasons for using or not using CLIL approach in teaching. The article aimed to compare and elaborate sufficient (or insufficient) readiness of the selected teachers and primary schools for CLIL in linking theory with practice based on the online interview.

The present results are significant in at least two major respects. The teachers responding to the online interview realize how useful CLIL is not only for their current teaching, their students but also for their future. As Oxbrow highlights the importance of CLIL, “it is arguably the most innovative didactic reform of the last couple of decades in response to the emergent twenty-first century need for multilingual citizens who need to be competent in more than one language” (Oxbrow, 2018, pp. 137-138). This finding has important implications for creating more opportunities, workshops, seminars aimed at CLIL for both teachers and students. The more confident teachers are and the more they believe in their ability to apply CLIL at the lesson, the easier it could be for them to perform at any lesson, bearing in mind that CLIL brings a full variety of benefits for their students too.

The results of the online interview offer an answer to the question: To what extent are Slovak and Spanish teachers familiar with the application of CLIL approach in the primary level? Even though CLIL approach has been applied in teaching for a number of years, the teachers from both countries would prefer if this topic was researched more. In addition, the article offers some important insights into CLIL teaching in primary schools in both countries and provides readers with the ideas that could be possibly implemented in teaching, so that the educational process could be improved. The reader should bear in mind that the results gained from the online interview should not be interpreted in general, as the sample was small and random. Another limitation of the study is the fact that not all the teachers responding to the online questionnaire apply CLIL in teaching. A full discussion of CLIL approach, its comparison in the primary level in Spain and in Slovakia lies beyond the scope of this paper.

Acknowledgements

This study derived from a governmentally-funded research project financed by the Slovak Ministry of Education, Science, Research and Sport (research grant number KEGA project No. 032PU-4/2019, project: Vytvorenie učebných materiálov pre učiteľov základných škôl pre integrovanie jazykového a obsahového vyučovania).

References

- Admiraal, W., Westhoff, G., & de Bot, K. (2006). Evaluation of bilingual secondary education in The Netherlands: Students' language proficiency. *English Educational Research and Evaluation*, 12(1), 75-93.
- Bentley, K. (2010). *The TKT course: CLIL module*. Cambridge: Cambridge University Press.
- Bežilová, V. (2019). The Effect of Storytelling on Longer Vocabulary Retention. *Contemporary research in education and English language teaching*, 1(1), 57-62.
- Bruton, A. (2011b). Is CLIL so beneficial, or just selective? Re-evaluating some of the research. *System*, 39(4), 523-532.
- Cenoz, J., Genesee, F., & Gorter, D. (2014). Critical analysis of CLIL: Taking stock and looking forward. *Applied Linguistics*, 35(3), 243-262.
- Cimermanová, I. (2017). CLIL – a Dialogue between the Language and Subject Teachers. *Scientia et eruditio [elektronický zdroj]*, 1(1), 1-14. DOI: <https://doi.org/10.31262/2585--8556/2017/1/1/1--14>
- Coyle, D. (2008). CLIL – A pedagogical approach from the European perspective. In Van Dusen-Scholl & N.H. Hornberger (Eds.), *Encyclopedia of Language and Education* (pp. 97-111). New York: Springer.
- Coyle, D, Hood, P., & Marsh, D. (2010). *CLIL. Content and language integrated learning*. Cambridge: CUP.
- Coyle, D. (2013). Listening to learners: an investigation into 'successful learning' across CLIL contexts. *International Journal of Bilingual Education and Bilingualism*, 16(3), 244-266.
- Doiz, A., Lasagabaster, D., & Sierra, J.M. (2014). CLIL and motivation: the effect of individual and contextual variables. *The Language Learning Journal*, 42(2), 209-224.
- Fernández, D.M., Ortega-Martín, J.L., & Hughes, S.P. (2019). CLIL and Language Education in Spain. In Tsuchiya, K. & Pérez-Murillo, M. D. (Eds.), *Content and Language Integrated Learning in Spanish And Japanese Contexts* (pp. 11-36). Springer.
- Huguet, A., Lasagabaster, D., & Vila, I. (2008). Bilingual education in Spain: Present realities and future challenges. In J. Cummins & N.H. Hornberger (Eds.), *Encyclopedia of language and education* (pp. 25-235). New York: Springer Science. http://dx.doi.org/10.1007/978-0-387-30424-3_127
- Lasagabaster, D., & Ruiz de Zarobe, Y. (2010). Ways forward in CLIL: Provision issues and future planning. In D. Lasagabaster & Y. Ruiz de Zarobe (Eds.), *CLIL in Spain: Implementation, results and teacher training* (pp. 278-295). Newcastle upon Tyne: Cambridge Scholars Publishing.
- Lasagabaster, D. (2011). English achievement and student motivation in CLIL and EFL settings. *Innovation in Language Learning and Teaching* 5(1), 3-18.

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- McDougald, J.S. (2018). CLIL across the Curriculum: Benefits that go beyond the classroom. *LACIL 11*(1), 9-18.
- Mehisto, P. (2008). CLIL counterweights: Recognising and decreasing disjuncture in CLIL. *International CLIL Research Journal 1*(1), 93-119.
- Muñoz, C., & Navés, T. (2007). CLIL in Spain. In D. Marsh & D. Wolff (Eds.) *Windows on CLIL. Content and Language Integrated Learning in the European Spotlight* (pp. 160-165). The Netherlands: European Centre for Modern Languages.
- Oxbrow, G.L. (2018). Students' Perspectives on CLIL Program: A Quantitative Analysis. *Porta Linguarum, 29*, 137-158.
- Pérez Cañado, M.L. (2014). Teacher training needs for bilingual education: In-service teacher perceptions. *International Journal of Bilingual Education and Bilingualism, 19*(3), 266-295.
- Pérez Cañado, M.L. (2018). CLIL and Educational Level: A Longitudinal Study on the Impact of CLIL Outcomes. *Porta Linguarum, 1*, 51-70.
- Pérez-Vidal, C., & Juan-Garau, M. (2010). To CLIL or not to CLIL: From bilingualism to multilingualism in Catalan/Spanish communities. In D. Lasagabaster & Y. Ruiz de Zarobe (Eds.), *CLIL in Spain: Implementation, Results and Teacher Training* (pp. 115-138). Newcastle-Upon-Tyne: Cambridge Scholars Publishing.
- Pokrivčáková, S. (2015). CLIL in Slovakia: projects, research, and teacher training. In Pokrivčáková, S. et al. (Eds.), *CLIL in Foreign Language Education: e-textbook for foreign language teachers* (pp. 17-29). Nitra: Constantine the Philosopher University.
- Rallo Fabra, L., & Jacob, K. (2015). Does CLIL Enhance Oral Skills? Fluency and Pronunciation Errors by Spanish-Catalan Learners of English. In M. Juan-Garau & J. Salazar-Noguera (Eds.), *Content-based Language Learning in Multilingual Educational Environments, Educational Linguistics 23* (pp. 163-178). Springer Cham Heidelberg New York Dordrecht London.
- Ruiz de Zarobe, Y. (2008). CLIL and Foreign Language Learning: A Longitudinal Study in the Basque Country. *International CLIL Research Journal, 1*(1), 60-73.
- Serra, C. (2007). Assessing CLIL at Primary School: A Longitudinal Study. *International Journal of Bilingual Education and Bilingualism, 10*(5), 82-602.
- Straková, Z., & Sepešiová, M. (2015). CLIL in Reading Programmes. In Hanesová, D. (Ed.), *Learning together to be a better CLIL teacher* (pp. 99-107). Banská Bystrica: UMB.
- Trníková, J. (2015). Primary CLIL. In Pokrivčáková, S. et al. (Ed.), *CLIL in Foreign Language Education: e-textbook for foreign language teachers* (pp. 45-59). Nitra: Constantine the Philosopher University.

THE INFLUENCE OF TRANSFORMATIONAL LEADERSHIP ON NEW MEDIA LITERACY ABILITIES OF ENGINEERING PROFILE GYMNASIUM STUDENTS

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Abstract. *The article deals with the role of transformational leadership of engineering profile gymnasium (EPG) students on their new media literacy. New media literacy covers a complex of socio-cultural, emotional and technical abilities. The operationalization of the concept of new media literacy in this study is viewed like the interaction of the two continuums: the continuum from consuming media (how to access and understand content) towards producing media (creating and sharing of media content); the continuum from functional to critical media. The study focuses on the collective creation of innovative media, social interaction and transformational leadership of engineering profile gymnasium students. The aim of the article is to explore how engineering profile gymnasium students' transformational leadership influences to their new media literacy abilities. New media literacy (NML) inventory was used to assess the engineering profile gymnasium students' new media literacy abilities. Multifactor Leadership Questionnaire (MLQ) was used in the research of leadership expression. The collected data were analysed using path analysis (PA) and confirmatory factor analysis (CFA). The findings confirm that the transformational leadership statistically significantly influences new media literacy abilities: critical consuming, functional prosuming, and critical presuming abilities of engineering profile gymnasium students.*

Keywords: *new media literacy ability; transformational leadership.*

Introduction

The rapid development of technology changes not only the humans' life but also the school life. "It goes without saying that new media has a very important role in education" (Kara et al., 2018, p.2). Scholars state that shift from printing media (books, newspaper), traditional media (telephone, film, radio, television) toward the digital media including computer, internet and smart phone highlights the importance of new capabilities to participate in the new media education (Simons et al., 2017). These capabilities can be conceptualized as new media literacy.

The leaners in social media use five practices of transformational leadership: modeling the way of activity, inspiring a shared vision, challenging the process,

enable others to act, and encouraging the others (Cummins, 2007; Kouzes & Posner, 2007). The role of transformational leadership on media literacy abilities cannot be understood in isolation from the learning context: one relationship between these components may be in social studies and the other in science. This study aims to contribute to this body of literature by analyzing the role of transformational leadership on new media literacy abilities of engineering profile gymnasium (EPG) students. The discussed situation highlights the scientific problem, which is formulated as a question: how does transformational leadership influence new media literacy abilities of EPG students?

The object of the research is new media literacy abilities of EPG students.

The aim of the research is to disclose the influence of transformational leadership of EPG students for their media literacy abilities.

Literature review

The shift from the traditional media towards the digital media changed the attitude to the media literacy concept. Firstly, the term media literacy “has been defined as including classic literacy, audiovisual literacy, digital literacy, and information literacy” (Lee et al., 2015, p. 85). In the world of digital media, the concept became broader and “involves essential process skills, including access, analysis, evaluation, critique, production and/or participation with media content” (Lee et al., 2015, p. 85). The sociocultural facets are emphasized in a commonly used new media literacy definition, which state that new media literacy is “a set of cultural competencies and social skills that young people need in the new media landscape” (Jenkins, Clinton, Purushotma, Robison, & Weigel, 2009, p. 3).

Scholars refined the content and structure of the media literacy describing four components of new media literacy: functional consuming (FC); functional prosuming (FP), critical consuming (CC), and critical presuming (CP) literacies (Chen, Wu, & Wang, 2011; Lin, Li, Deng, & Lee, 2013). Lee et al. (2015) state that “we limited functional consuming to technical skill and textual understanding of media contents, whereas critical consuming refers to the ability to read the embedded ideology and social values of media messages” (Lee et al., 2015, p.87). FC component encompasses technical ability necessary for consuming media contents, and ability to grasp the meaning of the media contents at a textual level. FP component consists of abilities necessary to create media contents, of abilities to disseminate information, and of abilities to mix media contents. CC component includes abilities to deconstruct media messages on its own, to remix media content in a different manner and ability to criticize media contents. CP component encompasses ability to participate interactively and critically in new media environments, “to create media contents especially with a critical

understanding of embedded socio-cultural values and ideology issues” (Lee et al., 2015, p.86).

Prosuming literacy (FP and CP) involves the abilities of sociocultural content that manifest themselves by participating in the creation of the media content, by interpretation of the media content during their media participation activities. Learners can enable others to act by fostering collaboration in using social media, by attracting followers and developing teams of followers.

Methodology

The research methodology. The study is focused on social cognitive theory. This theory states that learners functioning is the product of personal factors (cognition, affect); behavior, and environmental influences (Bandura, 2001). Social cognitive theory has four cornerstones that play an important role in media environment: human agency, human capabilities, vicarious learning, and self-efficacy (Bandura, 2001; Khang et al., 2014). New media change all cornerstones: “new media may be better suited to meet some of the challenges of testing social cognitive theory, such as portraying a range of behavioral reinforcements, increasing identification between the model and the target audience, and building self-efficacy” (Pajares et al., 2009, p.20). Social media provide a base to explore causation between social determinants and social media consumption behaviors in our daily routines (Khang et al., 2014).

Method of research. The study was conducted in Lithuania. Gymnasiums have the right to choose a training profile in Lithuania. There are engineering profile gymnasiums (EPG) in the country that provide students with a deeper knowledge of exact and natural sciences, help prepare students for technological and physical sciences, and allow students to learn programming and new technology. The education in the EPG is based on the principles of reasonableness, pragmatism and applicability, creativity and innovation, holism, coherence and sustainability, individualized and differentiated education, communication and cooperation. EPG promote the leadership, the creativity, and an initiative of students. EPG educate the students capable of generating and implementing new ideas, adapting quickly and effectively to changing external conditions, successfully developing careers, and combining engineering, subject and generic competencies to make decisions. A lot of EPG from Lithuania cooperate with Vilnius Gediminas Technical University, the students of EPG use this university's training base, laboratories and their equipment. The influence of transformational leadership of EPG students from Lithuania was disclosed by testing four hypotheses on path analysis:

H₁. The transformational leadership directly affects EPG students' FC media ability.

- H₂. The transformational leadership directly affects EPG students' FP media ability.
- H₃. The transformational leadership directly affects EPG students' CC media ability.
- H₄. The transformational leadership directly affects EPG students' CP media ability.

The instrument of the quantitative research. Multifactor Leadership Questionnaire (MLQ) was used in the research of leadership expression. Multifactor Leadership Questionnaire, devised by Bass and Avolio (1990), is meant for the identification of transformational, transactional and passive leadership styles. The current article explores exclusively the transformational leadership style.

New media literacy (NML) inventory was used to assess the engineering profile gymnasium students' new media literacy abilities. New media literacy (NML) questionnaire was created on the basis of New Media Literacy Scale (NMLS). NMLS is validated for university students (Koc & Barut, 2016). We simplified this questionnaire and applied it to gymnasium students. From the test results of the validity of EPG students new media literacy variable using Pearson's Product Moment Correlation with value ($df = n-2$) $df = 326-2 = 324$ at the 5% significance level is $r_{table} = 0.113$. All items statement for new media literacy variable r -value count was greater than the r_{table} . It concluded that all items statements were valid. The results of reliability test questionnaire showed that the instrument used was reliable. Cronbach's Alpha was greater than the critical number that has been set at ($0.72 > 0.6$).

The sample and sampling of the quantitative research. The research sample (the confidence interval being 5%, and the confidence level being 95%) was reliable as it involved 324 school students. The total population was 140112 gymnasium students (Lithuanian education in numbers, 2018). Therefore, the probability (confidence level) is 95%, so the obtained data can shift only by 5% from the population parameters (confidence interval). The research clusters were the largest EPG of Lithuania. The classes of EPG were selected on the basis of probability cluster sampling and all the learners of the selected classes were tested.

Results

This research aimed to measure the influence of transformational leadership on EGP students' media literacy. For this purpose, simple linear regression and path analysis procedure was chosen. Simple linear regression allows summarizing and studying relationships between two continuous (quantitative) variables. The path analysis procedure was chosen in order to test four hypotheses about the

influence of transformational leadership on EPG students’ media literacy components: FC; FP; CC; CP. The variables of all components were directly observable.

When performing a regression analysis, the normality test of Kolmogorov-Smirnov was used in this study (Table 1). This test was conducted to determine if the data were normally distributed. The results of Kolmogorov-Smirnov test show that the data of EPG students’ media literacy were normally distributed: ($p_{FC} = 0.123 > 0.05$), ($p_{FP} = 0.442 > 0.05$), ($p_{CC} = 0.116 > 0.05$), ($p_{CP} = 0.379 > 0.05$) (Table 1). The normality of the transformational leadership variables was also confirmed by the Kolmogorov-Smirnov test ($p_{TL} = 0.159 > 0.05$) (Table 2).

Table 1 Results of the One-Sample Kolmogorov-Smirnov Normality Test of media literacy abilities of EPG students

		FC	CC	FP	CP
N		324	324	324	324
Normal Parameters ^{a,b}	Mean	79,7235	79,2082	83,7788	71,6129
	Std. Deviation	8,50863	11,01511	12,11388	12,98323
Most Extreme Differences	Absolute	,106	,078	,107	,082
	Positive	,101	,078	,090	,082
	Negative	-,106	-,072	-,107	-,065
Kolmogorov-Smirnov Z		1,181	,865	1,193	,910
Asymp. Sig. (2-tailed)		,123	,442	,116	,379
a. Test distribution is Normal.					
b. Calculated from data.					

Table 2 Results of the One-Sample Kolmogorov-Smirnov Normality Test of transformational leadership of EPG students

One-Sample Kolmogorov-Smirnov Test		
N	324	
Normal Parameters ^{a,b}	Mean	61,7339
	Std. Deviation	12,81187
Most Extreme Differences	Absolute	,101
	Positive	,101
	Negative	-,075
Kolmogorov-Smirnov Z	1,125	
Asymp. Sig. (2-tailed)	,159	
a. Test distribution is Normal.		
b. Calculated from data.		

A simple linear regression was used to predict EGP student’s media literacy based on their transformational leadership. A significant regression equation was found ($F(1,122) = 48.966, p < .001$), with an R^2 of .286. The coefficient of determination (R^2) indicates that 28.6% of the variation in new media literacy can

be explained by the model containing only transformational leadership. This coefficient is sufficient, so the predictions from the regression equation are fairly reliable. The coefficient of students' motivation for learning science was 0.390 and the constant number was 54.526. Based on these data, the regression line equation can be written as follows:

$$\text{Media literacy (y)} = 54.5264 + 0.390 (\text{Transformational leadership}) (x) \quad (1)$$

Table 3 Simple linear regression analysis: motivation for learning science and basic psychological needs

Model		Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B		
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	54.526	3.511		15.530	.000	47.576	61.477
	Transform- leadership	.390	.056	.535	6.998	.000	.279	.500

a. Dependent Variable: Media literacy

The equation (1) shows that if the EPG students' transformational leadership increases by 1 unit, then students' media literacy will increase by 0.390 units. Therefore, the EGP students' transformational leadership has a positive influence on their media literacy (Table 3).

Using path analysis procedure with AMOS 17, we tested the theoretical model of EPG students' transformational leadership (Leadership in figure 1) and media literacy components: FC, FP, CC, CP (Figure 1).

According Bentler (1990), the measurement model fits the data well if:

- χ^2/df is less than 5, describes the distance between model and data, but depends on sample size;
- RMSEA (Root Mean Square Error of Approximation) is less than .08, describes how much error or unexplained variance remain after fitting model;
- NFI (Normed Fit Index) is larger than .80;
- IFI (Incremental Fit Index) exceed .90;
- TLI (Non-Normed Fit Index NNFI, also known as TLI) exceed .90, describe the 'power' of model compared to 'the situation without the model';
- CFI (Comparative Fit Index) exceed .90, describe the 'power' of model compared to 'the situation without the model' (Bentler, 1990).

Table 4 The fitness of items of EPG students’ transformational leadership and media literacy

	Absolute fit index			Relative fit index		
	χ^2/df	RMSEA	GFI	IFI	TLI	CFI
Assumed model	2.611	.030	.959	0.951	0.943	0.949
Acceptance value	1-5	<.08	>.80	>.90	>.90	>.90

The main purpose of this study was to reveal the *role of transformational leadership of EPG students on their new media literacy*. We examined direct effects for significance and magnitudes (Table 5). We found that all direct paths were significant in the final model (Table 5). The most significant paths’ coefficients in the model was: the transformational leadership (leader) effects on EPG students’ CC abilities ($\beta = 0.390$); the transformational leadership (leader) effects on EPG students’ FP abilities ($\beta = .374$). The least significant coefficient was found of EPG students’ transformational leadership on their FC ability ($\beta = .187$).

Table 5 The hypothesis testing of EPG students’ transformational leadership and media literacy: direct effects

Hypothesis	Paths	Paths coefficients	P	R ²	Results	Effect
H1. The transformational leadership directly affects EPG students’ FC media ability	Leader→ FC	.187	.001	.080	Support	Direct
H2. The transformational leadership directly affects EPG students’ FP media ability	Leader → FP	.374	***	.307	Support	Direct
H3. The transformational leadership directly affects EPG students’ CC media ability	Leader → CC	.390	***	.407	Support	Direct
H4. The transformational leadership directly affects EPG students’ CP media ability	Leader→ CP	.292	***	.432	Support	Direct

The explanatory power of the EPG students’ innovative behavior model (Figure 1; Table 5) was assessed by calculating the coefficient of determination (R²) of media literacy abilities: FC; FP; CC; CP (Table 5). The data indicate that

40.7% of the variation in EPG students' CC media ability can be accounted by their transformational leadership. Also, 43.2% of the variance of EPG students' CP media ability can be accounted by their transformational leadership. The smallest R^2 value was detected checking the hypothesis how the transformational leadership affects EPG students' FC media ability ($R^2 = 0.080$). It means that only 8.0% of the variance of EPG students' FC media ability can be accounted by their transformational leadership (Figure 1; Table 5).

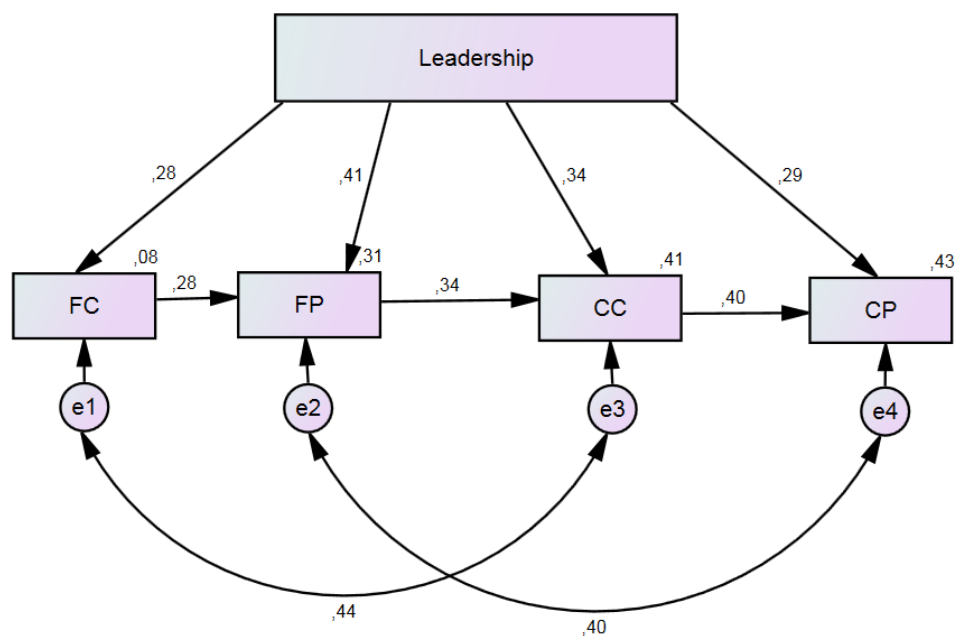


Figure 1 The hypothesis testing model of EPG students transformational leadership and media literacy: standardized Regression Weights

Discussion

At the time without digital media Burns (1978) stated that “leadership is one the most observed and least understood phenomena on earth” (Burns, 1978, p.1-2). Bennis (2007) simplested the problem of the leadership concept using “a tripod: a leader, followers, and common goal they want to achieve” (Bennis, 2007, p.3). We analysed the phenomenon of transformational leadership of EPG students in the time of digital media by tripod aspect: “transformational leadership is the process whereby a person engages with others and creates a connection that raises the level of motivation and morality in both the leader and the follower” (Nourthouse, 2013, p.186). The objective of this study was to determine the influence of transformational leadership on new media literacy of EPG students. In line with prior findings (Khan & Khan, 2019), we showed that transformational

leadership positively influenced new media literacy abilities of EPG students. Scholars (Khan & Khan, 2019) analyzed the relationship of transformational leadership and employees' task performance. We analyzed the relationship between transformational leadership and media literacy of school students (not of employees) and reached the similar result.

We also focused specifically on the components (FC, FP, CC, and CP) of new media literacy abilities by analyzing the influence of transformational leadership. We found that transformational leadership statistically significantly influences both components of prosuming (FP, and CP). Scholars (Koc & Barut, 2016) noticed that the activities of the prosumer are more related to tripod of leadership (a leader, the followers, and common goal they want to achieve) as the activities of consumer.

The limitation of our study is based on operationalization of the prosuming (FC, and CP) literacy concept. Scholars analyzed FC and CP structure even under a more detail level (Lin et al., 2013). They distinguished three details in FC structure (prosuming skill, distribution, and production), and two details in CP structure (participation and creation) (Lin et al., 2013). We didn't examine the influence of transformational leadership on the FC and CP details but rather on FC and CP themselves. The analysis using the details of FC (prosuming skill, distribution, and production) and CP (participation and creation) could be the object of further studies.

Conclusions

Linear regression analysis reveals the influence of transformational leadership on EPG students' new media literacy abilities. If the EPG students' transformational leadership increases by 1 unit, then students' new media literacy will increase by 0.390 units. Therefore, the EGP students' transformational leadership has a positive influence on their new media literacy.

Path analysis reveals the influence of transformational leadership on EPG students' new media literacy components: FC, FP, CC, and CP. The highest effect of transformational leadership occurs on CC component, the least effect – on FC component of new media literacy abilities of EPG students.

References

- Bandura, A. (2001). Social cognitive theory of mass communication. *Media Psychology*, 3(3), 265-299. DOI:10.1207/S1532785XMEP0303_03
- Bass, B.M., & Avolio, B.J. (1990). *Multifactor Leadership Questionnaire*. Palo Alto, CA: Consulting Psychologists Press.
- Bennis, W. (2007). The challenges of leadership in the modern world: Introduction to the special issue. *American Psychologist*, 62(1), 2-5.

- Burns, J. (1978). *Leadership*. New York, NY: Harper & Row.
- Chen, D.-T., Wu, J., & Wang, Y.-M. (2011). Unpacking new media literacy. *Journal on Systemics, Cybernetics and Informatics*, 9(2), 84-88.
- Jenkins, H., Purushotma, R., Clinton, K., Weigel, M., & Robison, A. (2009). *Confronting the challenges of participatory culture: Media education for the 21st century*. Cambridge, MA: MIT Press.
- Kara, M., Caner, S., Günay Gökben, A., Cengiz, C., İşgör Şimşek, E., & Yıldırım, S. (2018). Validation of an instrument for preservice teachers and an investigation of their new media literacy. *Journal of Educational Computing Research*, 56(7), 1005-1029. DOI:10.1177/0735633117731380
- Khan, A.N., Ali, A., Khan, N.A., & Jehan, N. (2019). A study of relationship between Transformational leadership and task performance: The Role of social media and affective organizational commitment. *International Journal of Business Information Systems*, 31(4), 499-516. DOI: 10.1504/IJBIS.2019.10023057.
- Khang, H., Han, E-K., & Ki, E-J. (2014). Exploring influential social cognitive determinants of social media use. *Computers in Human Behavior*, 36, 48-55.
- Koc, M., & Barut, E. (2016). Development and validation of new media literacy scale (NMLS) for university students. *Computers in Human Behavior*, 63, 834-843. DOI: 10.1016/j.chb.2016.06.035
- Lee, L., Chen, D., Li, J., & Lin, T. (2015). Understanding new media literacy: The development of a measuring instrument. *Computers & Education*, 85, 84-93. DOI: 10.1016/j.compedu.2015.02.006
- Lin, T.-B., Li, J.-Y., Deng, F., & Lee, L. (2013). Understanding new media literacy: an explorative theoretical framework. *Journal of Educational Technology & Society*, 16(4), 160-170.
- Lithuanian education in numbers (2018). [In Lithuanian: Lietuvos švietimas skaičiais]. Vilnius: SCA.
- Northouse, P. (2013). *Leadership Theory and Practice*. Sage, Thousand Oaks, CA.
- Pajares, F., Prestin, A., Chen, J.A., & Nabi, R.L. (2009). *Social Cognitive Theory and Mass Media Effects*. Book Chapters. 3. Retrieved from <https://scholarworks.wm.edu/bookchapters/3>
- Simons, M., Meeus, W., & T'Sas, J. (2017). Measuring media literacy for media education: Development of a questionnaire for teachers' competencies. *Journal of Media Literacy Education*, 9(1), 99-115. DOI:10.23860/JMLE-2017-9-1-7

VĒRTĒŠANAS DATU INTERPRETĀCIJA MATEMĀTIKAS VALSTS LĪMEŅA DARBOS, IZMANTOJOT RAŠA (RASCH) MODELI

Interpreting Large Scale National Level Assessment Data in Mathematics by Using Rasch Analysis

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Abstract. Latvia is undergoing a nation-wide curriculum reform in general education, with an aim to help students to develop 21st century skills. In order to successfully implement reform, not only teacher performance in the classroom is important, but also the transformation of the school culture is of high priority. One of the key dimensions that is characteristic for a school as learning organization culture is whether it has data-driven culture and is using data on continuous basis to improve student achievement.

Large scale national level assessment data is used for many different purposes, however, this data only rarely is recognised as useful data source for planning actions to improve student achievement at school level. Authors argue that in different grades average performance of students cannot be compared in a meaningful way to develop action plan and evaluate the impact of the initiatives at the school level. It is based on the issues rising from varying difficulty level of the tests and different skills, which are being assessed. The study design is based on in-depth analysis of items of large-scale national level assessment in mathematics, defining minimum level of competency of mathematics and calculating percentage of students in school with minimum level of competence in a cohort. This analysis is conveyed for the students of 3rd, 6th and 9th grade by using Rasch model, thus allowing to effectively monitor the student performance during the general education and use of data to make informed decisions.

Keywords: assessment data, data-driven decisions, large scale national level assessment.

Ievads

Introduction

Valsts izglītības satura centrs īsteno projektu “Kompetenču pieeja mācību saturā”, kura centrālais mērķis ir skolēns, kas ir atbildīgs sabiedrības dalībnieks, radošs darītājs, personība ar pašapziņu un lietpratējs izaugsmē

(Darbības programmas “Izaugsme un nodarbinātība” 8.3.1. Specifiskā atbalsta mērķa “Attīstīt kompetenču pieejā balstītu vispārējās izglītības saturu” 8.3.1.1. Pasākuma “Kompetenču pieejā balstīta vispārējās izglītības satura aprobācija un ieviešana” īstenošanas noteikumi, 2015). Plānojot šī mērķa sasniegšanu ir definēti skolēnam plānotie sasniedzamie rezultāti pirmsskolas vadlīnijās, pamatizglītības un vidējās izglītības standartā (Noteikumi par valsts pamatizglītības standartu un pamatizglītības programmu paraugiem, 2018).

Skolēna prasmes rīkoties jaunajās un nepazīstamajās situācijās, izmantojot tai skaitā metakognitīvas stratēģijas kļūst par būtisku mācīšanās rezultātu (Abell & Lederman, 2007). Tieši šādā kontekstā Latvijas skolēnu rezultāti Ekonomiskās Sadarbības un Attīstības organizācijas (Organisation for Economic Co-operation and Development, [OECD]) Starptautiskās skolēnu novērtēšanas programmas (Programme for International Student Assessment, [PISA]) pētījumā parāda, ka tā daļa skolēnu, kuri spēj risināt kompleksas problēmas un veikt pārnese, ir vidēji četras reizes mazāka (matemātikā - 3,8 reizes, lasītprasmē - 3,6 reizes, dabaszinātnēs - 3,6 reizes), nekā vidēji daļa skolēnu OECD valstīs, līdzīgi šī atšķirība saglabājas arī jaunākajos pētījuma rezultātos (OECD, 2016, 2019).

Veiksmīgu pārmaiņu atslēga ir saistīta ne tikai ar skolotāju prasmju attīstīšanu, lai sekmīgi mācītu 21. gadsimta prasmes, bet arī izmaiņām skolas līmenī, skolai transformējoties par mācīšanās organizāciju. Viena no dimensijām, kas ir raksturīga mācīšanās organizācijām, ir datu izmantošana lēmumu pieņemšanai un ietekmes izvērtēšanai (Mandinach, 2012; Senge u.c., 2012, Senge & Serman, 1992). Plānojot atbalstu pilnveidotā mācību satura ieviešanai, svarīgi piedāvāt veidu, kā pieejamos datus valsts pārbaudes darbos ir iespējams izmantot, plānojot skolas attīstību un identificējot intervences nepieciešamību (Mandinach u.c., 2008).

Šī raksta ietvaros veiktajai analīzei ir izmantoti 2019. gada 3. klases un 6. klases Valsts izglītības satura centra (VISC) izstrādātie diagnosticējošie darbi matemātikā un 9. klases eksāmena darbs matemātikā. Pētījuma mērķis ir piedāvāt risinājumu pieejamo datu izmantošanai situācijā, kad vērtēšanas darbi ir būtiski atšķirīgi gan pēc grūtības pakāpes, gan arī pēc vērtēšanas satura. Šī analīze ir būtiska, jo parāda praktisko veidu, kā ir iespējams izmantot pieejamos valsts līmeņa vērtēšanas darbu datus.

Pētījuma izvirzītie jautājumi:

1. Kas ir faktiski izmērītais konstrukts 2019. gada 3. klases un 6. klases diagnosticējošajos darbos un 9. klases eksāmena darbā matemātikā?
2. Kā ir iespējams interpretēt skolēnu rezultātu izmaiņas matemātikas diagnosticējošos darbos un eksāmena darbā, izmantojot Raša (*Rasch*) modeli?

Pētījuma teorētiskais pamatojums *Research theoretical background*

Laikā, kad tika realizēts pētījums, obligātie valsts pārbaudes darbi pamatizglītības pakāpē bija: diagnosticējošie darbi, beidzot 3. klasi - ar kombinētu mācību saturu, latviešu valodā (mazākumtautību izglītības programmās); beidzot 6. klasi - latviešu valodā (latviešu mācībvalodas izglītības programmās), latviešu valodā (mazākumtautību izglītības programmās), matemātikā, dabaszinībās un mazākumtautības valodā (mazākumtautību izglītības programmās) un beidzot 9. klasi tiek organizēti eksāmeni mazākumtautības valodā (mazākumtautību izglītības programmās), latviešu valodā (latviešu mācībvalodas izglītības programmās), matemātikā, Latvijas vēsturē, mazākumtautības valodā (mazākumtautību izglītības programmās un svešvalodā). Diagnosticējošo darbu ar kombinēto saturu, beidzot 3. klasi, organizē, izmantojot matemātikas mācību saturu (Noteikumi par valsts pamatizglītības standartu, pamatizglītības mācību priekšmetu standartiem un pamatizglītības programmu paraugiem, 2014). Šajā pētījumā autori apskata datus par skolēnu sasniegumiem matemātikā 3. klases un 6. klases diagnosticējošajos darbos un 9. klases matemātikas eksāmena darbā.

Lai veiktu valsts līmeņa vērtēšanas darbu mācību satura salīdzināšanu starp dažādām klasēm, autori izmantoja teorētisko modeli, kurā matemātikas mācību saturu definē četrās konstrukta kategorijās (1. tabula) (Pestovs u.c., 2019). Šī raksta ietvaros jēdziens “konstrukts” tiek saprasts kā hipotētiska spēja, īpašība, prasme vai prasmju grupa, kuru nevar tieši novērot vai izmērīt un kas ir piemītoša respondentiem mazākā vai lielākā mērā, piemēram, matemātikas vai dabaszinātniskā pratība (Messick, 1995).

1. tabula. Matemātikas konstrukta kategorijas
Table 1 Mathematics construct substrands

Konstrukts	Konstrukta kategorijas
Matemātikas pratība	Darbības ar skaitļiem
	Datu analīze (darbības ar datiem)
	Sakarību/funkciju izmantošana
	Matemātikas (algebras, ģeometrijas) izpratne

Būtiski mācību saturu analizēt ne tikai no matemātikas pratības kategorijām, bet arī no kognitīvā līmeņa aspekta, ilustrējot katras kategorijas progresiju (Brown u.c., 2010; Schraw & Robinson, 2011). Lai raksturotu mācību satura kognitīvo līmeni, autori izmanto *SOLO* (*Structure of Observed Learning Outcomes*) taksonomiju (Biggs & Collis, 1982). *SOLO* taksonomijā ir definētas četras kognitīvas struktūras: 0 – nav struktūras, 1. līmenis – skolēns, atbildot uz

konkrēto jautājumu, izmanto vienu ideju jeb struktūrelementu, 2. līmenis – atbildē tiek izmantoti vairāki nesaistīti struktūrelementi, 3. līmenis – vairāki struktūrelementi saistīti kopējā atbildes struktūrā un 4. līmenis – skolēns saista vairākus struktūrelementus no dažādiem konceptiem, ģenerējot risinājumu vai atbildi (Biggs & Tang, 2011). *SOLO* priekšrocība veicot vērtēšanas darbu analīzi, ir precīzāka kognitīvā līmeņa identificēšana, jo tiek ņemta vērā ne tikai jautājuma struktūra, bet arī skolēna atbilde, kura tiek sniegta. Šis aspekts ir īpaši svarīgs, ņemot vērā, ka visi vērtēšanas darbi tiek laboti skolas līmenī, kas noved pie nepietiekamas atkārtojamības (*angl. reliability*) (Pestovs & Namsone, 2017).

Pieejamo skolēnu rezultātu analīze tika veikta, izmantojot Raša (*Rasch*) modeli. Raša teorijas izmantošana ļauj izvērtēt piedāvāto darbu atbilstību Latvijas skolēnu kopai un veikt salīdzināšanu, izmantojot skolēnu daļu procentos, kuri demonstrē nepietiekamu sniegumu matemātikā (Andrich, 1982; Bond & Fox, 2001; Boone u.c., 2013).

Metodoloģija ***Research Methodology***

2019. gada 3. klases un 6. klases diagnosticējošo darbu un 9. klases eksāmena darba katram testelementam matemātikā ir noteikts vērtēšanas indikators un testelementa kognitīvais līmenis, izmantojot *SOLO* taksonomiju. Šī pētījuma ietvaros tika piesaistīti eksperti ar pieredzi matemātikas mācību priekšmeta metodikas izstrādē (vismaz pieci gadi), ar vismaz maģistra grādu pedagoģijā un pieredzi pētījumu veikšanā (vismaz pieci gadi). Katrs eksperts nosaka vērtēšanas indikatoru un *SOLO* kognitīvo līmeni atsevišķi. Iegūtais vērtēšanas indikators un *SOLO* kognitīvais līmenis katram testelementam tiek salīdzināts, vienojoties kopīgi vairākiem ekspertiem par gala rezultātu. Vērtēšanas indikatori tiek kartēti, atbilstoši matemātikas prasības konstrukta kategorijām. Diagnosticējošie darbi un eksāmena darba uzdevumi un vērtēšanas kritēriji, kas tiek analizēti pētījumā, ir pieejami VISC mājas lapā pēc norises laika.

Anonimizēti skolēnu rezultāti diagnosticējošajos darbos 3. klasē (skolēnu skaits = 18835, testelementu skaits = 47), 6. klasē (skolēnu skaits = 18352, testelementu skaits = 25) un 9. klasē (skolēnu skaits = 15546, testelementu skaits = 43) katrā testelementā tiek analizēti, izmantojot programmas *Winsteps* 3.2.2. Raša (*Rasch*) modeli, izveidojot mainīgo karti (*Wright or Variable Map*), kurā tiek atspoguļota katra testelementa grūtības pakāpe un skolēna spējas vienas skalas ietvaros. Katram vērtēšanas darbam tiek identificēta testelementu kopa, kas raksturo minimālo kompetences līmeni matemātikā konkrētā vērtēšanas darba ietvaros, izmantojot eksperta metodi. Vispirms katram ekspertam nosakot testelementu kopu atsevišķi un pēc tam vienojoties par gala rezultātu (ekspertu skaits = 5). Vienas skolas ietvaros, balstoties uz gadījuma izpēti, ir aprēķināta

skolēnu daļa procentos no kopējā skolēnu skaita konkrētajā skolā, kuri nerasniedz minimālo kompetences līmeni un tiek analizēti rezultāti no 3. klases līdz 9. klasei.

Diagnosticējošo darbu vērtēšana notiek skolā, kas nozīmē, ka pastāv noteikti ierobežojumi attiecībā uz standartizētu apstākļu nodrošināšanu gan norises, gan darbu labošanas laikā.

Rezultāti *Results*

Rezultāti tiek analizēti un atspoguļoti vairākās daļās: pirmajā daļā tiek kartēti testelementa numuri atbilstoši teorētiskajam ietvaram, otrajā daļā katra vērtēšanas darba analīze ar Raša (*Rasch*) modeli tiek atspoguļota, izmantojot mainīgo kartes (*Wright Map*) un trešajā daļā rezultāti atspoguļo vienas skolas skolēnu sniegumu, analizējot visus skolēnus attiecīgajās paralēlajās klasēs

Pēc vērtēšanas indikatora un *SOLO* kognitīva līmeņa noteikšanas katram testelementam 3. un 6. klases diagnosticējošajiem darbiem un 9. klases eksāmenam, tie tiek kartēti atbilstoši matemātikas prasības kategorijām (2., 3., 4. tabula). Noteiktajās matemātikas prasības kategorijās vai *SOLO* kognitīvajā līmenī netika konstatēts neviens testelements.

2. tabula. 3.klases matemātikas diagnosticējošā darba testelementu kartēšana, atbilstoši matemātikas prasības konstrukta kategorijām
Table 2 3rd Grade National Level Large Scale Assessment Item Mapping According to Mathematics Literacy Construct Substrands

Konstrukta kategorijas	1. līmenis	2. līmenis	3. līmenis	4. līmenis
Darbības ar skaitļiem	7.1.	1., 3., 4., 5., 6., 7.3.,7.5.,7.7.,7.9.		
Datu analīze	7.2., 7.4., 7.6., 7.8., 7.10.		8.5.,8.6.	
Sakarību izmantošana Matemātikas (algebras, ģeometrijas) izpratne		2.1., 2.2., 2.3. 2.4.		

3. tabula. 6. klases matemātikas diagnosticējošā darba testelementu kartēšana, atbilstoši matemātikas prasības konstrukta kategorijām

Table 3 6th Grade National Level Large Scale Assessment Item Mapping According to Mathematics Literacy Construct Substrands

Konstrukta kategorijas	1. līmenis	2. līmenis	3. līmenis	4. līmenis
Darbības ar skaitļiem	1., 2.	7., 8., 9.1., 6., 3.	4.	
Datu analīze		10.	11.	
Sakarību izmantošana		9.2., 5.		
Matemātikas (algebras, ģeometrijas) izpratne				

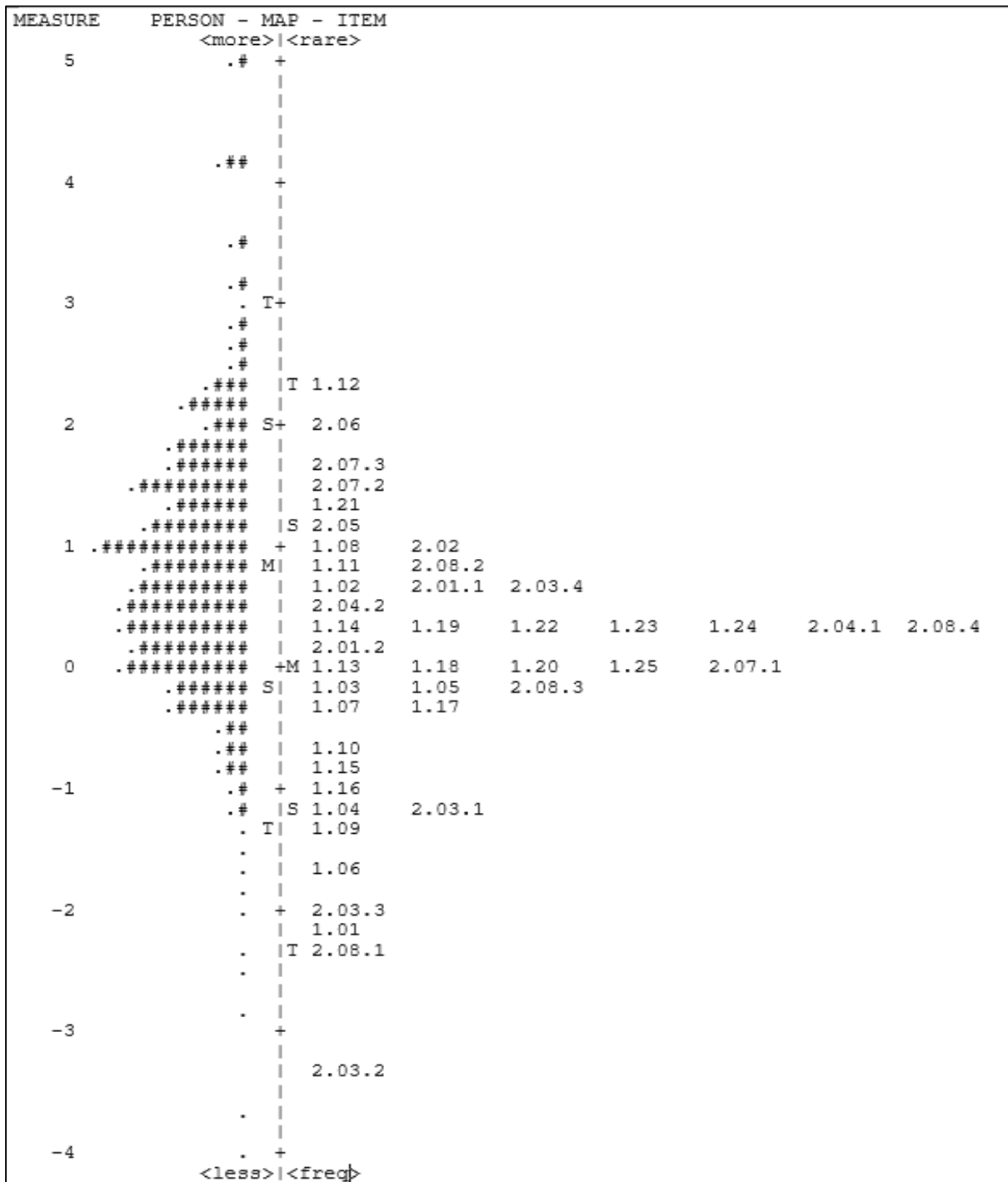
4. tabula 9. klases matemātikas eksāmena testelementu kartēšana, atbilstoši matemātikas prasības konstrukta kategorijām

Table 4 9th Grade National Level Large Scale Assessment Item Mapping According to Mathematics Literacy Construct Substrands

Konstrukta kategorijas	1. līmenis	2. līmenis	3. līmenis	4. līmenis
Darbības ar skaitļiem	3., 19., 15	6., 2.1.1., 2.4.2., 7., 8., 21.		
Matemātikas (algebras, ģeometrijas) izpratne	2., 13., 14., 18., 4., 10., 22.	11., 12., 2.1.2., 2.5., 2.7.2., 2.7.3., 5., 20., 23., 24., 2.2., 25., 2.4.1., 2.7.1.		
Datu analīze	16., 17.	2.8.1., 2.8.3., 2.8.4.	2.8.2.	
Sakarību/funkciju izmantošana	1., 2.3.1., 2.3.2., 2.3.3.	9.	2.3.4., 2.6.	

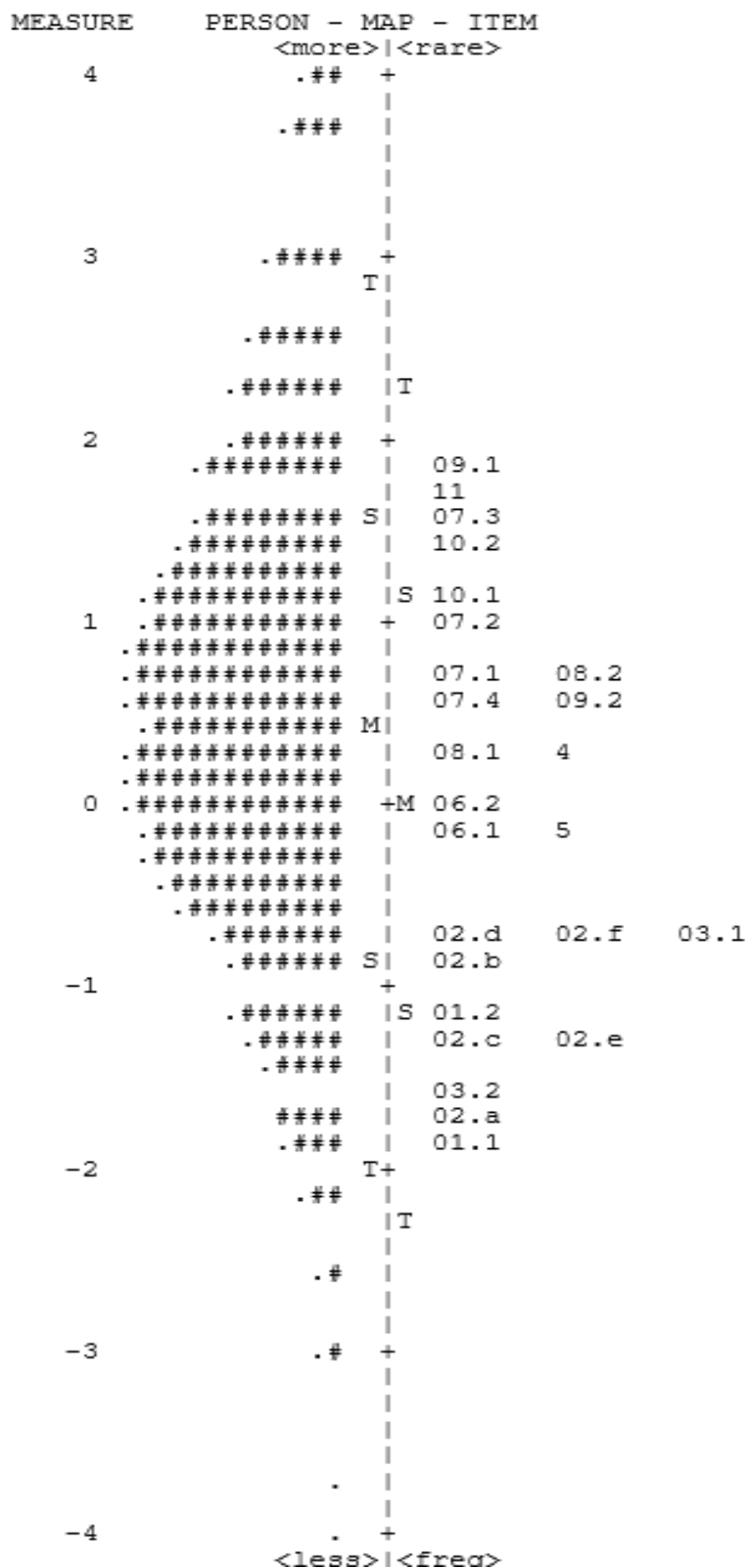
Izmantojot 2019. gada skolēnu rezultātus, katrā no valsts pārbaudes darbiem matemātikā (3. un 6. klases diagnosticējošie darbi un 9. klases eksāmens) tika konstruēta mainīgo karte (*Wright Map*) (1., 2., 3 attēls). Mainīgo kartē (*Wright Map*) vienas skalas ietvaros tiek attēloti gan skolēni, izmantojot apzīmējumu “#”, kas norāda skolēnu skaitu 3. klasē - 112 skolēnus, 6. klasē – 69 skolēnus un 9. klasē - 96 skolēnus, gan arī katra testelementa numuri. Mainīgo kartē (*Wright Map*) attēlotās skalas mērvienība ir “logit”, kas raksturo varbūtību atrisināt konkrētus testelementus. Skolēna grupas atrašanās vieta skalā tiek

interpretēta kā spēja ar 50 % varbūtību atrisināt testelementus, kuri atrodas tajā pašā skalas pozīcijā (Linacre, 1999, 2004).

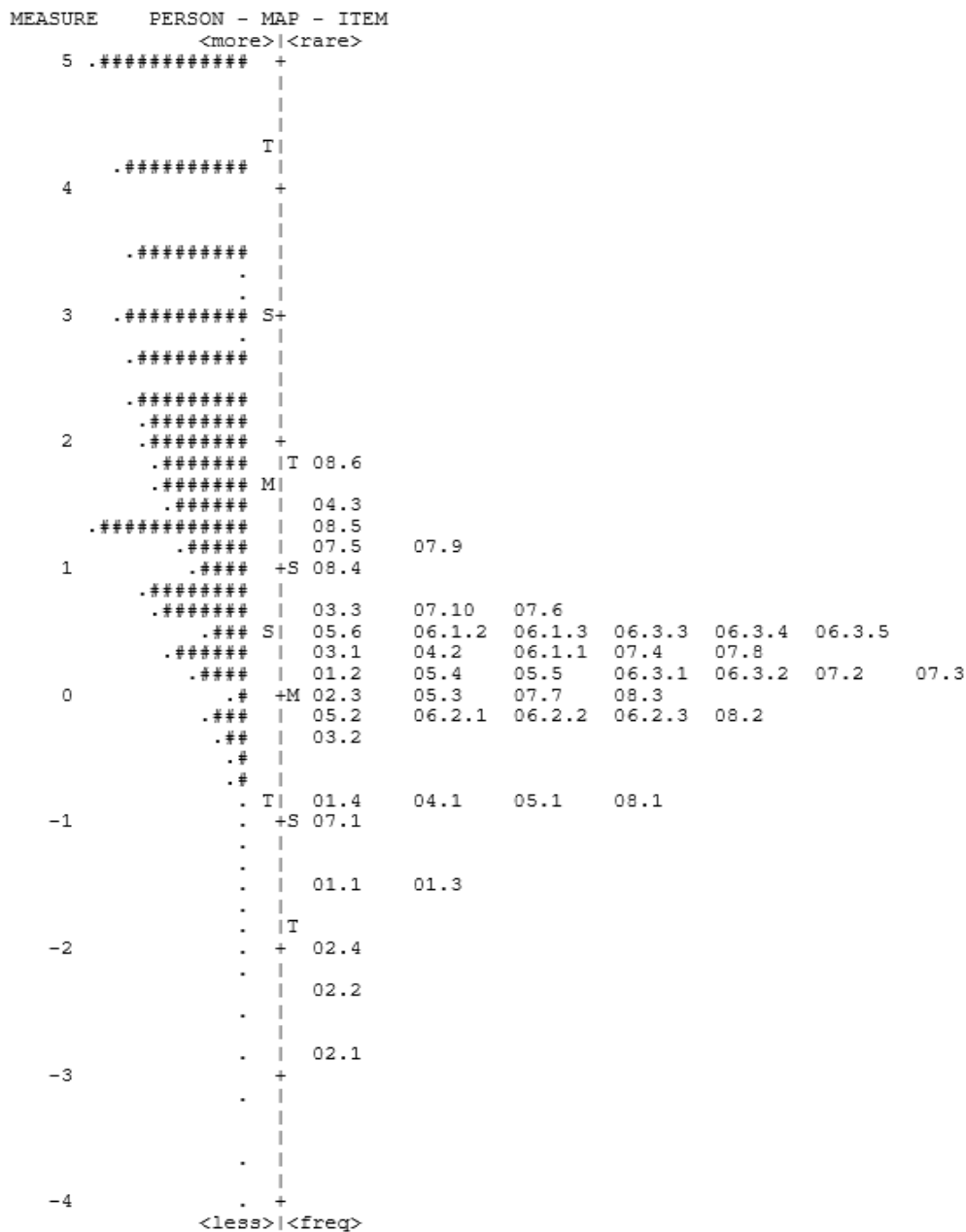


1. attēls. 9.klases matemātikas eksāmena skolēnu un testelementu attēlojums mainīgo kartē (Wright Map), izmantojot Raša (Rasch) modeli
 Figure 1 9th Grade Large Scale Assessment Wright Map, using Rasch Model

Pestovs & Namšone, 2020. Vērtēšanas datu interpretācija matemātikas valsts līmeņa darbos, izmantojot raša (rasch) modeli



2. attēls. 6.klases matemātikas diagnosticējošā darba skolēnu un testelementu attēlojums mainīgo kartē (Wright Map), izmantojot Raša (Rasch) modeli
 Figure 2 6th Grade Large Scale Assessment Wright Map, using Rasch Model



3. attēls. 3.klases matemātikas diagnosticējošā darba skolēnu un testelementu attēlojums mainīgo kartē (Wright Map), izmantojot Raša (Rasch) modeli
 Figure 3 3rd Grade Large Scale Assessment Wright Map, using Rasch Model

Gadījuma izpētē tiek analizēti skolēni, kuru sniegums 3. un 6. klases diagnosticējošo darbu un 9. klases eksāmena mainīgo kartēs ar varbūtību 50% atbilstoši metodoloģijai netiek raksturots ar minimālo matemātikas kompetences līmeni. Analizētie dati atspoguļo skolēnu skaitu klašu grupā un skolēnu daļu procentos no kopējā skolēna skaita attiecīgajā klašu grupā, kuri nav sasnieguši minimālās kompetences līmeni matemātikā, kā tā tiek definēta valsts līmeņa vērtēšanas darba ietvaros (5. tabula).

5. tabula. Skolēnu daļa procentos, kuri nav sasnieguši minimālo kompetences līmeni matemātikā vienas skolas ietvaros (gadījuma izpēte)

Table 5 Student proportion below minimal competency level in mathematics in one school (case study)

Valsts līmeņa vērtēšanas darbs	3. klases diagnosticējošais darbs	6. klases diagnosticējošais darbs	9. klases eksāmens
Testelementu numuri, kuri raksturo minimālās kompetences līmeni	2.1., 2.2., 2.4., 1.1., 1.3., 7.1., 1.4., 4.1., 5.1., 8.1., 5.2., 6.2.1., 6.2.2., 6.2.3., 8.2.	1.1., 2.1., 3.2., 2.5., 1.2., 2.2., 3.1., 2.4., 2.6.	2.3.2., 2.8.1., 1.1., 2.3.3., 1.6., 2.3.1., 1.4., 1.16., 1.15., 1.10., 1.17., 1.7.
Skolēnu skaits klašu grupā	53	48	71
Skolēnu daļa procentos, kuri nesasniedz minimālo kompetences līmeni	3,8 %	18,8 %	12,7 %

Svarīgi atzīmēt, ka lai varētu noteikt skolēnu skaitu, kuri nesasniedz minimālo kompetences līmeni, pirms tam ir nepieciešams analizēt gaitā noteikt vienas skalas ietvaros gan testelementa grūtības pakāpi, gan skolēna spējas pret konkrēto vērtēšanas darbu. Lai noteiktu minimālo matemātikas kompetences līmeni, specifiski tiek atlasīta testelementu kopa: 3. klases diagnosticējošajā darbā - 15 testelementi, 6. klases diagnosticējošajā darbā - 9 testelementi un 9. klases eksāmenā - 12 testelementi. Iegūtie minimālās kompetences līmeņu sliekšņi nav salīdzināmi savā starpā tiešā veidā, un katram darbam sliekšnis tiek noteikts neatkarīgi, jo datu iegūšanai tiek izmantotas dažādas testelementu kopas dažādos vērtēšanas darbos pret dažādām skolēnu populācijām.

Gadījuma izpētē, vienas skolas ietvaros, katram bērnam izmantojot mainīgo kartes (*Wright Map*) tiek noteiktas viņu spējas pret vērtēšanas darba testelementiem. Skolēniem, kuru spēju līmenis ir mazāks (atrodas zemāk mainīgo kartē) par testelementu grūtības pakāpi, kuri raksturo minimālo kompetences līmeni matemātikā, ir atspoguļoti 5. tabulā kā skolēnu daļa procentos no visiem skolēniem paralēlajās klasēs.

Diskusija *Discussion*

Arvien nozīmīgāks kļūst mērķis – atbalstīt skolotājus, izmantojot datus no valsts līmeņa vērtēšanas darbiem, piemēram, no diagnosticējošiem darbiem un eksāmeniem, piedāvājot konkrētus veidus, kā ir iespējams skolas līmenī interpretēt pieejamos datus (Volante, 2006). Visi trīs analizētie 2019. gada

matemātikas vērtēšanas darbi kopumā nepiedāvā testelementus, ar kuru palīdzību ir iespējams pilnvērtīgi un aptveroši vērtēt skolēnu spējas, īpaši šī tendence iezīmējās 3. klases diagnosticējošajā darbā, kur aptuveni 25% no skolēnu populācijas netiek piedāvāti testelementi atbilstoši viņu spējām. Tas noved pie tā, ka 3. klases ietvaros vidējais valsts sniegums ir ļoti augsts, kas tiek iegūts, piedāvājot testelementus, kuri ir nozīmīgi vieglāki par skolēnu spējām.

Pētījuma rezultāti par testelementu vērtēšanas indikatoru kartēšanu atbilstoši konstrukta kategorijām, konstatē otru problēmu, proti, matemātikas mācību saturs netiek līdzsvarots dažādos vērtēšanas darbos un netiek izstrādāts vērtēšanas darbs, kas būtu reprezentatīvs matemātikas konstrukta kategorijām, tāpēc tiešā veidā salīdzināt skolēnu rezultātus nav iespējamas. Ir grūti pie šādiem nosacījumiem runāt par skolēnu rezultātu tendencēm, jo nav skaidrs, ko šīs tendences īsti atspoguļo skolas līmenī, un kāda veida intervenci ir nepieciešams plānot, lai skolēna rezultāti uzlabotos.

Autori piedāvā kompleksu pieeju datu apstrādei: vispirms, izmantojot ekspertu metodi, nepieciešams definēt katra testelementa vērtēšanas indikatoru un testelementu kopu, kura raksturo minimālo matemātikas kompetences līmeni konkrētā darba ietvaros, pēc tam - konstruēt mainīgo kartes (*Wright Map*), izmantojot Raša modeli. Gala rezultātā tas ļauj aprēķināt skolēnu daļu procentos, kuri nedemonstrē pat minimālo kompetences līmeni. Gadījuma izpētē varētu tikt identificēts gadījums, kur posmā no 3. klases līdz 6. klasei notiek nepietiekami efektīvs darbs matemātikas stundās, kas noved pie tā, ka palielinās skolēnu skaits, kas nerasniedz matemātikas minimālo kompetences līmeni. Ir nepieciešama papildu faktoru analīze, piemēram, skolotāju snieguma vērtēšana konkrētajā klasē, lai veiktu pilnvērtīgāku datu interpretāciju.

Secinājumi un rekomendācijas *Conclusions and Recommendations*

1. 2019. gada matemātikas vērtēšanas darbos - 3. klasē un 6. klasē diagnosticējošajos darbos un 9. klases eksāmenā - mācību saturs ir būtiski atšķirīgs gan atbilstoši kategorijām, gan arī pēc kognitīvā līmeņa. Noteiktajās matemātikas konstrukta kategorijās ir tikai viens kognitīvi dziļš testelements, kas neļauj secināt par skolēnu mācīšanās rezultātu ar lielu ticamības pakāpi. Nevienā no vērtēšanas darbiem nav identificēts testelements atbilstoši 4. līmenim pēc *SOLO* taksonomijas. Tāpēc nav iespējams interpretēt skolēnu rezultātus tiešā veidā, izmantojot vidējos rezultātus, jo svarīgi attiecībā pret kādu saturu vidējo sniegumu skolēns demonstrē.
2. Raša (*Rasch*) modeļa izmantošana, kur vienas skalas ietvaros tiek aprēķinātas skolēnu spējas un testelementu grūtības pakāpe, ļauj definēt

testelementu kopu, kas raksturo minimālo kompetenci matemātikā, izmantojot testelementus konkrētajā vērtēšanas darbā. Izmantojot šo statistisko apstrādes metodi, ir iespējams identificēt tendences, izmantojot ļoti atšķirīgus vērtēšanas darbus.

Summary

The purpose of the research is to find out what mathematics content and at what complexity level is measured in the 3rd, 6th and 9th grade and how it is possible to interpret this data at school level. Construct substrands measured in large scale national level assessments in mathematics are defined by using item assessment indicators of large-scale assessments and they are mapped according to the theoretical framework. Authors conclude that the measured constructs in different grades are very different, that's why rather complex statistical analysis is needed to interpret data. Authors firstly define the minimum mathematics competency level using items from the assessments and then compare the tendency in different grades, calculating the proportion of students below the minimum competency level. Limitation of the study is an insufficient number of test items with high complexity level and reliability issues, because of marking procedures in the schools.

Literatūra References

- Abell, S.K., & Lederman, N.G. (Ed.). (2007). *Handbook of research on science education*. Lawrence Erlbaum Associates.
- Andrich, D. (1982). An index of person separation in latent trait theory, the traditional KR. 20 index, and the Guttman scale response pattern. *Education Research and Perspectives*, 9(1), 95–104.
- Biggs, J.B., & Collis, K.F. (1982). *Evaluating the quality of learning: The SOLO taxonomy (structure of the observed learning outcome)*. Academic Press.
- Biggs, J.B., & Tang, C. (2011). *Teaching For Quality Learning At University*. McGraw-Hill Education. Retrieved from <http://public.eblib.com/choice/publicfullrecord.aspx?p=798265>
- Bond, T.G., & Fox, C.M. (2001). *Applying the Rasch model: Fundamental measurement in the human sciences*. Psychology Press.
- Boone, W.J., Staver, J.R., & Yale, M.S. (2013). *Rasch analysis in the human sciences*. Springer.
- Brown, N.J.S., Nagashima, S.O., Fu, A., Timms, M., & Wilson, M. (2010). A Framework for Analyzing Scientific Reasoning in Assessments. *Educational Assessment*, 15(3–4), 142–174. DOI: <https://doi.org/10.1080/10627197.2010.530562>
- Linacre, J.M. (1999). Understanding Rasch measurement: Estimation methods for Rasch measures. *Journal of outcome measurement*, 3, 382–405.
- Linacre, J.M. (2004). Rasch model estimation: Further topics. *Journal of applied measurement*, 5(1), 95–110.
- Mandinach, E.B. (2012). A Perfect Time for Data Use: Using Data-Driven Decision Making to Inform Practice. *Educational Psychologist*, 47(2), 71–85. DOI: <https://doi.org/10.1080/00461520.2012.667064>

- Mandinach, E.B., Honey, M., & Center for Children and Technology (Education Development Center) (Ed.). (2008). *Data-driven school improvement: Linking data and learning*. Teachers College Press.
- Messick, S. (1995). Validity of Psychological Assessment. *American Psychologist*, 9.
- Noteikumi par valsts pamatizglītības standartu, pamatizglītības mācību priekšmetu standartiem un pamatizglītības programmu paraugiem, Pub. L. No. 468 (2014).
- Darbības programmas “Izaugsme un nodarbinātība” 8.3.1. Specifiskā atbalsta mērķa “Attīstīt kompetenču pieejā balstītu vispārējās izglītības saturu” 8.3.1.1. Pasākuma “Kompetenču pieejā balstīta vispārējās izglītības satura aprobācija un ieviešana” īstenošanas noteikumi., Pub. L. No. 670 (2015). Pieejams <https://likumi.lv/ta/id/278201>
- Noteikumi par valsts pamatizglītības standartu un pamatizglītības programmu paraugiem, Pub. L. No. 747 (2018). Pieejams <https://likumi.lv/ta/id/303768-noteikumi-par-valsts-pamatizglitibas-standartu-un-pamatizglitibas-programmu-paraugiem>
- OECD. (2016). *PISA 2015 Results (Volume I): Excellence and Equity in Education*. OECD Publishing.
- OECD. (2019). *PISA 2018 Results (Volume I)*. Retrieved from <https://www.oecd-ilibrary.org/content/publication/5f07c754-en>
- Pestovs, P., & Namsone, D. (2017). National level test in science in Latvia for assessing how students explain phenomena scientifically. *2nd International Baltic Symposium on Science and Technology Education (BalticSTE 2017)*.
- Pestovs, P., Namsone, D., Čakāne, L., & Saleniece, I. (2019). Alignment of 6th Grade Large-Scale Assessment Constructs with the Revised Curriculum Framework. *Society. Integration. Education. Proceedings of the International Scientific Conference*, 2, 387. DOI: <https://doi.org/10.17770/sie2019vol2.3811>
- Schraw, G.J., & Robinson, D.R. (Ed.). (2011). *Assessment of higher order thinking skills*. Information Age Pub.
- Senge, P.M., Cambron-McCabe, N., Lucas, T., Smith, B., & Dutton, J. (2012). *Schools that learn (updated and revised): A fifth discipline fieldbook for educators, parents, and everyone who cares about education*. Crown Business.
- Senge, P.M., & Sberman, J.D. (1992). Systems thinking and organizational learning: Acting locally and thinking globally in the organization of the future. *European journal of operational research*, 59(1), 137–150.
- Volante, L. (2006). An Alternative Vision for Large-scale Assessment in Canada. *Journal of Teaching and Learning*, 4(1). DOI: <https://doi.org/10.22329/jtl.v4i1.89>

ПЕДАГОГИЧЕСКАЯ ПОДГОТОВКА ВОЖАТЫХ К РАБОТЕ В СОВРЕМЕННОЙ ШКОЛЕ

Pedagogical Preparation of Camp Counselors for Working in Modern School

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Abstract. *The article discusses the problem of pedagogical training of camp counselors for working at school. The authors note that the profession of counselor in modern conditions takes on a completely different meaning: the introduction of the counselor position in the staff of the modern school is associated not only with the organization of children's vacation, recreation and rehabilitation, but also with the need to include counselors in the school educational activities during the school year.*

The article presents an empirical research of the counselors importance and their role in a modern school: a description of diagnostic tools is given, the survey results are analyzed by the authors. Also the authors diagnose the qualities and knowledge needed to the modern counselor, determine the counselor's mission in a school, conduct a comparative analysis of the counselor's activities at the school and the summer camp, summarizing the points of view of students and teachers (class teachers, representatives of the administration of educational institutions). The data obtained during the experiment formed the basis to create the educational program "Camp counselor at school", focused on the pedagogical training of counselors for working at schools. The article is intended for public reading and for those who are interested in the problems of modernization of the general education system.

Keywords: *camp counselor, vacation school, school camp, educational program*

Введение

Introduction

В условиях модернизации системы общего образования актуальной остается проблема организации детского каникулярного досуга, отдыха и оздоровления. В педагогическом сообществе организация каникул вызывает особую тревогу, так как необходимо методически грамотно спроектировать Концепцию детского отдыха, наполнить ее

технологическим содержанием, обеспечить реализацию с помощью разнообразных педагогических стратегий и технологий в интересной, разнообразной, привлекательной для школьника деятельности, с целью приобретения социального и практического опыта ребенка.

По мнению ученых О.Е. Лебедевой (Lebedeva, 2000), А.В. Золотаревой (Zolotareva, 2014), В.А. Березиной (Berezina, 2007), организация детского отдыха и оздоровления испытывает серьезные затруднения, к числу которых можно отнести: недостаточную разработанность нормативных документов, регулирующих вопросы ее организации и деятельности, определение прав и обязанностей субъектов и их ответственности. Еще один вопрос, который ставится педагогическим сообществом, является кадровая проблема: кто будет осуществлять педагогическое сопровождение детей в период школьных каникул, а также оздоравливать их досуг в свободное от учебы время?

Актуальность. Психолого-педагогическая подготовка студентов-вожатых в российских вузах не всегда отвечает запросам общеобразовательных школ. В высших учебных заведениях чаще всего готовят студентов к прохождению практики в загородных лагерях, а не к работе в пришкольных лагерях, где условия работы иные. Специалисты Московского педагогического государственного университета (МПГУ), которые в течение нескольких лет реализуют проект «Всероссийская школа вожатых», говорят о необходимости введения должности «вожатый» в штат современной школы.

Цель данной статьи – изучить опыт подготовки студентов к работе в пришкольных лагерях, проанализировать существующую ситуацию в каникулярный период в школах города Пскова и разработать методическое пособие, ориентированное на педагогическую подготовку вожатых к работе в школах.

Методологическими основаниями исследования являются: системный подход к выстраиванию единой структуры подготовки вожатых к работе в школе; положения деятельностного подхода: гармоничное развитие персоны как студента-вожатого, так и его будущего воспитанника в лагере происходит посредством деятельности; принципы антропологического подхода, основанные на гуманном отношении к жизни и здоровью ребенка, его целостном развитии, на бытийном характере взаимодействия взрослого и ребенка, их диалоге, понимании и сотрудничестве.

Роль вожатого в контексте проблемы исследования *The counselor's role in the context of research problems*

В исследованиях ученых (Shmonina, 2011; Sysoeva, 2002; Slastenin, 2005) отмечается, что летний отдых детей – направленная система воспитательных, образовательных и оздоровительных мероприятий на активный отдых, занятость и включенность школьника в активную социализацию, учебную, творческую и другие виды деятельности. Такие лагеря создаются при многих российских образовательных организациях и получают название «Каникулярная школа».

Инновационный проект «Каникулярная школа» – площадка для отработки новейших образовательных технологий, инновационная система, которая представляет собой совокупность компонентов, взаимодействие и интеграция которых направлена на выявление творческих и интеллектуальных способностей, развитие положительных личностных качеств, поддержание физической формы и позитивного психологического состояния детей в летнее каникулярное время.

При изучении опыта работы различных каникулярных школ у авторов возник интерес к роли вожатого в этих организациях. Была проанализирована возможность использования элементов проекта «Каникулярной школы» в образовательных организациях города Пскова.

Особенностью проектов «Каникулярная школа» является их ориентация на мотивированных школьников в возрасте от 11 до 18 лет, выявление и развитие творческих способностей обучающихся, а также формирование устойчивого интереса к профессии, поддержка научно-исследовательских интересов учеников, разработка индивидуальных образовательных маршрутов. То есть деятельность проекта направлена на формирование профессионального самоопределения школьников. Из этого проекта «выпадают» дети младшего школьного возраста, а именно они являются воспитанниками пришкольных лагерей в осенне-весенний и летний период.

Кроме того, остается открытым вопрос, кто же будет осуществлять сопровождение детей в каникулярный период. На данном этапе возрастает внимание и интерес к должности вожатого и его роли в образовательном процессе школы. В современных условиях профессия вожатого приобретает иной смысл, так как трудоемкость работы вожатого бывает выше, чем у классного руководителя. Поэтому необходимо ставить вопрос о качественной психолого-педагогической подготовке студентов-вожатых.

В практике реализации школьных каникулярных программ возникают вопросы подготовки методистов, педагогов, вожатых, в соответствии с Профстандартами педагогической деятельности, способных обеспечивать

высокое качество обучения, владеющих приемами ориентации на современного ребёнка поколения Z, умеющих общаться с различными детьми, в том числе с детьми «группы риска», сотрудничать с коллегами и родителями обучающихся, и разумно подходить к оценке своих образовательных возможностей. «Острой является проблема обеспечения школы молодыми кадрами – вожатыми. Чаще всего в период школьных каникул вожатыми и начальниками пришкольных лагерей являются (согласно опросам) школьные учителя, в частности учителя начальных классов» – отмечает Т.В. Сидорова (Sidorova, 2019). Проблема участия вожатых в организации пришкольных лагерей и возможность их включения в воспитательную деятельность школы в течение учебного года является недостаточно изученной.

Чтобы в полной мере осуществить качественную психолого-педагогическую подготовку вожатых к работе в школе необходимо разработать соответствующую образовательную программу. Одним из «векторов» направления деятельности современного вожатого является профессиональный стандарт «Специалист, участвующий в организации деятельности детского коллектива (вожатый)», утвержденный приказом Министерства труда и социальной защиты Российской Федерации от 25 декабря 2018 г. № 840н. Главная цель деятельности вожатого – сопровождение детского коллектива в организациях отдыха, создание условий для развития коллектива, планирование и реализация его деятельности под руководством педагогического работника.

В 2017 году МПГУ при поддержке Министерства образования и науки РФ начал реализацию проекта «Всероссийская школа вожатых». По данным 2019 года, подготовка вожатых по программам «Основы вожатской деятельности» ведется в 150 вузах страны. «Если первоначально проект был ориентирован на подготовку вожатых к работе только в загородных оздоровительных лагерях, то потом вожатых стали готовить к работе в общеобразовательных организациях на протяжении всего учебного года, в том числе в организациях, работающих по направлениям деятельности Российского движения школьников (Vladimirova et al., 2019).

Мониторинги, которые проводились в 2017, 2018 годах специалистами МПГУ, показали, что за один год всего по стране было подготовлено около 25 000 вожатых. Из них 50% студентов прошли практику в летних оздоровительных лагерях, а 33 % в – пришкольных лагеря. Остальные 17% – в других организациях. Статистика по Псковской области пока не ведется, но в будущем мы предполагаем ее провести.

Функционал вожатого в школе и в лагере не одинаков, хотя есть множество сходных видов деятельности. Деятельность вожатого в общеобразовательных организациях и организациях отдыха детей и их

оздоровления регламентируется разными нормативно-правовыми документами, особенности формирования коллектива в загородном и школьном лагере разные, время пребывания тоже. Поэтому было проведено эмпирическое исследование в школах и вузах города Пскова с целью выяснения важности и актуальности работы вожатых в школе не только в период каникул, но в течение учебного года.

Эмпирическое исследование значимости и роли вожатого в современной школе

Empirical research of the counselor's importance and role in a modern school

Целью исследования являлось обоснование значимости введения должности вожатого в школе и определение отношения к проблеме подготовки и готовности студентов и школы в лице классных руководителей, администрации к их сопровождению.

Исследование проводилось **на базе** образовательных учреждений города Пскова, а также ПсковГУ. Констатирующий эксперимент включал в себя следующие методы работы: анкетирование и опрос классных руководителей, представителей воспитательной службы и администрации образовательных учреждений, а также студентов 3 курса направления подготовки «Педагогическое образование», прошедших практику в летних оздоровительных и пришкольных лагерях, беседы с учащимися, включенное наблюдение. На основе полученных данных была разработана образовательная программа «Вожатый в школе», которая будет реализовываться в 2020-2021 учебном году. В исследовании приняли участие 53 педагога и 200 студентов.

Анализируя анкеты педагогов, необходимо отметить, что 40% респондентов удовлетворяет ситуация с организацией детского каникулярного отдыха и они не нуждаются в помощи вожатых, которых *«скорее всего необходимо будет еще и готовить»*. Эти классные руководители не против вожатых, как таковых, но нуждаются лишь в качественно подготовленных и готовых активно работать студентах. Большинство педагогов (60%) считают, что школе необходимы изменения в организации детского отдыха в период школьных каникул. Причем изменения должны быть как на государственном, так и на уровне образовательного учреждения, путем обогащения содержания дополнительного образования школьников с задействованием в том числе вожатых. Например, необходимо организовать: туристические поезда, с целью знакомства с историей страны, культурными достижениями во время школьных каникул; разнообразный осовремененный досуг (активные игры, настольные игры, участие в социальных проектах); улучшение

материально-технической оснащенности лагерей (пришкольных, летних);
должное стимулирование воспитателей в лагере.

Анализ ответов на вопросы, касающихся понятия, личностных характеристик и необходимых знаний, которыми должны обладать вожатые, отражены в сводной таблице.

Таблица 1. Качества, знания, необходимые современному вожатому
Table 1 Qualities, knowledge needed to the modern counselor

Вожатый – это...		Знания, необходимые современному вожатому	Качества вожатого, необходимые для работы в лагере
педагоги	студенты	педагоги и студенты	педагоги и студенты
Человек, который ведет за собой!	Это человек, который всегда рядом с детьми, но в то же время чуть впереди.	Знание психологии и педагогики - 40%	Активность -25%
Тот, кто помогает решать организационные и воспитательные моменты		Знает правила оказания первой медицинской помощи – 25%	Коммуникабельность -17%
Генератор идей	Это творческий человек	Знает игры, настольные игры -20%	Ответственность - 15%
Наставник, старший брат Ответственный за коллектив	Друг, наставник для своих подопечных	Знает и умеет применять различные новые методики работы с разновозрастными группами (КТД) -17%	Дружелюбие-15%
Сопровождающий во время детских мероприятий	«Мультифункциональный» человек, способный решать много задач в условиях ограниченности времени	Знает как увлечь, заинтересовать -12%	Эмпатия – 13%
Универсал, позволяющий раскрыть личностный потенциал ребенка	Обеспечивает развитие детей	Знает ИКТ, этику -6%	Творчество -12% Эрудиция -10%
Это человек, увлеченный процессом и способный заинтересовать детей	Человек, любящий детей, который и сам в каком-то смысле является ребенком. Такому человеку легко найти общий язык с детьми и настроится на одну волну. Дети, в свою очередь, замечают это и легче идут на контакт.	Конфликтологию -5% Свои права и обязанности -5%	Чувство юмора -7% Легкость в принятии решения -5% Мобильность взглядов -5% Добросовестность - 5% Умение прийти на помощь -6% Любовь к детям - 4%

Можно констатировать, что современный вожатый, по мнению педагогов, – это человек, который способен оживить современную школьную реальность, вдохнув в нее «жизнь», при безусловном знании психолого-педагогических основ развития каждого ребенка и методического инструментария становления коллектива. Студенты же были более активны в толковании понятия, где были отражены не только сущностные характеристики, но и эмоциональное отношение к данному виду деятельности.

О миссии вожатого в школе мы можем судить, проанализировав ответы на идентичный вопрос в анкетах педагогов и студентов – «Вожатый в школе необходим:

- детям, чтобы...
- классным руководителям, чтобы...
- администрации (воспитательной службе), чтобы...»

Таблица 2. Миссия, роль вожатого в школе
Table 2 Mission, the role of counselor in school

Вожатый в школе необходим					
– детям, чтобы...		– классным руководителям, чтобы...		– администрации (воспитательной службе), чтобы ...	
педагоги	студенты	педагоги	студенты	педагоги	студенты
был такой человек, молодой по духу и возрасту, с которым можно поделиться проблемами, посоветоваться	помочь выразить свои творческие таланты	помогать в проведении мероприятий (дети устают от одного педагога в разных формах школьной активности)	помогать в работе с детьми	для проведения актуальных мероприятий	чтобы помогать организовывать воспитательные и познавательные мероприятия для детей в школе, предлагать идеи
он должен открыть то, что дети не знали, сидя в гаджетах	дети были заняты, интересно и с пользой проводили время	организовать ребят, а классный руководитель будет на подхвате	научиться понимать детей и узнать их лучше	быть в курсе обстановки в школе и своевременно принять меры	контролировать дисциплину
поможет быстрее адаптироваться он – пример	отвлечься от школьных будней. Им было весело и интересно	открыть детей по-новому, во внеучебной ситуации обнаружить разные качества детей, увлечь их	освободить время для подготовки к урокам	помочь в неформальной ситуации развить детей, обнаружить их проблему и прийти им на помощь	помочь в организации отдыха; проводить общешкольные мероприятия

друг лидер	организовать полезный досуг и безопасное времяпрово ждение	помочь в организации внеклассных мероприятий	помогать в организации классных часов, внеклассной работы	охватить наибольшее количество детей	иметь мероприятия, обязательные для проведения.
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Также мы поинтересовались у студентов, как они понимают «чем отличается работа вожатого в лагере от работы вожатого в школе и пришкольном лагере?»

Наиболее частотные ответы мы представили в таблице.

Таблица 3. Особенности деятельности вожатого в школе и летнем лагере
Table 3 Features of the counselor's activities at school and summer camp

В лагере вожатый всегда рядом (24*7).	70%
В школе вожатый несет ответственность за детей лишь несколько часов, а в летнем лагере ответственность зашкаливает	60%
В школе вожатый не может проводить большое количество мероприятий, потому что его рабочий день короче, чем в летнем лагере	43%

Однако, невзирая на все сложности, большинство ребят с радостью вспоминали свою вожатскую практику и высказывали пожелания, что вожатская практика в школе должна стать ступенью в овладении ими педагогической профессией.

Образовательная программа «Вожатый в школе: от А до Я» ***Educational program “Counselor at school: from A to Z”***

В текущем учебном году нами была разработана образовательная программа, рассчитанная на 1 год изучения для студентов 2,3 курсов направления подготовки «Педагогическое образование», имеющих возможность не только пройти практику в летнем оздоровительном лагере, но и параллельно стать вожатым в школе. Программа «Вожатый в школе» разработана в соответствии с Законом РФ «Об образовании в Российской Федерации» и другими официальными документами.

В результате изучения дисциплины студент узнает:

- законы и иные нормативные правовые акты, регламентирующие деятельность вожатого в РФ, нормы законодательства о правах ребенка, положения Конвенции о правах ребенка, нормы трудового законодательства, нормы профессиональной этики;
- принципы и механизмы социального взаимодействия; виды и функции межличностного общения; закономерности

осуществления деловой коммуникации с семьей, коллегами, детьми, в том числе с особыми образовательными потребностями;

- основные способы, формы, средства и приемы обеспечения охраны жизни и здоровья детей.

А также приобретет практические навыки:

- педагогически корректно управляться с детским коллективом;
- устанавливать и поддерживать конструктивные деловые отношения с коллегами и представителями администрации;
- обеспечивать охрану жизни и здоровья детей;
- определять и реализовывать формы, методы и средства для организации совместной и индивидуальной воспитательной деятельности воспитанников, в том числе с особыми образовательными потребностями.

Программа содержит лекционный курс, представленный в сводных схемах, таблицах, глоссариях. Подробно описывается тематика и логика подготовки к практическим занятиям, направленных на развитие различных форм практической работы, творческих способностей, воображения, учитывающих интересы, увлечения студентов.

Таблица 4. Тематика лекционных и практических занятий
Table 4 Topics of lectures and practical classes

Тематика лекций	Тематика семинарских занятий
1. Кто такой вожатый? Вожатый в ДОЛ и вожатый в школе: общее и специфичное.	1. История вожатского дела
2. Правовые основы деятельности вожатого в школе	2. Нормативно-правовые основы вожатской деятельности в школе
3. Психолого-педагогические основы вожатской работы.	3. Психолого-педагогические основы вожатской деятельности в школе.
4. Планирование деятельности вожатого в школе	4. Технологии работы вожатого в образовательной организации
5. Временный детский коллектив	5. Информационно - медийное сопровождение вожатской деятельности
6. Содержание целостного педагогического процесса в школе	6. Профессиональная этика и культура вожатого
7. Прикладные навыки вожатого	

Один из разделов программы посвящен организации Вожатских практик в школе как части профессиональной подготовки вожатых соединяющей теоретические знания обучающихся с практической работой в школе, учреждениях дополнительного образования, образовательных организациях различного типа, формирующей у обучающихся творческий подход к вожатской работе. В пособии приведены методические рекомендации по выполнению некоторых видов творческих заданий, предлагаются варианты итоговой аттестации.

Выводы *Conclusion*

Теоретическая значимость исследования состоит в том, что в нем обоснована значимость введения должности «вожатый» в штат современной школы. Проведенные исследования о месте и роли вожатого в образовательной организации, позволяют говорить о необходимости привлечения ресурсов студентов – будущих педагогов – к организации воспитательной, внеурочной работы с детьми в школе не только в летнее каникулярное время, но и в течение всего учебного периода.

По итогам проведенного авторами статьи исследования, составлен «портрет» вожатого: определены качества, знания, необходимые современному вожатому, его миссия и роль в школе с точки зрения педагогов и студентов, что придает исследованию **практическую значимость**. Полученные в ходе эксперимента данные легли в основу создания образовательной программы «Вожатый в школе», ориентированного на педагогическую подготовку вожатых к работе в школах.

Все трудности и противоречия, обозначенные в статье, преодолимы, для их решения нужно время и серьезные управленческие и политические решения. В этой связи возрастает значение предлагаемой модели как инструмента эффективного взаимодействия различных социальных институтов, призванных влиять на подготовку педагогических кадров к воспитательной работе, как в школе, так и в лагере; на удовлетворение потребностей образовательных организаций в молодых специалистах, владеющих технологиями создания воспитывающей среды.

Summary

The organization of children's recreation and rehabilitation is experiencing serious difficulties, which include: insufficient development of regulatory documents regulating the issues of its organization and activities, determination of the persons' rights and obligations and their responsibilities.

The psychological and pedagogical preparation of student counselors at Russian universities does not always meet the needs of secondary schools.

The purpose of this article is to study the experience of preparing students for work in school camps, to analyze the current situation during the vacation period in the schools of the city of Pskov and to develop a methodological guide focused on the pedagogical preparation of counselors for work in schools.

The authors substantiated the importance of introducing a counselor position at school and conduct the empirical research of the counselor's importance and role in a modern school

Based on the obtained data, the educational program "Counselor at School" was developed and will be implemented in the 2020-2021 academic year. The research involved 53 teachers and 200 students.

Based on the results of the research conducted by the authors of the article, a portrait of the counselor was drawn up.

In our opinion, all the difficulties and contradictions outlined in the article are surmountable; its solution requires time and serious managerial and political decisions.

Литература **References**

- Berezina, V.A. (2007). *Additional Education of Children in Russia*. M.: Dialogue of cultures.
- Lebedeva, O.E. (2000). *Additional education of children*. M.: Vlados.
- Shmonina, L.V. (2011). Ahead - the holidays // *The Practice of School Education*, 2(79), 2-4.
- Sidorova, T.V. (2019). Preparing student counselors for work in school camps // *Society and Education in the XXI Century: Experience of the Past - A Look into the Future*. 191-195 Pskov: PSGU.
- Slastenin, V. A. (2002). *Methods of Educational Work*. M.: Publishing Center "Academy".
- Sysoeva, M.E. (2002). *Fundamentals of Counselor Skill*. M.: Center for the Humanities Literature "RON".
- Vladimirova, T.N., Leskonog, N.Yu., & Shalamova, L.F. (2018). A model for creating an educational environment in educational organizations, children's recreation organizations and their recovery: difficulties and successes in implementation // *Educational World - Education in the World*, 3(71), 213-218.
- Vladimirova, T.N., Leskonog, N.Yu., & Shalamova, L.F. (2019). *Training of Counselors on the Basis of Educational Institutions of Higher Education in Russia*. M.: Moscow State Pedagogical University.
- Zolotareva, A.V. (2014). *Modern Problems of Additional Education of Children*. Yaroslavl: Publishing House of YAGPU.

PUPILS' TRUST IN TEACHERS AS A KEY PREREQUISITE FOR CHILD SAFETY IN SCHOOL

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Abstract. *The article deals with the actual issue of safety of a child aged 11-15 years. Its purpose is to define and describe key prerequisite for a child's safety at school (5th-9th grade), based on an analysis of the essence of the safety and results of empirical studies. The novelty of the article is due to the necessity to immediately search for prerequisites, factors, tools and other factors to counteract and overcome bullying in the educational environment.*

The article reveals the essence of child safety, as well as indicators that can be used to monitor 5th-9th grade pupils' safety at school are outlined. Based on survey of teenagers and teachers, as well as correlated relationships, it has been determined that trust in teachers is a prerequisite for a child's safety in the educational environment and manifestation of social behaviour by pupils. Conclusions concerning instruments of establishing trust between pupils and teachers at school and ensuring their safety are formulated.

Keywords: *safety, bullying, child, teacher, trust.*

Introduction

Guaranteeing the safety of the children in all environments of their livelihoods is a basic condition for meeting their needs, socialization, harmonious development, foundation for the system of ensuring children's rights. In accordance with international standards outlined by the UN Committee on the Rights of the Child, child safety should be interpreted in the broadest sense, namely: protection against all forms of physical and psychological violence, offence or abuse, sexual harassment, peer pressure, bullying, degrading treatment dignity of attitude; such as security against exploitation, drugs, involvement in the worst forms of child labour, armed conflict, etc.

The processes of deformation of values, changes of stereotypes, weakening of the educational function of the family and other factors increase the relevance of the problem of child safety. Today, this problem is becoming more and more urgent due to the rapid spread of such a negative phenomenon as bullying in a

child-youth environment, in school in particular. Among the pupils, the most impressionable are teenagers aged 11-15 years.

On January 19, 2019, Law of Ukraine “On Amendments to Certain Legislative Acts of Ukraine on Counteracting Bullying” came into force (Verkhovna Rada of Ukraine, 2018). In particular, the Law of Ukraine “On Education” is supplemented by the clause, which foresees that bullying is the act (act or omission) of participants in the educational process, which consists in psychological, physical, economic, sexual violence, including the use of electronic communications, committed against a minor or junior and (or) such a person in relation to other participants in the educational process, which could have caused or harmed the victim's mental or physical health (Verkhovna Rada of Ukraine, 2017).

However, nowadays, the system of general secondary education in Ukraine does not clearly identify the key prerequisites for child safety at school, as well as indicators which could measure the safety of the environment and the pupils' feelings of safety.

The purpose of the article: based on the analysis of the essence of child safety and the results of empirical research, to determine and describe trust of pupils to teachers as a key prerequisite for the safety of children aged 11-15 years (pupils 5th-9th grades) in school.

The study used empirical methods such as questionnaires, interviews with teachers, monitoring and methods of descriptive statistics (determining the percentage, arithmetic mean) and the method of correlation analysis. The purpose of the last mentioned method is to establish correlation between the individual factors of influence and the safety of the child.

The Problem of Research and Research Focus

We define child safety as a state of protection of a person from birth to 18 years from external and internal threats, availability of ways to meet the needs, protection of its rights. A sense of safety is a sense of stability and confidence, ability to generally influence own life and control certain circumstances.

The problem of the children's safety in different environments of their life is the subject of a number of sociological researches and scientific researches. In particular, negative trends in violence against children and young people are evidenced by the global U-Report surveys conducted in 2016-2017 and 2019 among young people aged 13-24 from 36 countries. Thus, according to the 2016-2017 polls, 67% of respondents confirm that they or their friends have experienced cases of violence, and almost a third of them (29%) said that they most often suffer from peer abuse (UNICEF, 2016).

Based on survey in Ukraine in 2019, the number of respondents suffering from peer aggression is significantly higher (62%). U-reporters say that bullying and abuse are most common at school, meeting (76%) and social networks (33%).

It is worth noting that, according to U-Report, 36% of respondents did not tell anyone about the cases of bullying that happened to them. Almost the same number of respondents (38%) say this problem to parents, even fewer (27%) share it with friends (UNICEF, 2019).

According to the 2019 HBSC survey, among children aged 10 to 17 years, 35% of those polled during the past two months have been abused / humiliated or bullied by others, 37.9% have been victims of abuse, abuse and humiliation by other adolescents; 21.1% of respondents admitted that they were “online bullies” and 21.5% – they were “online victims” (Balakirieva et al., 2019).

The safety of school-age children has been the subject of research by a number of scientists from around the world. In particular, important is research concerning pupils' and teachers' perceptions of school safety. In particular, researchers K. Bosworth, L. Ford, and D. Hernandez conducted researches of school climate factors that contribute to pupils 'and teachers' perceived security in selected Arizona schools. Yes, it was found that in 9 out of 11 schools, neither teachers nor students expressed extreme safety concerns. When asked what makes school safe, pupils usually informed of components of physical security, although in their opinion, the school climate and staff actions also strengthened feelings of safety. The received results give an opportunity to form a view concerning factors that contribute to the feeling of safety of pupils in and around school (Bosworth, Ford, & Hernandez, 2011).

The US Department of Education (USDOE), based on the measurement of school climate in high schools with a focus on safety, interaction and environment, elaborated a three-factor model based on the school climate's dependence on behavioural, academic, medical, social and emotional factors. Researchers C. Bradshaw, T. Waasdorp, K. Debnam and S. Lindstrom Johnson studied the factor structure and measurement invariance of the USDOE model. The research resulted in a model that included 13 subdomains: security (sense of security, billing and aggression, drug use); involvement (teacher relationships, student relationships, educational environment, communication with school, justice and parental involvement); environment (rules and consequences, physical comfort and support, disorder) (Bradshaw, Waasdorp, Debnam, & Lindstrom Johnson, 2014).

The J. White research focuses on evidence-based instructing for solving school violence and bullying. It is emphasized that: school violence and bullying can have long-term effects on the health and well-being of children and young people; bullying among school-age children and young people can occur both outside the classroom, on the way to and from school, and online. It is emphasized

that published evaluations of the results of school programs on violence and bullying conducted in the UK or Ireland are negligible. It is concluded that a good one at one school may not work at another. Emphasis is placed on the necessity to elaborate a systematic, comprehensive approach to preventing and responding to bullying that would comprehensively address all aspects of the problem (White, 2019).

V. Primakova and L. Morska raised the issue of education of pupils in a safe learning environment in secondary schools of Ukraine in general. The authors analysed the current state of the problem; stated that the school's teaching staff should be able to detect, predict and eliminate dangerous situations (Primakova & Morska, 2019). However, key factors for teacher effectiveness have not been identified.

Methodology of Research

During the preparation of this article, a secondary analysis of the empirical results of the applied research “Technologies of formation of prosocial behaviour of vulnerable adolescents in general educational institutions” was conducted, which was carried out by employees of the laboratory of physical development and healthy lifestyle of the Institute of Educational Problems of the National Academy of Pedagogical Sciences of Ukraine in 2017-2019 (Fedorchenko et al., 2019).

The questionnaire was chosen as a survey, which can be done either in paper form or through Google Forms, which allows filling in the questionnaire in a convenient and time-consuming way, simplifies the analysis and processing of data with the help of mathematical statistics tools.

In mentioned research, a complex diagnostic methodology was applied from three questionnaires: two questionnaires for teachers “Organizational and technological support for the formation of social behaviour of adolescents” and “Prosocial behaviour through the eyes of teachers” and for pupils “Prosocial behaviour through the eyes of adolescents”.

The analysis of the information from the questionnaire blocks “Question about your school”, “Question about your class” and “Question about you” helps to find out the peculiarities of the life of pupils in the educational institution.

The following statements were formulated to analyse the problem of child safety at school:

- no school bullying and humiliation among pupils; emotional atmosphere is favourable (1);
- no physical punishment and humiliation of pupils by teachers; instead the partnership of adults and children is practiced (2);

- our class is very friendly and students take care of each other's affairs (3);
- in a conflict situation, pupils try to agree and find a solution that is acceptable to all (4);
- pupils are able to abandon proposals for violations of the rights of others, as well as harmful practices to their health (5);
- there are trusted people in the school who can be reached for advice or assistance (6).

For each statement, the students had to define their position: “completely agree”, “partially agree”, “partially disagree” and “completely disagree”. Teachers also defined their position regarding individual statements (1, 2, 5, 6). Thus, the task was also to compare students’ and teachers’ perceptions of different aspects of child safety at school.

A survey of teachers and pupils was conducted through Google Forms during September-December 2017. The method of obtaining information is to complete a formalized questionnaire with any device.

Poll regions – four regions of Ukraine (Dnipropetrovsk, Cherkasy, Kharkiv, Kyiv regions) and Kyiv city. A total of 1,071 pupils were interviewed (boys – 516 people, girls – 555 people) from 5-9th grade, aged 11-15 years from 13 educational institutions located in 9 settlements. Additionally, 136 teachers were surveyed, teaching in these classes.

Sampling was carried out on the basis of experimental establishments, depending on the grade. The selection of experimental educational institutions was carried out based on voluntary participation. At the same time, the requirements that provided representativeness and uniformity of the sample were observed, in particular: regionality, gender and age characteristics of pupils, number of pupils in one classes’ parallel. The same number of boys and girls (100-110 people each) participated in survey. The total number of pupils in each parallel was 200-220 people.

According to the length of service of teachers – 77.5% of respondents have more than 10 years of work and more than half of the respondents – have more than 10 years of experience of classroom management.

Samples of pupils and teachers were compared using the Kramer-Welch (T) statistical criteria. STATISTICA 6.0 was used for correlation analysis and to establish the probability of difference between samples.

As for the location of the educational institution – 64% of the educational institutions are located in cities and 36% – in rural areas.

The observance of ethical issues of organizing and conducting the survey were ensured through the preparation of a letter “Informed Consent to Participate in the Research” for management of schools and parents of pupils. The mentioned

letter contained a description of the conditions and requirements for conducting the survey. Parents provided written permission for participation their children in this survey.

Results of Research

The survey results “Social behaviour through the eyes of pupils” and “Social behaviour through the eyes of teachers” demonstrated that with the statement concerning the absence of abuse and humiliation among pupils in the school and the domination of a favourable emotional atmosphere, “partially disagree” and “completely disagree” 33.0% of 5th-grade pupils, 28.74% of 6th-grade pupils, 34.79% of 7th-grade pupils, 41.2% of 8th-grade pupils and 43.64% of 9th-grade pupils. At the same time, only 16.1% of teachers inform of facts of bullying and humiliation, which is two or even three times less than pupils. In our view, this indicates a worrying trend of increasing cases or situations of bullying / danger, encountered by about 1/3 of pupils in 5-7th grades up to almost 1/2 of pupils in 8-9th grades. At the same time, the teachers were not aware about that cases.

18.77% of fifth-graders, 19.76% of sixth-graders, and 13.66% of seventh-graders, 17.59% of eighth-graders and 21.91% of ninth-graders “partially disagree” and “completely disagree” with the statement that there are “no physical punishment and humiliation of pupils by teachers; instead the partnership of adults and children is practiced”. It means that with the exception of 7th grade pupils, almost every fifth pupil has seen or experienced bulling at school. At the same time, only 3.7% of teachers notice physical punishment and humiliation of pupils by teachers. 96.3% of teachers agree with statement about partnerships between adults and children at school that contradicts the statements of pupils.

The fact that their “class is very friendly and pupils take care of each other's affairs” is “partially disagree” and “completely disagree” over a 1/3 of pupils: 31.44% of fifth-graders, 32.33% of sixth-graders, 35.65% of eighth-graders, 34.09% of ninth-graders and about a 1/3 (26.77%) of seventh-graders.

On average, almost every fifth student in a conflict situation does not try to negotiate and find a solution that is acceptable to all: 5th grade – 23.11%; 6th – 22.75%; 7th – 18.47%; 8th – 17.13%; and 9th – 21.82%). As follows, the problem at school is the pupils' ability to negotiate and reach compromises (especially among 8th-grade pupils) that is a factor of forming friendly, trusting relationships with others.

Practically in all classes (5th – 20.22%; 6th – 21.56%; 8th – 21.86%; 9th – 21.36%), except 7th (14.84 %), one in five pupils disagrees with the statement that “pupils are able to refuse suggestions for violating other people's rights or harmful practices for their health”. The same position is shared by 14.0% of teachers. Therefore, appearance of a dominant or aggressive leader in the pupils' team,

significantly increases the risk of involving pupils in the violation of others' rights. In this case, it is important to understand which person the teenager will seek to be protected.

Thus, majority of adolescent pupils (92.84%) answer that their “close environment includes adults who they trust and can ask for help”. In general, only 8.16% of pupils deny this situation.

At the same time, with the statement “there are people in the school who are trusted by all and who can be reached for advice or help” mostly agree the 5th and 7th grade pupils (90.97% and 85.87% respectively). Instead, “slightly disagree” and “completely disagree” more than 1/5 of 8-9th grade pupils (19.44% and 22.73% respectively). That is, from 10-15% of 5-7th grade pupils to 20-23% of 8-9th grade pupils do not have teachers among adults in school whom they may trust and seek help in case of danger.

Answers of teachers distributed radically different from pupils: 97.0% of teachers agree and only 2.2% deny allegation that there are adult in school who pupils may trust, ask for advice or help. Therefore, teachers are not aware of the identified problem, and do not perceive it as a potential prerequisite for danger for teenager at school.

Table 1 Comparing pupils’ and teachers’ responses to questionnaires, %

Answer options	Statement							
	S 1		S 2		S 5		S 6	
	pupils	teachers	pupils	teachers	pupils	teachers	pupils	teachers
Completely disagree	12.71	2.92	8.45	0.73	4.65	0	4.27	0
Slightly disagree	23.28	13.14	9.75	2.92	15.16	13.87	11.69	2.19
Slightly agree	35.81	45.99	26.74	21.90	46.79	61.31	41.56	24.82
Completely agree	28.2	37.23	55.06	72.99	33.4	24.09	42.49	72.99

Source: prepared by authors

N pupils – 1071 persons. N teachers – 136 persons.

Statement 1. *There are no school bullying and humiliation among pupils; emotional atmosphere is favourable.*

(Empirical value of Cramer-Welch criteria (‘CWC’) – 3.0965, critical value of CWC – 1.96, p<0.05);

Statement 2. *There are no physical punishment and humiliation of pupils by teachers; instead the partnership of adults and children is practiced.*

(Empirical value of CWC – 3.5669, critical value of CWC – 1.96, p<0.05);

Statement 5. *Pupils are able to abandon proposals for violations of the rights of others, as well as harmful practices to their health.*

(Empirical value of CWC – 0.2039, critical value of CWC – 1.96, p>0.05);

Statement 6. *There are trusted people in the school who can be reached for advice or assistance*

(Empirical value of CWC – 4.9658, critical value of CWC – 1.96, p<0.05).

Comparisons of the responses of all grades pupils and teachers to the proposed statements are given in the Table 1.

There was no statistically significant difference between the responses of pupils and teachers in rural and urban educational institutions ($p > 0,05$).

One of the factors that is likely to complicate the identified situation is gender imbalance in the pedagogical environment: almost 92% (125 persons) of the surveyed teachers are female and only 8% are male (11 persons). Therefore, the opportunity to seek help from a male teacher is negligible.

Searching for correlation links between respondents' answers showed that pupils' trust to teachers may be treated as the basic prerequisite for children safety and prosocial behaviour at school.

If pupils trust teachers at school, highly probable outcomes are the following:

- there is no abuse and humiliation among pupils, but a favourable emotional atmosphere prevails ($r=0.9$; $p < 0.05$);
- pupils jointly solve problems that arise and participate in charitable projects or actions ($r=0.99$; $p < 0.01$);
- there are no physical punishments and humiliation of the students by the teachers, instead the partnership of adults and children is practiced ($r=0.99$; $p < 0.01$).

Conclusions and suggestions

Therefore, the results of the survey show that the key aspect of ensuring the safety of the child at school is the trust of the participants in the educational process to each other, and especially the trust of pupils to teachers. Trust appears as a basis for establishing productive contacts and maintain healthy relationships, effective conflict resolution and so on. Failure to consider such a prerequisite for child safety significantly reduces the effectiveness of any action to prevent or eliminate bullying at school or other dangerous situations.

The safety of a child is the basis for harmonious development of an individual, as well as an important condition for a child's prosocial behaviour, his/her desire to act for the good of others and society as a whole.

Feeling child safety affects her relationships with others, including her desire to support the weak, help the needy, intercede for others. Instead, bullying problems, conflicts between different participants in the educational process often become a barrier to develop in pupils such values as tolerance, respect, support, honesty, harmonious communication and coexistence in society. Similar conclusions were made by scientists of the Institute of Problems on Education of the National Academy of Educational Sciences of Ukraine (Kyrychenko, Yezhova, Necherda, Tarasova, & Demyanchuk, 2016).

Our findings are in line with the provisions of the UN Committee on the Rights of the Child document “General Comment No. 20 (2016) on the realization of the rights of the child in adolescence”. It is noted there that among the factors that contribute to improving the viability and healthy development of teenagers, an important place occupy: strong relations and support of adults, playing key role in their lives; opportunities for participation and decision-making; safe and healthy environment; opportunities to build and maintain friendly relations (Komitet z prav dytyny, 2016).

In our research, we share the findings of researchers that attachment relationships are extremely important for creating a sense of safety for children, since “the person to whom the child is most strongly attached will have the most serious impact on his or her life” (Newfeld & Mate, 2018, p. 14) and the fact that “deep trusting protects the individual” in difficult life situations (Neubronner, 2015, p. 31). In this regard, great attention has to be paid to all adult trusted by teenagers.

Therefore there are two aspects of safety: objective and subjective. The objective aspect is characterized by the existence or non-existence of real threats. The subjective aspect refers to a person's awareness of the danger and its potential counteraction. As the same time, it is important for adults, in particular teachers, to understand key prerequisites of safety.

In order to avoid the effects of danger, a child of 11-15 years of age, first of all, needs to know which adult to turn to in case of danger, to do it and to know how to do it. Instead, from 10-15% of 5-7th grade pupils to 20-23% of 8-9th grade pupils do not have teachers they trust.

This fact is generally confirmed by the survey results U-Report that states that for various reasons, pupils have been hesitant to talk about bullying with teachers, preferring to deal with bullying cases alone or with the help of friends or family (UNICEF, 2019).

In order for the school to become a safe place for the child, teachers should be aware that a key prerequisite for the child's safety is the pupils' trust in the teachers, and be prepared to have a trusting relationship especially with the teenagers.

For these matters, the authors of the article, considering the long experience of teaching and scientific-pedagogical work, recommend:

- develop programs for interactive lessons with teachers about establishing trusting relationships with pupils on the basis of mutual understanding, joint activity, implementation of the principle of child participation in decision-making and society;
- organize regular training of teachers and social pedagogue concerning child protection and mechanisms for responding to risky or threatening

situations, as well as the specificities of providing assistance to a child when needed;

- develop scenario plans for classes with pupils of different ages to develop skills to avoid potential risks and dangers;
- during professional education of students (future teachers), focus their attention on ability to get involved in modern and interesting for children projects which also treated as socially significant ones;
- develop Code of Safe Educational Environment jointly with children;
- define clear indicators to monitor a child's safety at school, etc.

In addition, we support the suggestion of V. Primakova and L. Morska for wider use in schools of the Preventive Program for teenagers “Personal Dignity. Safety of Life. Civic Position” and methodological resources for its implementation (Osobysta hidnist. Bezpeka Zhyttia. Hromadianska Pozytsia, 2012). However, we again emphasize that only teachers whom pupils trust can successfully “learn how to avoid conflicts, creatively solve problems and find a way out of difficult life situations” (Primakova & Morska, 2019, p. 70).

It should be noted that for more in-depth analysis of this problem, the generally recognized methods of studying the various components of the educational environment should be used, in particular, space-subject filling, security and comfort of stay of participants of pedagogical interaction, styles of relations between teachers and pupils. Additionally, the process of learning is useful, for example, study of qualities of a person who is characterized by social behaviour, vital values, motives for participating in social activities, etc.

Summary

The article reveals the essence of child safety (objective and subjective factors) and the components of safe behaviour (hazard prediction, prevention of danger, overcoming danger, creating a safety regime). Outline indicators are outlined that can be used to monitor the safety of the environment and pupils' sense of safety. Based on analysis of other researches, a survey of adolescents and teachers, it is determined that trust in teachers is a prerequisite for child safety, a key factor in ensuring the safety of a teenager at school. Correlation links between respondents' answers show that if there are people in the school who are trusted by the children, then there is a high likelihood of it: there is no abuse and humiliation among pupils, but a favourable emotional atmosphere prevails; pupils jointly solve problems that arise and participate in charitable projects or promotions; there are no physical punishments and humiliation of pupils by teachers, instead the partnership of adults and children is practiced. According to results of the research, conclusions and recommendations concerning tools, ways of establishing trusting relationships between pupils and teachers at school, forming of the social behaviour of adolescents were formulated.

References

- Balakirieva, O., Bondar, T., Danylenko, H., Levin, Ya., Nhuien, N.-M., Pavlova, D., ... Shevchenko, S. (2019). *Sotsialna obumovlenist ta pokaznyky zdorovia pidlitkiv ta molodi: za rezultatamy sotsiolohichnoho doslidzhennia v mezhakh mizhnarodnoho proektu "Zdorovia ta povedinkovi oriientsatsii uchnivskoi molodi"* [Social conditionality and health indicators of adolescents and youth: According to a sociological survey within the international project "Health and behavioral orientations of student youth"]. Kyiv: Polihrafichnyi tsentr "Foliant".
- Bosworth, K., Ford, L., & Hernandez, D. (2011). School climate factors contributing to student and faculty perceptions of safety in select Arizona schools. *Journal of School Health, 81*(4), 194-201.
- Bradshaw, C., Waasdorp, T., Debnam, K., & Lindstrom, J. (2014). Measuring school climate in high schools: A focus on safety, engagement, and the environment. *Journal of School Health, 84*(9), 593-604.
- Fedorchenko, T. (Ed.). (2019). *Tekhnologii formuvannia prosotsialnoi povedinky pidlitkiv urazlyvykh katehori u zakladakh zahalnoi serednoi osvity* [Technologies for shaping the prosocial behavior of vulnerable adolescents in general secondary education]. Kropyvnytskyi: Imeks-LTD.
- Hlobalne opytuvannia pro bulinh (znushchannia u shkolakh)* [Global survey about bullying (bullying in schools)]. (2016-2017). Retrieved from <https://ukraine.ureport.in./v2/opinion/566>
- Kyrychenko, V., Yezhova, O., Necherda, V., Tarasova, T., & Homych, O. (2016). *Formuvannia prosotsialnoi povedinky uchniv v umovakh preventyvnogo vykhovnoho seredovyshcha zahalnoosvitnoho navchalnoho zakladu* [Formation of prosocial behavior of students in the conditions of the preventive educational environment of a general educational institution]. Ternopil: TzOV "Terno-hraf".
- Naker, D. (2019). Preventing violence against children at schools in resource-poor environments: Operational culture as an overarching entry point. *Aggression and Violent Behavior, 47*, 268-273.
- Noibronner, D. (2018). *Ponimat detei. Putevoditel po teorii Gordona Niufelda* [Understand the children. Gordon Newfeld theory guide]. Moscow: Izdatelstvo resurs.
- Nyufeld, G., & Mate, G. (2018). *Ne upuskajte svoih detei* [Do not miss your children]. Moscow: Izdatelstvo resurs.
- Osobysta hidnist. Bezpeka zhyttia. Hromadianska pozytsia. (2012). Prohrama vychovnoi roboty z uchniamy z pytan protydii torhivli liudmy; I.D. Zvierieva, Zh.V. Petrochko (Eds.), Kyiv: TOV "Osnova".
- Primakova, V., & Morska, L. (2019). Educating Students in a Safe Educational Environment in Secondary Schools of Ukraine: Current Issues and Challenges. *Pedagogical Contexts, 1*(12), 63-71.
- Shkilnyi bullinh: UNICEF nadav novi dani U-Report pro kiberbulinh i bulinh v osvitnomu seredovyshchi* [School bullying: UNICEF provides new U-Report data on cyberbullying and bullying in education]. (2019). Retrieved from <http://knowledge.org.ua/uk/shkilnij-bullinh-junisef-nadav-novi-dani-u-report-pro-kiberbulinh-i-bulinh-v-osvitnomu-seredovishhi/>
- White, J. (2019). *Addressing school violence and bullying: Evidence briefing*. Edinburgh: NHS Health Scotland.

- Yezhova, O., Kyrychenko, V., Tarasova, T., Fedorchenko, T., Muromets, V., & Necherda, B. (2014). *Formuvannia preventyvnogo vykhovnoho seredovyshcha zahalnoosvitnoho navchalnoho zakladu [Formation of preventive educational environment of a comprehensive educational institution]*. Kirovohrad: Imeks LTD.
- Zakon Ukrainy "Pro osvitu" [The Law of Ukraine "On Education"]* (No.2145-VIII, September 05). (2017). Retrieved from <https://zakon.rada.gov.ua/laws/show/2145-19>
- Zakon Ukrainy "Pro vnesennia zmin do deiakyykh zakonodavchykh aktiv Ukrainy shchodo protydii bulinhu (tskuvanniu)" [The Law of Ukraine "On Amendments to Some Legislative Acts of Ukraine on Countering Bullying"]* (No.2657-VIII, December 18). (2018). Retrieved from <https://zakon.rada.gov.ua/laws/show/2657-19>
- Zauvazhennia zahalnoho poriadku № 20 pro realizatsiiu prav dytyny v pidlitkovomu vitsi [General Comment No. 20 on the Rights of the Child in Adolescence]*. (2016). Retrieved from <https://www.msp.gov.ua/timeline/Konvenciya-OON-z-prav-ditini.html>

REFLECTIVE ABILITIES OF STUDENTS: WAYS AND MEANS OF DEVELOPMENT WHILE STUDYING GEOMETRY

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Abstract. *A reflective ability as an ability to comprehend one's experience, knowledge, evaluations is a psychological condition of thinking activity. But in researches, reflection is mainly considered as an indicator of a high level of thinking, creativity, the ability to analyze, types of reflection are not distinguished. For teaching mathematics, the development of intellectual reflection is especially important. In our study, the problem of the development of intellectual reflection is identified as an independent one. As a means of its development, we proposed geometric "many-valued" problems in which a situation of choice is organized. Three levels of development of reflective abilities in teaching geometry, in accordance with certain types of reflection are distinguished. The purpose of the study is to find out whether the level of development of students' reflection will change if "many-valued" problems are used in geometry. Is there a correlation of the manifestation of reflection on the geometric content and the content of another object? The experiment involved 375 students. The Pearson criterion was used in processing the results. The inclusion of "many-valued" problems in teaching geometry showed an increase in the level of formation of reflective skills of students and the transfer of these skills to another subject.*

Keywords: *levels of development of reflective abilities, "many-valued" problems, reflective abilities, students in grades 7-9, teaching geometry, a situation of choice.*

Introduction

Awareness of the methods and means by which the student's educational activities are carried out, the ability to adequately assess their achievements and capabilities, to draw conclusions about their own improvement is the key to the successful development and training of students in both mathematics and other subjects. Reflection is one of the mechanisms that provides the conditions for achieving these goals. Development of intellectual type of student reflexing (ability to analysis of mental activity) is the key for successful development and

learning math. But the ability to realize reflective control does not develop without purposeful training (Vygotskij, 2006) The mechanism of inclusion of such analysis in the cognitive processes is the situation of choice, it promotes to take more effective control of the behavior and thinking (Glasser, 1989). Therefore, as an instrument for developing students' reflective abilities while studying mathematics, we proposed geometric problems (we called them "many-valued" problems) in which the multi meaning of each problem component (each component has more than one meaning) creates a situation of choice: the methods of solution; the selection of a specific set of conditions, each of them leads to its specific answer, including the non-existence of the given figure. We worked out sets of problems and the requirements for working with them. We distinguished three levels of development of reflective ability in teaching geometry, in accordance with certain types of reflection: extensive, intensive, constructive. The research questions are:

- Will the level of development of students' reflective abilities be changed if "many-valued" problems are used in studying geometry in accordance with certain requirements?
- Will the transfer on other school subjects be carried out (i.e. is there a correlation of the demonstration of reflexive abilities on geometric material and on the material of another subject)?

The study involved 147 students in control classes and 228 – in experimental. Unlike the control classes the students in the experimental classes solved the "many-valued" problems within the studied topic at the lessons of geometry (twice a week). The findings indicate that the effectiveness of the formation of levels 2 and 3 of reflection of students' reflexive ability in the experimental classes is statistically significantly higher than in the control ones ($\chi^2 = 47.45$, $df = 1$, $\rho < 0.01$). Level detection of development of reflexive ability among students of experimental classes on geographical material showed a high degree of correlation. The number of students with the same level of reflective abilities differed by 1-2% while working with geographical and with mathematical material. "Many-valued" problems include tasks the solution of which involves operating the object mental image without a visual basis (all actions with the object are performed mentally).

Literature review

Due to the importance and role of reflection in cognitive activity, many researchers have studied this concept. Even D. Locke (Locke, 1960) considered reflection as a mechanism by which a person explores his cognitive activity. In his work, reflection is described as observation of mental activity, as well as ways of its manifestation are presented. A.P. Ogurtsov (Ogurcov, 2011) understands

reflection as “thinking about thinking,” as thinking that has made itself an object of knowledge. I.S. Ladenko defines reflection as “a critical awareness of one’s own capabilities and the capabilities of other and those or other means of intelligent systems” (Ladenko, 1989, p.35) as a guarantor of positive interpersonal contacts, ensuring mutual understanding and coordination of people’s actions in conditions of joint activity. Thus, in the context of philosophical problems, reflection is interpreted as the ability of the mind and thinking to turn on itself; analysis of knowledge in order to obtain new knowledge; self-observation of the state of mind and soul. Yu.N. Stepanov, V.K. Zareckij, I.N. Semenov (Semenov, Zareckij & Stepanov, 1979) define reflection as a psychological mechanism. They consider the reflective component in the structure of thinking, taking into account the inclusion of the personal aspect in it. Reflection is connected with the spiritual world of a person, his ability to comprehend and rethink his experience, knowledge, assessments, is not only a general psychological condition for the course of any mental activity, but also acts as a central point (along with intuition) of the creative process (Semenov, 1990).

Among research in the field of education, the main problem is finding ways, means of developing reflective abilities. So, in a study (Strakova & Cimermanova, 2018), ways of developing reflection of future teachers are considered. As a tool, a technologically supported environment is proposed. It is defined in the educational context as a workspace with new opportunities for acquiring learning experience. The role of computer technology in the development of students' reflective abilities is studied in the research (Zehavi & Mann, 2005). In it the functions of reflective thinking are considered: in the choice of methods, monitoring of the decision process, understanding and conceptualization, in the creation of instrumental methods for solving problems in analytical geometry with CAS - Computer Algebra System. In the study (King, 2002), the formation of reflection in the learning process is based on familiarizing students with the features of reflection, using the model of stages of reflection and further evaluating students' reflexive writing for quality. The study (Porter, 1998) is aimed at solving the problem of developing critical reflective thinking based on problem-based learning in a model of joint (group) research. “Collaborative learning is a powerful and attractive strategy worthy of thoughtful application by all high school teachers”. (p. 38) The development of reflective thinking through collaboration and philosophy is also proposed in the study (Chesters, 2012). The Socratic class presents a theoretical and practical study of how philosophy can be accepted in education. He implements three different approaches that make a significant contribution to classroom practice: the Matthew Lipman Investigation Community, Leonard Nelson’s Socratic Dialogue, and David Bohm’s Dialogue and reflects Socratic pedagogy, which relies on the “generative, evaluative, and connecting thinking” that is inherent in reflective thinking.

As for the development of student's reflective abilities different researchers suggest different ways to achieve the task. It may be a specific approach to the organization of training, a model or technology of training. For example, the study (Porter, 1998), is aimed at solving the problem of developing critical reflective thinking based on problem-based learning in a model of joint (group) research. "Co-education is a powerful and attractive strategy worthy of thoughtful application by all high school teachers" (Porter, 1998, p.38). In the study (Shikhova, 2005) the basis for constructing the educational process is a problematic approach to learning in a primary school, and the techniques, methods and forms of organizing educational activities are aimed at solving the problem of self-development in the study of chemistry. It can also be certain sets of tasks, but with the organization of a dialogue between students and a teacher or between students themselves. In the study (Shatova, 2004) solving logical problems within the framework of a dialogue is proposed as a means of developing the reflexive activity of students in grades 5-6. Kotenko identified a certain type of tasks - reflective, i.e. problems "activating the process of reflection various components of educational activity by students" (Kotenko, 2000, p.15). The author considers these tasks as aimed at improving the learning ability of schoolchildren in computer science lessons. In our opinion, these are not tasks in the generally accepted sense, but tasks focused on the assimilation of theoretical material, work with concepts and types of tasks. In the study of geometry, some researchers (Patronis, 1990) offer work with models as a means of developing reflective thinking. In other studies, for example, (Ulmer, 2015), on the contrary, situations requiring reflective thinking are used to transfer of reasoning ability from subject matter fields to more general fields, and also to improve the quality thinking by making use of the opportunity offered in geometry to study principles of reflective thinking. Many applications of reflective thinking (Ulmer, 2015, p.13) were considered in both geometric and non-geometric situations.

But in these works, the problem of the development of reflection is mainly considered as an indicator of a high level of theoretical thinking, creative thinking, conscious skills, characterized primarily by the ability to analyze. In these works, the question is not raised, what is the difference between reflection and analysis, there is no tool for evaluating the reflection level, the level of mastery of knowledge or skills is most often checked. Also, the variety of manifestations of reflection, the features of its deployment as an integral act, are not taken into account. This means that the problem of the development of reflection is not identified as independent, requiring special study, although most psychologists consider it as an independent task. All of the above determines the relevance and novelty of the research problem, which consists in the search for means of developing intellectual reflection as an integral act in teaching geometry to students in grades 7-9 and identifying levels of proficiency in it.

It is important to understand that the possession of reflection should not be manifested only on geometric material, it should be a universal skill that does not depend on the content in question. The possibility of such a transfer was shown back in a study (Cook, 1943): after teachers were developing students' logical reasoning through geometry during a year the students could use that same type of thinking in situations outside of geometry.

We also have developed definite means for developing reflective abilities while teaching geometry, so it is necessary to seek evidence that students will manifest these abilities outside of geometry.

Methodology

The analysis of the literature showed that reflection begins to form in primary school age (Davydov, 1986). But adolescence is characterized by active self-consciousness (Bizyaeva, 2004.). Therefore, it is advisable to develop reflection in students in grades 7-9. Psychologists distinguish such types of reflection as intellectual (associated with the subject's ability to reflect on knowledge, the subject and ways of acting with it) and personality (associated with the subject's investigation of himself, his own personality as a person). (Semenov, 1990). When teaching geometry, conditions are created for the development of intellectual reflection, on the one hand, and on the other, its development is necessary, for the ability to solve geometric problems.

Intelligent reflection manifests itself in such forms as:

- 1) extensive reflection (associated with the control and planning of transformations of the content or operations that are obvious to the subject, with the fixation of the performed action and the relationship to subsequent actions);
- 2) intense thinking (the subject discovers ambiguities in the contents of the assignment, errors in operations and eliminates them thanks to an understanding of the problem);
- 3) constructive reflection (organizes the integrity of the stream of thought processes, it is necessary to determine the correct solution to the problem). These types of reflection are in a certain hierarchy, constructive is considered as the highest type (Zaretsky, Semenov, & Stepanov, 1979). In order to develop reflection and to trace its formation in the learning process, we have developed criteria for the development of reflection in geometry training, taking into account the hierarchy of types of intellectual reflection.

The student can solve the problem in one or two steps in accordance with the model and substantiate his decision. He understands what he knows and what he does not know. This is characteristic of manifestations of extensive reflection,

which, in accordance with the hierarchy of types of intellectual reflection, characterizes the lower level of its development. Therefore, we have defined this level as the first level of development of intellectual reflection in teaching geometry.

The student can solve the problem in several stages and justify the solution, in case of difficulty determines the boundaries of his knowledge, but when solving a multi-stage task, he can plan a part of the solution and only after its implementation, continue the decision. This is characteristic of intense reflection. Therefore, we have defined this level as the second level of development of intellectual reflection.

The student is able to formulate a plan for solving the entire problem, justify, offer the final result. This allows him to determine all stages of the solution. This is characteristic of manifestations of constructive reflection. Therefore, we have defined this level as the third level of development of intellectual reflection.

The development of students' reflection with the help of geometry is possible only if there is knowledge of the basic geometric facts necessary for solving problems. Therefore, we determined the basic (zero) level of development of reflection in teaching geometry (a student can solve the problem in one or two stages according to the algorithm, but cannot explain the reason for the difficulties, determine the boundaries of his knowledge).

In contrast to analysis, reflection occurs simultaneously with mental activity, and not delayed and represents a holistic act. Four stages of the formation of reflection in educational activity as a holistic act were singled out by us on the basis of a consideration of the characteristics of the flow of reflective processes in learning, identified by V. Bogin, A.V. Khutorsky and others.

1. The stage of a complete stoppage of activity. Activities that are being completed or terminated. If during the solution of a problem there is a difficulty, doubt in the way of solution, then the solution is suspended.
2. The stage of stopping activity. The student understands that the subject activity is stopped, and tries to find out the reasons for the situation.
3. The stage of objectification. The student turns to restoring and studying the sequence of actions performed.
4. The stage of generalization of the content. Identification of the results of reflective activity, which may be:
 - a) ideas, answers to questions, etc .;
 - b) the methods that were used in the course of the activity;
 - c) hypotheses in relation to future activities.

The completion of the student's reflexive activity is the testing of hypotheses in practice in subsequent substantive activity.

The mechanism of inclusion in cognitive processes of reflection is the situation of choice (Glasser, 1998). Therefore, as a means of developing reflection

in teaching geometry, we chose problems that are aimed at developing a multi-valued vision that requires a choice. We called such problems (tasks) “ambiguity problems (tasks)”. The ambiguity of each structural component of the problem allows you to create a situation of choice: a solution; justification; highlighting a specific set of conditions, each of which leads to its own specific answer, including the non-existence of a given object. Moreover, the ambiguity of the condition can be expressed explicitly and implicitly. In accordance with the structural components, task types were identified.

We give examples of «many-valued» problems.

Example 1. Type: problems related to the ambiguity of the answer. The condition for such problems contains an explicit situation of choice. The task proposes solutions made by someone, it is necessary to explain how they were received. This makes the decider try to understand the mental activity of another. Problems of this type characterize the development of the first level of reflection, since their solution consists of one or two steps and is associated with objective actions that are obvious to the student. Such activity is based on extensive reflection and initiates the development of intense reflection.

Problem 1. Students, having studied the drawings, came to the conclusion that trapezoids are depicted in fig. 1a), 1c), 1d). Do you agree with them? Explain why they drew such conclusions.

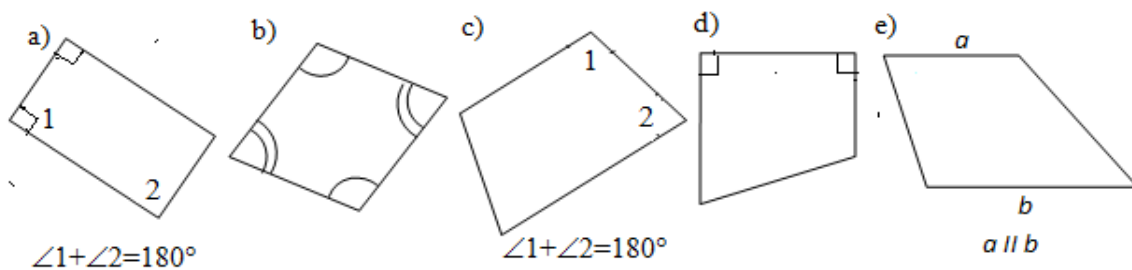


Figure 1 Images of quadrangles

Example 2. Type: problems in which the ambiguity of the condition is explicitly indicated. Such problems are mainly intended for the development of the third level of reflection, since they are aimed at planning a strategy for solving the problem as a whole, at predicting those features of the solution that will appear (or may appear depending on the introduction of certain additional data into the problem text). Work on such problems contributes to the development of constructive reflection.

Problem 2. In the isosceles trapezoid bases 14 and 8. Enter additional data so that you can find the side of the trapezoid.

Adding, for example, data such as “the bisector of the angle divides the side

opposite the vertex of the angle in the ratio of 3: 5”, leads to 6 situations, but some of the trapezoids do not exist.

Example 3. Type: problems “on the mental creation of the image.”

Problems of this type are problems whose solution involves operating with an image of an object in the absence of a visual basis (all actions with the object are performed mentally) (Podkhodova, 2019). The answer can be presented in a drawing or orally described. The problems “on creating an image” include the translation of a word into an image, and the image is always subjective and ambiguous, which is explained by the unique experience of each person. The ambiguity of students' understanding of the text implies ambiguity in the state, methods of solution and justification. The ambiguity of the requirements is objectively embedded in the text of such problems. This polysemy creates situations of choice for students and requires an understanding of the basics of their actions, constant self-control over their own perception of the text and mental operations.

Problem 3. Imagine a rhombus before you. One side of it is horizontal. Mentally draw its diagonal from the left upper vertex to the right lower vertex. Bend your rhombus on this diagonal so that the upper right angle was put on the left lower one. Then find the middle point of the bend line. After that draw the segment from this point perpendicular to the horizontal line. Cut along this segment and put away the right part. Unfold the left part (your rhombus was folded) and draw the obtained figure. If solving of the problem is difficult for pupils they can do it practically

The problems “on creating an image” can be proposed when studying any topic in geometry, at any stage of the lesson with various goals. At the beginning of the lesson - for motivation; to consolidate the theoretical material; to verify the formed ideas about geometric figures and their essential properties at the level of images (suitable for right hemispheres students); contribute to the formation of a competent mathematical language. Their compilation by students contributes to the development of creative abilities, the ability to describe spatial relationships. We have developed eight requirements for the selection and design of tasks for the development and diagnosis of the level of development of students' reflection. One of the requirements for the problems corresponding to the second and third levels of reflection development is the use of preparatory tasks aimed not only at updating the knowledge necessary to solve the problem, but also at turning students to their mental activity when searching for a solution. The condition and requirement of problems aimed at the development of the third level, involves the study. The use of “many-valued” problems in the process of teaching geometry requires the organization of work with them, “the teacher must not only set the task, but also organize work to solve it” (I.S. Yakimanskaya, 2008). For the development of reflection among students as an integral act, we developed end-

to-end (effective when working with the “ambiguity” task of all types) and specific (effective for working with specific types of “many-valued” problems “) methods.

Research results

Formative experiment lasted for a year. The performance in the control and experimental classes at the beginning of the experiment was approximately the same. Students in experimental classes solved the “many-valued” problems within the studied topic at the lessons of geometry (twice a week). The students in the control classes study geometry according to a traditional program.

Table 1 shows the distribution of students by levels of development of reflection before and after the formative experiment.

Table 1 Level of reflection development in teaching geometry

Level of reflection development	The number of students in experimental classes (%)		The number of students in control classes (%)	
	before	after	before	after
Basic level	22%	0%	26%	23%
First level	53%	32%	46%	47%
Second level	23%	58%	25%	24%
Third level	2%	10%	3%	6%

From the data given in the table 1, a positive shift is visible in the dynamics of the development of reflection of students in experimental classes. Moreover, positive changes in the development of reflection occurred in all students, with the exception of 2% of schoolchildren. 75% had an increase in the level of development of reflection by one level. 23% of students showed higher results in knowledge compared to traditional ones for themselves, although progress in the development of reflection in accordance with the selected criteria did not completely go one level. In the control classes, the level of development of reflection in students practically did not change.

Students of the experimental classes were also offered a diagnostic work on geography, compiled taking into account the levels of development of reflection. According to its results, it can be concluded that the transfer of students' ability to reflection when studying mathematics to another field of knowledge occurred (table 2).

Table 2 Level of reflection development in teaching geometry and geography after the formative experiment

Level of reflection development	The number of students in experimental classes (%) Geometry	The number of students in experimental classes (%) Geography
No basic level	-	2%
Basic level	-	6%
First level	33%	36%
Second level	58%	50%
Third level	9%	6%

The results obtained in the experimental and control classes were processed and compared before and after the completion of the formative experiment using the χ^2 – Pearson criterion according to formula (1).

$$\sum \frac{n_i - n'_i}{2n'_i} \quad (1)$$

where n_i - the empirical frequencies obtained from the sample,
 n'_i - the theoretical frequencies found theoretically.

The application of this criterion was possible, because:

- 1) both samples are random;
- 2) the samples are independent, and the members of each sample are independent among themselves;
- 3) as a scale for measuring the level of development of reflection, a scale of names with four categories was selected;
- 4) more than 100 participants in the experiment.

Conclusions

As a result of the study, the effectiveness of the developed methodology for the development of students' reflective abilities in grades 7-9 was confirmed in teaching geometry. "Many-valued" problems generated interest among students.

In the process of theoretical and experimental research, which consists in finding means of developing reflection in teaching geometry to students in grades 7 - 9, and in accordance with the purpose and objectives of the study, the following main results were obtained.

Based on the analysis of psychological and pedagogical literature:

1. The stages of the formation of reflection (in accordance with the structure of reflection as an integral act) in educational activities are characterized.

2. Criteria for the development of reflection and, based on them, the levels of development of reflection, depending on the manifestations of various types of intellectual reflection (extensive, intense, constructive) in teaching geometry, are highlighted.

Based on these theoretical generalizations were:

1. Developed requirements for the selection and design of “many-valued” problems that contribute to the development of reflective abilities of students;
2. The types of “many-valued” problems, which contribute to the development of students’ reflective abilities are highlighted.
3. A system of “many-valued” problems was developed, which contributes to the development of reflective abilities of students in grades 7–9 in teaching geometry.
4. A methodology has been developed for working with the task system, aimed at developing reflection of students in grades 7–9 in teaching geometry, including through and specific techniques for working with “many-valued” problems.
5. It is proved that students who manifest reflective abilities when working with geometric material also show them when working on other subjects.

References

- Bizyaeva, A.A. (2004). *Psychology of a thinking teacher: pedagogical reflection*. PSPI named after S.M. Kirov. Pskov. Retrieved from <https://dogmon.org/a-a-bizyaeva-psihologiya-dumayushogo-uchitelya-pedagogicheskay.html>
- Chesters, S.D. (2012). *The Socratic classroom: reflective thinking through collaborative inquiry*. Sense Publishers. Rotterdam; Boston.
- Cook, I. (February, 1943). Developing Reflective Thinking Through Geometry. *The Mathematics Teacher*, 36(2), 79-82.
- Cukerman, G.A. (2010). *Razvitie uchebnoj samostojatel'nosti*. M.OIRO.
- Davydov, V.V. (1986). *Problems of developing education*. M.
- Glasser, W. (1998). *Choice theory: A new psychology of personal freedom*. New York: Harper Collins.
- Il'jasova, A.B. (1997). *Razvitie myslitel'nyh dejstvij uchashhihsja pri formirovanii ponjatij na urokah matematiki v mladshih klassah shkoly: dis. ... kand. ped. nauk*. M.
- King, T. (2002). Development of Student Skills in Reflective Writing Article. Retrieved from https://www.researchgate.net/publication/251656887_Development_of_Student_Skills_in_Reflective_Writing/citation/download
- Kotenko, V.V. (2000). *Refleksivnaja zadacha kak sredstvo povyshenija obuchaemost ishkol'nikov v processe izuchenija bazovogo kursa informatiki: avtoreferat dis. ... kandidata pedagogicheskikh nauk*. Omsk.

- Lavy, I. (2015). Problem-Posing Activities in a Dynamic Geometry Environment: When and How. In: Singer F., F. Ellerton N., Cai J. (Eds.), *Mathematical Problem Posing. Research in Mathematics*
- Locke, D. (1960). Experience about the human mind. *Selected philosophical works: in 2 volumes* M., V. 1.
- Ogurcov, A. P. (2011). *Filosofiya nauki. Dvadcatyjvek. Konceptii i problemy*. V 3 knigah. Izdatel'stvo: Mir.
- Porter, L.K. (1998). Critical reflective thinking in Euclidean geometry for grade nine mathematics students. *Master thesis, Memorial University of Newfoundland*, 139-149
- Patronis, T. (1990). Using geometrical models in a process of reflective thinking in learning and teaching mathematics. *Educational Studies in Mathematics*, 21(1), 29–54.
- Podkhodova, N.S. (2019). *Methods of teaching mathematics: in 2 Parts / under the editorship of N.S. Podkhodovoy and V.I. Snegurova*. M: Yurayt Publisher House.
- Refleksija v nauke i obuchenii: Sbornik nauchnyh trudov*. (1989). Pod red. I. S. Ladenko. Novosibirsk: IIF-FSO
- Rubinshtejn, S.L. (1989). *Osnovy obshhej psihologii*. V 2 t. M.: Pedagogika, T.1.
- Russo, Zh-Zh. (1981). *Pedagogicheskij sochinenija: V 2-h t.* T1/ Pod red. G.N. Dzhibladze - M.: Pedagogika.
- Semenov, I.N., Zareckij, V.K., & Stepanov, S.Ju. (1979). Produktivnost' refleksii pri diskursivnom reshenii zadach, *Novye issledovaniya v psihologii*, 2, 7-12
- Semenov, I.N. (1990). Ot gumanitarnej refleksologii k tehnologicheskoj refleksike: tipologija refleksii i struktura refleksivnosti v organizacii tvorcestva. *Refleksivnye process i tvorcestvo*, 20-22.
- Shatova, N.D. (2004). *Logicheskie zadachi kak sredstvo razvitija refleksivnoj dejatel'nosti uchashhihsja 5 - 6 klassov pri obuchenii matematike*. Avtoref. Dis. nasoisk. uchen. step. k.p.n. spec. Omsk.
- Shihova, L. N. (2005). *Razvitie refleksivnyh umenij uchashhihsja v processe izuchenija himii v sovremennoj shkole*. Avtoref. Dis. nasoisk. uchen. step. k.p.n. spec. Sankt-Peterburg.
- Strakova, Z., & Cimermanova, I. (2018). Developing reflective skills of student teachers in the virtual learning environment *Electronic Journal of e-Learning*, 16(2), 107-121. Retrieved from <https://www.researchgate.net/publication/330192985>
- Ulmer, G. (2015). Teaching Geometry to Cultivate Reflective Thinking. An Experimental Study with 1239 *High School Pupils*, 18-25. DOI: <https://doi.org/10.1080/00220973.1939.11010143>
- Tonkykh, G.D. (2010). Rol' refleksii v processe obuchenija matematike v srednej shkole. *Ucheny ezapiski. ZabGU s*, 105-111.
- Vygotskij, L.S. (2006). *Psihologiya razvitiya rebenka*. EKSMO.
- Zehavi, N., & Mann, G. (2005). Instrumented Techniques and Reflective Thinking in Analytic Geometry. *The Mathematics Enthusiast*, 2(2).
- Yakimanskaya, I.S. (2008). *Pedagogicheskaya psihologiya (osnovnyeproblemy)*. Moskva: MPSI.

INVESTIGATING TEACHER LEADERSHIP: FRACTIONS OF TEACHER LIFEWORLD EXPERIENCE

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Abstract. *The phenomenon of teacher leadership has been investigated over the past few decades. The purpose of the current paper is to explore the phenomenon of teacher leadership through investigation of lifeworld experience of Lithuanian in-service teachers in terms of eight lifeworld experience fractions: selfhood, sociality, embodiment, temporality, spatiality, project, discourse and moodedness. The focus group interview method was applied in order to explore the opinions and experiences of teachers. In total, 5 focus group interviews with 12 teachers were conducted. The research results indicate that the fractions of selfhood, moodedness and sociality are the most salient for Lithuanian teachers. The interpersonal nature of teacher leadership, the need of social persuasion and capability to sustain a successful interaction with students are discussed.*

Keywords: *teacher leadership, fractions, teacher lifeworld experience.*

Introduction

The current research is built on the assumption of the American educator Maddie Fennell: “*From the minute they step foot inside their classrooms, all teachers act as leaders*” (ASCD report, 2015, p. 7), and focused on the issue of teacher’s “bottom-up” leadership, mainly on the question of being a teacher leader at school.

There are three main issues, defined by the research on teachers’ leadership: first, teachers’ leadership is often equalized with formal administrative leadership (Williams, 2015). In practice such an attitude mean that teachers view themselves as leaders only if they are formally involved in administrative work. At the same time, teachers’ leadership is being opposed to principal’s (or administration’s) leadership and defined in terms of vertical versus shared leadership (Pearce & Sims, 2000). And this contradiction may be called as the concept of “top-down” and “bottom-up” leadership.

Secondly, it is standardized and recognized in terms of set of skills and competencies, regardless of the school’s context. For instance, the Teacher Leader Competency Framework (2015) refers to teachers’ leadership as to driving force that leads to students’ learning improvement and increasing teaching

effectiveness through coaching others, driving initiatives, self-improvement and leading teams. Gill (2006) had called such approach as “how to do leadership” and “emphasized that this does not do justice to the complexity of the phenomenon of leadership or the variety of leadership contexts, neither does it provide tools for supporting reflection on leadership practice which is where active knowledge-creation about leadership is generated” (p.11). In other words, teachers themselves clearly generate the most “organic” and “authentic” knowledge of what constitutes their leadership, in contexts of their countries and schools. According to teachers’ educator Robyn Jackson (ASCD report, 2015), when leadership becomes a professional standard, and teachers cannot get to the highest levels of promotion unless they will exercise some kind of leadership behavior, then leadership is no more a choice, but the requirement and standard of performativity, which mitigate teachers’ desire to be leaders and give them little control over their activities: “We standardize it ... suck the life out of it” (p. 15).

Hence, the third tension derives from the nature of teachers’ leadership knowledge. In contrary to standardized and explicit knowledge of becoming a leader, the tacit knowledge is difficult to capture, and it remains poorly investigated (Janson & McQueen, 2007). If we refer to a teacher’s leadership as a complex relationship-based process, then knowledge about this process remains silent, as it derives from everyday actions, experiences and reflections. From one hand, teachers learn how to lead others from their practice, through action, successfully solving practical problems; from another hand, teacher may learn from their followers in everyday situations, responding to different issues and solving various problems. And the problem is that this accumulated knowledge remains tacit and unrecognized by teachers. Therefore, the research questions of the present study are: How teachers recognize they are leaders for their pupils? What does it mean to be a leader for pupils? What does it mean to be a teacher that students are following?

Literature review

The shift in leadership paradigm. The significant attention was given to the idea of leadership within the last 30 years and several distinct approaches and leadership styles have been identified by the theorists (Pearce & Sims, 2000; Houghton & Yoho, 2005; Gill, 2006). According to the main typologies, leadership has been represented by four distinct perspectives: directive leadership, transactional, transformational and empowering. *Directed leadership* derives from the Theory X management stating that workers must be directed, controlled and threatened with punishment (Arslan & Staub, 2013). This approach to leadership employs the usage of power, close supervision and command. *Transactional leadership* makes an emphasis on the provision of personal or

material rewards to pursuit desirable behaviors (Houghton & Yoho, 2005). *Transformational leadership* may be contrasted to previous types due to its emphasis on relationships creation and communication between leaders and employees. *Empowering leadership* is focused mainly on enabling followers' self-management and self-influence, focusing on intrinsic rather than extrinsic rewards (Anderssen, Konradt, & Neck, 2012). Gill (2006) concludes, that leadership paradigms differ in terms of their focus, depending whether leadership is situated in the person, position or process. In case of *personhood*, the features and competencies of a leader and the leader-follower relationship are primary. In *positional* leadership, the main emphasis is on power, authority and hierarchy of the leader within organizational systems. In case leadership is seen as a *process*, the main focus is given to interactions and mutuality of relationships between leaders and followers (Gill, 2006).

Teacher leadership at school. According to Gill (2006), the educational theories on leadership build their understandings from the business theories. Thus, researcher states that directive and transformational leadership gained its popularity within educational organizations at the beginning of 21st century, when strong emphasis had been put on the role of school principals, who could communicate the schools shared vision and maintain the positive change at school.

The rapidly changes occurred within the context of school leadership in the past two decades, particularly reflected in a shift from domination of headship, focused on the individual endeavor of school principal and/or school administration towards the collective action of all school community for school improvement (Mujis & Harris, 2007). The leadership in education nowadays is seen in terms of collective cooperation of educational institution members. Within the literature, the concept of teachers leadership is defined in different ways, however, the most commonly it is defined as the process when teachers are enabled to influence their colleagues, principals or other members of school community in order to contribute to improvement of teaching and learning practices (Hunzicker, 2012), bringing the positive change and school improvement and enhancing learners' achievement and learning, implementing teaching and managerial responsibilities (Mujis & Harris, 2007).

Recent research on leadership suggest that learning leadership from the documents is impossible (Gill, 2006), and moreover, enabling leadership with "romanticized" features and imposing them to teachers trigger their resistance and opposition (Carroll & Nicholson, 2014). In addition, most research regard teacher leadership in terms of competency, skills and abilities. Leadership of teacher is seen as a desired, inherently good competence or requirement, "must have" for all teachers. However, current research views leadership of teachers as a latent process of constant acquisition and formation of tacit knowledge. As Rodd (2006)

claimed that the research on teacher leadership remains focused mostly on investigating what leaders do and what kind of attributes they possess; although, leadership is multifaceted and embedded into a reciprocal relationship. Indeed, the issue of what do teachers experience in the relationship with their followers (students, members of teacher community) remains poorly investigated.

The paradigm shift on the role of teachers in school improvement and student performativity enhancement, makes teachers' empowered leadership crucial for education of 21st century (Kimwary et al., 2014). Moreover, the school principal, being in superior position, is supposed to create an environment and opportunities for enactment of teachers' empowered leadership in terms of teachers' involvement into decision-making, recognition of their expertise, autonomy and trust. Empowered teachers influence their colleagues or the whole school community in order to improve the practices of teaching and learning (Hunzicker, 2012), which contributes to school improvement and enhances student achievement and learning (Mujis & Harris, 2007).

Methodology

The current research was focused on the investigation of teachers' lived experience of being a leader for pupils within the professional environment and the phenomenological lifeworld research approach was implemented. The main goal of lifeworld research is to discover, describe, analyze and clarify the essential meaning which is inherent to a certain phenomenon of research interest (Dahlberg, 2006; Dahlberg et al., 2008). And the research questions are *what does it mean to be a leader for pupils? What does it mean to be a teacher that students are following?*

Data collection procedure. The data collection procedure included a conduction of 5 interviews with the group of 12 teachers working at private Primary school. Qualitative semi-structured focus group interviews were applied. The interviews were aimed at revealing the experience of teachers' professional lifeworld in relation to teaching and pupils' learning in order to get teachers' insights about their leadership experience. The topics of interviews varied and were related to the concept of teacher leadership experiences. The first, opening interview, was aimed to familiarize the participants with the goals and tasks of the research. The second, third and fourth interviews were aimed to collect the information about how teachers experienced leadership in relation to concepts of authority, respect, dignity and professional development. The last, finalizing interview was aimed at getting a feedback from the respondents, to clarify certain issues and doubts concerning the research.

Research participants. In the phenomenological research, the potential respondents are required to have a certain kind of experience needed to produce

the knowledge. Therefore, the research participants were required to be employed as a teacher at the moments of participation in the research, to have a relevant teaching experience (at least one year of teaching experience) and not to hold any kind of formal administrative position at school. The 12 participants of the focus group were employees of the same private Primary school. Most respondents were female aged from 24 to 45, working as classroom teachers. There were two male respondents, aged 29 and 27. The participants were recruited applying convenient sampling strategy, as the school administration allowed to conduct the research with their employees. The research took place in the teachers' working place, at the time free from professional duties.

Data analysis. The records were transferred into computer and the copies of records were made in order to avoid the loss of data. Then, every interview was carefully transcribed verbatim. The transcribed texts were carefully analyzed. The process of analysis included a multiple reading of the text in order to explore and discover the places where the research question was highlighted the best. The next step included the extraction of the smallest meaningful units (subthemes), which were later joined into wider themes. In order to systematize the data and reveal the diversity of aspects and attributes of teacher leadership experience and enrich the descriptiveness of the study, the themes were analyzed in terms of eight lifeworld experience fractions: selfhood, sociality, embodiment, temporality, spatiality, project, discourse and moodedness (Ashworth, 2016).

Research results

Self-hood. The fraction of self-hood implies one's priorities, cares, concerns, understanding of own social identity, feeling of one's presence, autonomy and sense of agency (Ashworth, 2016). Teachers viewed their everyday leadership and linked their professional identity to certain personal features related to their individual endeavor into learners' success.

Being reliable

"Teacher, by no means a punisher, not an autocrat, but a man who still sets boundaries, children want to feel safe in this age. Good teacher is an authority - it may be because, for example, pupils feel safe with her because she has drawn boundaries." (T8)

Teachers believe that creation of positive and safe surrounding is a foundation of relationship with children and, thus, they highly prioritize setting of boundaries or rules of behavior and communication. These rules, according to respondents' views, create a positive surrounding for children and helps to come to mutual agreement.

Relying on erudition

Teachers perceive their expertise as one of the most important attributes of everyday teaching and authority. The recognition of learners serves as a positive assessment of teacher's effort.

There was a funny situation when pupils encountered something in the encyclopedia: "No, there's something unclear, let's ask the teacher - she'll definitely answer." They came to me, and I really heard it for the first time - and I still must hold on and admit that I will search to fully answer them. Because otherwise: "How is it? It is impossible for the teacher not to know!" (T3)

Keeping professional dignity

As a result, teachers view their dignity as a counterweight to unjust behavior of other members of school community. They demand an external respect in order to sustain own sense of dignity. This attribute is seen as an individual teacher's necessity in order to assure equal rights and sustain the reputation.

"Well, when I say I respect myself, I try to maintain my human dignity all the time, and if you are treated unfairly, take care of yourself. Just defend all your rights." (G1)

Sacrificing (Being a role model)

Teachers dedicate their personal free time striving to accomplish all necessary or urgent work during workday. They view this endeavor as a sacrifice and equalize the sacrifice to a great teacher work.

"We work hard every day and make a lot of sacrifices, even for our family account and health account. Every day we just try to work as well as we can." (T5)

The respondents viewed their professional identity inseparably from other members of school community. Their leadership may be seen in everyday work and endeavor into learners' growth and improvement. At the same time, teachers require respect and desire to be acknowledged, thus, seeking for a balance between their effort and reward.

Sociality. The fraction of sociality refers to relationship with others and attention payed to them, in other words it is about interpersonal relations. The question is how others are viewed within the experience and in which ways relationships may be affected (Ashworth, 2016).

Being trustworthy

The respondents viewed the trust as a key sign of their effort acknowledgement. The trust of individual child is perceived as a reward and a signal of interpersonal relationship establishment. Hence, teachers feel they exercise power and this power is deliberately given by their followers. And teacher's openness and care resulted her authority and students' emotional well-being and affection.

"From my own practice, I could say what it really means to me the respect of students. When the student comes in and asks, "Teacher, can I talk to you in person?" And then a learner starts talking about something from his or her personal life." (T7)

Adjusting to learner's pace (Balancing)

Teacher emphasized her willingness to find an individual approach to each student and create a suitable atmosphere, evoking learners' emotional attachment and loyalty. The contact between teacher and learners starts in the early morning and, thus, from the very beginning of the day teacher adjusts own desires and habits to learners' pace in order to maintain healthy interpersonal relationship.

"The smallest problems of all kinds are, for example: when you keep an eye contact, greeting children, pay attention to what is pleasant to them, or uncomfortable. Some children may hug you while others prefer to do not. In this way you respect their choice since the morning."

Acknowledging learner's contribution

Creation of possibility to demonstrate student's abilities and providing them with positive feedback stimulates learner's positive reaction and empowerment. Maintaining the equality in teacher-learner relationship enhances their emotional attachment and provides a common ground for mutual understanding.

"We maintain the equivalence when being together and learning from each other, showing that teachers are also doing mistakes. We consider children's opinions, observations and suggestions. And in general, we do a lot of things together." (T2)

Embodiment. The fraction of embodiment refers to one's feelings about one's body, disabilities or emotions (Ashworth, 2016). In terms of teaching, the respondents mostly referred to their experience of different emotions, mainly contacting with pupils' parents.

Experiencing positive and negative attitude (Balancing)

Teachers viewed their emotional state as balancing between positive and negative emotions dealing with stakeholders (learners' parents) within the working environment. Sometimes teachers experience negative emotions, as a result of conflicts with parents. After they may experience positive feelings or calmness as a result of parents' recognition and acknowledgement.

"Yes, we are balancing. Sometimes during the day, those [parents] attack you, you argue with them emotionally, but the next day you remain silent. And because there is that balance - sometimes you get frustrated, sometimes you get arise." (T6)

Temporality The fraction of temporality implies that all experiences are being lived within a certain time flow. It is about how time, duration and biography influence the experience (Ashworth, 2016). Teachers' experience of time is viewed through planning and coping with challenges that appear in times.

Reorienting plans

The professional activity of teachers can be viewed as strictly planned and scheduled. This temporality can be regarded as expected set of events. However, the respondents emphasized a spontaneity in their planned work. This spontaneity is caused by the interdependence of school actors and responsibility division which not always act in a prescribed and planned way. Hence, other members of

school community need to cope with unexpected situations and put additional effort.

“We plan both lessons and assignments, and we divide into weeks, and each teacher is responsible for a certain week. You're calm, but you don't get anything on Sunday, no plans, no tasks, you get nothing when you get to work, and then you must get out of the situation. Even if you do not have the materials, you still need to make lessons and accomplish your weekly goals.” (T3)

Planning and personal time

Another important issue, emphasized by the respondents, was the balance between personal and professional lives in terms of dimension of temporality. Teachers believed that well-planned personal life is the basic condition for accurate time division for accomplishment of professional needs and responsibilities. At the same time a well-established routine is regarded as one of the professional strengths.

“You just need to better plan your personal life to make everything in time. And lesson planning is important, because you need to know what topic to teach next. We teachers know what will happen in June, what day, what event, who will be there, who is responsible.” (T1)

Spatiality. The dimension of spatiality refers not only to certain geographical locations and spaces, but also to meanings allocated to those places and social norms embedded within them (Ashworth, 2016).

Accepting the prescribed norms

Teachers strongly connect their professional identity to the environment and context they work in. They accept the prescribed norms and embed them into own behavior, especially when dealing with learners and their parents. From one hand, it provides certain guidelines of conduct for representing their educational organization; however, from another hand, the artificial school rules to some extent, inhibit the possibility to express personal position, and thus, practice teacher leadership.

“...when we come in [to school], we open the door, leave our own opinions behind, and adopt the rules that are here, we adopt the rules of conduct that are here, and we must behave as required of us. Oh, not the way we would like or the way we think it is right. Because we are the face of this school.” (T9)

Project. Almost all things and occasions in the lifeworld refer to the fraction of project. Ashworth (2016) defines the project in terms individual's beliefs in own abilities to carry out the things they are committed to.

Acknowledging

The teaching is viewed by the respondents as a valuable mission which aspires for future positive changes. This understanding is inevitably linked to teachers' beliefs about their abilities to achieve the mission. And these beliefs are being persuaded by important others (in this case by family and friends). We may see that social persuasion to believe in one's mission and acknowledgement of

capabilities empowers teachers and promotes a positive self-perception of teaching profession.

“I’ve been getting a lot of positive comments. But [friends] are saying: "You are probably a good person when you have chosen [teaching]" or "You create! Your job is different than others because you add value. You develop personalities. And you're like changing that society and everything is in your hands.” (T11)

Predicting consequences (Being responsible)

Another important aspect relates to teachers’ commitment to inspire their learners and instill the conventional values which will help the child to behave in an appropriate way. Teachers are trying to predict the consequences of their work, although, they do not question whether they possess the capabilities to teach the right system of values to their learners.

“We are aware that pupil is not a paper, not a document, and every mistake can cost someone’s life. That responsibility and daily respect for the child, knowing that someday they will grow up... and I believe they will be different in society. We instill those values, those rules, so that when pupil’s doing the right thing, he[she] feels good.” (T12)

Discourse. The fracture of discourse, according to Ashworth (2016) questions what kind of terms are being used to describe the experience and what cultural norms surround the experience. Thus, there is a need to examine what words are being used by teachers to describe their leadership experiences, and what cultural norms are embedded.

Cherishing personality

The experiences related to teacher leadership are inseparable from teachers’ links with their learners. Teachers viewed their duty and mission in cherishing the personality of every child. This may be regarded as a social norm of school practicing a children-centered approach.

“That is, we cherish values, nurture children as personalities, not humiliate them simply because of their misconduct, treat each other with dignity and nurture them.” (T10)

Being involved

The desire to be involved and influence the school decisions may be also viewed as a certain form of school culture. We may see that teachers negatively perceive the expression of force and power from the school administration.

“If the decisions that affect us are made with our involvement, but not some force from above that is, I think, a respect.” (T8)

Moodedness. The mood can be understood as an atmosphere that surrounds the experience. Teacher leadership experience is viewed by the respondents as being encompassed by the sense of positive disposition and creativity, which help to avoid a routine and maintain good social relationship.

Being positively disposed

“Our strengths today are positivity in the classroom, in relationships with colleagues, in self-motivation.” (T2)

Being creative

“The creativity need to be everywhere: in the design of plans, in the conduct of lessons, in the ability to approach the student, in avoiding routine, in organizing events, outings, and more. Every step you have to take a creative look to avoid that routine and it would be fun for you and for the kids.” (T6)

Conclusions

Educational reforms, aimed to search for effective schools, have been shifting from the principal-based management, emphasizing the development planning in schools, assurance of education quality, the curriculum programs implementation in education and giving the key role to efforts of teacher community or individual teachers (Hunzicker, 2012).

Today the teacher leadership is regarded in terms of teachers’ day-to-day experiences, as embedded into teaching practice. The investigation of lifeworld experiences of teachers clearly demonstrates the dependence of teacher leadership on the context they are working within and may be maintained and empowered by the support of school community, social persuasion, sense of autonomy and involvement. Teacher leadership is inseparable from and interconnected with their followers (learners) who are viewed as equal participants of the educational process. The capability to sustain a successful interaction with learners is perceived as a core attribute and goal of teacher leadership within the classroom.

The current research was conducted with a group of teachers working at the same private Primary school, in other words, the sample of respondents was quite homogeneous. Therefore, additional research needs to be conducted within wider and more diverse auditory of teachers from different types of schools and different teaching subjects.

References

- Andressen, P., Konradt, U., & Neck, C.P. (2012). The relation between self-leadership and transformational leadership: competing models and the moderating role of virtuality. *Journal of Leadership and Organizational Studies*, 19(1), 68-82.
- Arslan, A., & Staub, S. (2013). Theory X and Theory Y Type Leadership Behavior and its Impact on Organizational Performance. *Social and Behavioral Sciences*, 75(2013), 102-111.
- ASCD Annual Report (2015). Learn. Teach. Lead. Retrieved from <http://www.ascd.org/ASCD/pdf/siteASCD/annualreport/2015/ar15-learnteachlead.pdf>
- Ashworth, P.D. (2016). The lifeworld – enriching qualitative evidence. *Qualitative Research in Psychology*, 13(1), 20-32. DOI: 10.1080/14780887.2015.1076917
- Dahlberg, K. (2006). The essence of essences the search for meaning structures in phenomenological analysis of lifeworld phenomena. *International Journal of Qualitative Studies on Health and Well-being*, 1, 11-19. DOI: 10.1080/17482620500478405

- Dahlberg, K., Dahlberg, H., & Nystrom, M. (2008). *Reflective Lifeworld Research*. Lund: Studentlitteratur.
- Gill, R. (2006). Redefining leadership: A new model. In *Theory and practice of leadership* (63-95). London: Sage Productions.
- Houghton, J.D., & Yoho, S.K. (2005). Toward a contingency model of leadership and psychological empowerment: When should self-leadership be encouraged? *Journal of Leadership & Organizational Studies*, 11, 65-83.
- Hunzicker, J. (2012) Professional development and job-embedded collaboration: how teachers learn to exercise leadership. *Professional Development in Education*, 38(2), 267-289.
- Janson, A., & McQueen, R.J. (2007). Capturing leadership tacit knowledge in conversations with leaders. *Leadership & Organization Development Journal*, 28(7), 646-663.
- Kimwaley, M.C., Chirure, H.N., & Omondi, M. (2014). Teacher empowerment in education practice: strategies, constraints and suggestions. *Journal of Research & Method in Education*, 4(2), 51-56.
- Muijs, D., & Harris, A. (2007). Teacher leadership in (in)action: three case studies of contrasting schools. *Educational Management Administration & Leadership*, 35(1), 111-134.
- Pearce, C.L., & Sims, H.P. (2000). Shared leadership: Toward a multi-level theory of leadership. *Advances in the Interdisciplinary Studies of Work Teams*, 7, 115-139.
- Rodd, J. (2012). *Leadership in Early Childhood*. Maidenhead: Open University Press.
- Teacher Leader Competency Framework. (2015). Retrieved from http://www.sai-iowa.org/Schreifer_TLcompetencyframework%202015.pdf
- Williams, KM. (2015). *Dynamics of Efficacy for Teachers in Formal Leadership Roles: A Case Study*. Electronic Theses and Dissertations. Retrieved from <http://dc.etsu.edu/etd/2503>

MATEMĀTISKĀ MODELĒŠANA KĀ ZINĀTNISKĀ IZZINĀ VIDUSSKOLĀ

Modelling of Mathematical Processes as a Scientific Cognition in High School

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Abstract. *The topicality of the article relates to the use of modelling in a real, complicated and complex process, with the need to forecast the progress and results of the occurrence. Article problem: In school, the focus is on building theoretical models, without real-life context. In real life, the problems are interdisciplinary, more difficult to define than in the theoretical model. The student should be able to transfer knowledge and concepts from one learning discipline in which he can deal with the problem to another. Mathematical modelling offers opportunities to connect and use knowledge from different disciplines. The aim of the article is to stimulate interest in the use of diverse learning approaches and forms, on the learning of mathematics as science, on its application in other scientific disciplines to address problems, on mathematics as a form of systemic thinking and on mathematical modelling as a learning method. The study used student test papers and open-ended questionnaires to collect data. The research used data triangulation method for data processing.*

Keywords: *knowledge transfer, learning approaches, mathematical modelling, scientific inquiry, systems theory.*

Ievads

Introduction

Mācīšanās ir mērķtiecīgs izziņas process, tā ir pieredzes bagātināšana un aktīva darbība, kuras mērķis ir pārveidot katram pašam sevi, attīstīt prasmi mācīties un domāt, jo būs jāpildveidojas mūžilgi. Informācijas tehnoloģiju laikmetā lielāks uzsvars tiek likts uz radošu mācīšanās procesu, uz pētījumiem un problēmu risinājumu, kur matemātika tiek saprasta kā domāšanas instruments.

Lielākoties matemātikas mācīšanās procesā balstās uz teorētisku modeļu veidošanu bez reālās dzīves konteksta (Chengnm, 2001). Skolēnam ir jāprot pārnest zināšanas un koncepcijas no vienas mācību disciplīnas, kurā viņš problēmu prot risināt, uz citām. Matemātiskā modelēšana (MM) piedāvā iespējas savienot un izmantot zināšanas no dažādām disciplīnām.

Raksta aktualitāte saistās ar matemātiskās modelēšanas izmantošanu reālā kompleksā procesā, ar nepieciešamību prognozēt parādību norisi un rezultātus.

Raksta mērķis parādīt matemātikas lietojumu problēmu risināšanā citās zinātņu disciplīnās, parādīt matemātiku kā sistēmiskās domāšanas formu un matemātisko modelēšanu kā mācīšanās metodi.

Zinātniskā izziņa ir sistēmiska, tā balstās uz skolēna spēju kompleksi lietot zināšanas, tās pārnest jaunā situācijā. Analizējot Valsts izglītības satura centra centralizēto eksāmenu darbu rezultātus matemātikā 12.klasē, dati rāda, ka eksāmenu rezultāti samazinājās no 34,6% 2018.gadā līdz 32,7% 2019.gadā, bet 9.klasē par 3% no 2017.gada uz 2019.gadu (Valsts izglītības un satura centrs, 2017, 2018, 2019). Arī OECD PISA rezultāti atspoguļo, ka Latvijas skolēnu skaits ar augstu matemātikas kompetences līmeni samazinājies no 8% 2012.gadā līdz 5,2% 2015.gadā (Geske, Grīnfelds, Kangro, & Kiseļova, 2013, 2016). OECD PISA 2012 matemātikas rezultātu analīzē atzīmēts, ka problēmrisināšanas kompetence pazeminās, ja par maz tiek risināti teksta uzdevumi ar zināšanu pārnesi jaunās situācijās (Geske et al., 2013). Ikviena paņēmiena apguves galvenais rādītājs ir prasme izmantot to jaunā situācijā (Palamarčuka, 1984). Skolēni MM uzdevumus risina nepietiekamā līmenī. Mencis norāda, ka teksta uzdevumu risināšanai sākumskolā jāizmanto vairāk nekā puse no visa laika, kas veltīts matemātikas apgūšanai, kā arī, sākumskolā skolēnam, katra veida teksta uzdevumus, jāprot risināt bez īpašas apdomas (Mencis, 2014).

Vidējās izglītības matemātikas saturā sasniedzamo rezultātu nosaka izvirzītais mērķis. Viens no šiem mērķiem saistās ar matemātisko modelēšanu, kuru skolēnam jāapgūst, lietojot matemātiskos modeļus praktiskos, reālos kontekstos, vai matemātikas un citu jomu kontekstos, vai padziļinot izpratni par matemātiskiem modeļiem un to lietojumu, atkarībā no sasniedzamā līmeņa (Skola 2030, 2017).

Pētījumā izvirzītie jautājumi:

- 1) Kādas mācīšanās metodes matemātiskā produktīvi izmantot, lai vidusskolēni iegūtu kvalitatīvas matemātikas zināšanas un attīstītu matemātiskās domāšanas prasmes, kuras viņi varētu izmantot reālās dzīves problēmu risināšanā?
- 2) Kādu prasmju apguves līmeni vidusskolēni uzrāda MM problēmu uzdevumu risināšanā?

Matemātiskās modelēšanas veidošanas teorētiskie aspekti

Theoretical aspects of mathematical modeling

Zinātniskā izziņa. Skolēns pasauli izzina ar dažādiem paņēmieniem - empīriski, emocionālo, racionālo izziņu un modelēšanu (Bonka et al., 2010).

Zinātniskās izziņas augstākā vērtība ir objektīvā patiesība, kas virzīta uz parādības būtības atklāšanu, tā ir mērķtiecīga un problēmiski ievirzīta darbība.

Zinātniskā izziņa īstenojas divos līmeņos – empīriskā un teorētiskā, kuri atšķiras pēc izziņas mērķiem, līdzekļiem un metodēm. Empīriskās izziņas mērķis ir faktu informācijas iegūšana par noteiktas realitātes parādībām. Teorētiskās izziņas mērķis ir faktu informācijas vispārināšana un izpratne. Faktu izskaidrošanai nepieciešams noteikts teorētiskais pamats, taču šis pamats var balstīties tikai uz noteiktiem empīriskās izziņas rezultātiem. Zinātniskā izziņa ir process, kura rezultātā ar teorijas pilnveidošanos var mainīties atsevišķu faktu interpretācija, bet empīriskās informācijas padziļināta izpratne precīzē teorijas saturu (Vedins, 2008). Zinātniskā izziņa pēc savas dabas ir sistēmiska, tās rezultātus veido loģiski sakārtota zināšanu sistēma, kura stingri izskaidro noteiktas realitātes parādības (Broks, 1988; Vedins, 2008).

Pierādījums matemātikā. Matemātika ir vienīgā racionālā zinātne, kas pasauli iepazīst caur sakarībām un attieksmēm (Bonka et al., 2010). Matemātikā pierādījums ir loģiski stingru secinājumu virkne, kas ved no dotajiem apgalvojumiem uz pierādāmo, neatkarīgi no tā, kāds ir šo apgalvojumu saturs un ietekme uz mūsu dzīvi (Čerāns, 2009). Matemātikā pierādījums ietvert sevī dažādu gadījumu pilnu pārslasi. Matemātikā jāprot argumentēt, ka izteiktais apgalvojums ir pilnīgi patiess visos gadījumos, pretējā gadījumā šis apgalvojums netiek uzskatīts par pierādītu. Fizikā par pierādījumu tiek uzskatīts izvirzītas hipotēzes eksperimentāls apstiprinājums, tādējādi hipotēze, var neapstiprināties visās situācijās, kuras iepriekš netika paredzētas (Čerāns, 2009).

Sistēmiskā pieeja. Modeļus plaši izmanto dažādās zinātnēs. Modeļu izmantošana skolēnu mācīšanās procesā pastiprina prakses teorētisko līmeni, jo, veidojot modeļus, var pētīt gan visu objektu, gan tā raksturīgās īpašības. Izdala trīs modeļu pielietošanas iespējas:

- 1) modelis kā problēmas analīze, kuru izmanto risinājumu meklēšanai;
- 2) pazīstams modelis kā īpašs problēmu risināšanas vispārīgs veids;
- 3) sākotnējs parauga modelis kā jaunas problēmas risinājums citā kontekstā. Prognozēt kādas noteiktas situācijas vai parādības gaitu palīdz MM (Blum & Borromeo-Ferri, 2009; Freudenthal, 1978; Moriyama et al., 2007).

MM bāzi veido trīs saistītas disciplīnas:

- 1) konkrētā disciplīna, kurai atbilst aplūkojamais objekts (sistēma);
- 2) matemātika, kura nodrošina simbolisku konkrētas sistēmas apraksta valodu, matemātiskos lielumus un matemātiskās struktūras;
- 3) informācijas tehnoloģijas (IT), kuras palielina matemātisko modeļu analīzes tehniskās iespējas. Visas trīs disciplīnas atrodas ciešā sasaistē un mijiedarbībā, tās pašas arī veido noteiktu sistēmu (Broks, 1988; Garyayev, 2006; Greefrath, 2016; Moriyama et al., 2007).

Vidusskolēnus jāorientē uz zinātnisku un praktisku uzdevumu sistēmisku risināšanu. Sistēmiskā pieeja balstās uz praksi, kurā aplūko objektu un procesu daudzveidību; objektu mijiedarbību un kopsakarus; objektu kustību un mainību. Sistēmu teorija ir sistēmu starpdisciplināra izpēte, lai atklātu modeļus un principus, ko var attiecināt uz visu veidu un līmeņu sistēmām, visās zinātņu nozarēs (Mārtinsone, Pipere, & Kamerāde, 2016).

Matemātiskais modelis un matemātiskā modelēšana. Viens no praksē nozīmīgiem matemātikas metožu lietojumu virzieniem ir saistīts ar matemātisko modeļu izveidošanu un izmantošanu. Bieži vien matemātika tiek uzskatīta par darbību, kas ir atdalīta no reālās dzīves un tiek lietota tikai skolā, bet matemātika ir sistēmiska domāšanas forma, kas rada risinājumus reālām problēmām, izmantojot matemātisko modelēšanu (Niss, 1989).

Jēdzieniem modelis un modelēšana ir atšķirīga nozīme, jo modelis saistās ar gala produktu, kas tiek iegūts modelēšanas rezultātā, bet modelēšana attiecas uz procesu. Modeļi ikdienas dzīvē tiek izveidoti tā, ka tie ir reāli vai saistīti ar realitāti. MM ir kognitīva metode, kurā reāls objekts vai situācija, tiek aizstāts ar modeli. Modelis ir domāšanas procesa rezultāts un izpētot izveidoto modeli, iegūstam informāciju par sākotnējo objektu vai procesu.

Skolēns var izziņāt pasauli, izmantojot teoriju un praksi. Teoriju izmanto, lai uz tās bāzes veidotu matemātisko modeli. Teorijas nav modeļi, jo teorijas nemodelē vienu konkrētu sistēmu, tās ģenerē modeļus. Katra modeļa pielietojamības apgabals ir ierobežots, tādējādi nav radīts viens vienots modelis visai darbības videi vai kādai lielākai tās daļai. Modelis ir jebkas, ko izmanto (vai var izmantot) kaut kā cita vietā, kaut kādam nolūkam (Podnieks, 2014).

Matemātikā un fiziskās zinātnēs aplūko teorētiskos (abstraktos) un praktiskos (lietišķos) modeļus. Dabas likumi precīzi atspoguļojas modeļos, kas radīti uz dabas likumu pamata. Matemātika nepētī objektus, sistēmas un procesus tādus, kādi tie ir sastopami dabā. Matemātika pēta apskatāmo sistēmu un procesu vienkāršotus, stingrus un precīzi aprakstītus modeļus (Podnieks, 2014). Matemātika ir instrumentu kopa, kas visu laiku rada jaunus instrumentus: modeļus un teorijas (Zeps, 2009). Matemātika to dara, formulējot definīcijas, veidojot algoritmus un pierādot teorēmas. Simboliskā modelēšana ir teorētiska, bet materiālā ir eksperimentāla (Broks, 1988).

Modeļus, atkarībā no pētījuma mērķiem, var klasificēt pēc parametriem: pēc to izmantošanas izziņas procesā (zinātnisks vai izglītojošs); pēc vizualizācijas veida - simbolisks (aprakstošs, matemātisks, grafisks); pēc formalizācijas veida - fizisks (bioloģisks, ķīmiskis, ekonomiskis), matemātisks, datorizēts; pēc struktūras sarežģītības pakāpes; pēc funkcionālām sakarībām (nepārtraukts vai diskrēts), utt. (Broks, 1988; Freudenthal, 1978; Garyayev, 2006). Pētījumā modeļi tiek aplūkoti pēc to formalizācijas veida.

Matemātisko modeļu pazīmes: matemātiskais modelis ir autonomš, kuru pēta izolēti, neatkarīgi no parauga; stabils, bet, to modificējot, tiek radīts cits modelis; pašpietiekams, kas izskaidro procesus tīras secināšanas ceļā; formalizēts, kas atklāj matemātikas kā zinātnes īpašu dabu, kuras daba ir citām zinātnēm “perpendikulāra” (Podnieks, 2014).

Pētījumā matemātiskā modeļa veidošanā tiek izmantotas gan matemātikas, gan fizikas satura zināšanas. Lai no modeļa iegūtu informāciju, tiek izmantoti secināšanas līdzekļi, tās pašas teorijas, kas ir modeļa pamatā, taču var veidoties situācijas, ka būtu jāizgudro jauni līdzekļi, metodes vai pat jaunas teorijas. Ja modeļa struktūrā kādi jautājumi iepriekš nav paredzēti, tad tie būtu speciāli jāpieprogrammē klāt, ievērojot, lai modeļa struktūra modifikācijas rezultātā nemainās (Podnieks, 2014).

Matemātikai un dabaszinātnēm kopīgais ir dažādu procesu izprašana un to izmaiņu raksturojums. Matemātika ir zinātne par reālās pasaules kvantitatīvām attiecībām, telpiskām formām un loģiskām konstrukcijām. Matemātika apraksta abstraktos modeļus, tā palīdz izprast pasauli ap mums. Dekarts atzīmēja, ka matemātika ir zinātne vispār, jo visas zinātnes uz to attiecas kā daļas pret veselo (Dekarts, 1978). Matemātiskie pētījumi, kas radušies pašas matemātikas ietvaros, pēc ilgāka laika atrod pielietojumu reālu problēmu risināšanai, to dziļākas izpētes rezultātā (Zeps, 2009).

Matemātikas pielietojumi virza matemātikas attīstību. No praktiskā viedokļa matemātika ir zinātne par modeļiem un sakārtojumu tajos. Matemātikas izpētes objekti ir skaitļi, iespējas, formas, algoritmi un izmaiņas, savukārt kā zinātne par abstraktiem objektiem matemātika balstās uz loģiku nevis uz novērojumiem, tomēr, lai atklātu patiesību, kā līdzekļus tā izmanto novērojumus, simulācijas un eksperimentus. Matemātikai, kā universāli pielietojamai zinātnei (Garyayev, 2006), ir īpaša loma izglītībā. Ar teorēmu palīdzību matemātika piedāvā zinātnei gan patiesību pamatus, gan standartu noteiktību. Matemātikā izmantotās galvenās pētniecības metodes ir analīze un sintēze, indukcija un dedukcija.

Savukārt fiziku māca kā dabaszinātni, jo tā balstās uz novērojumiem un eksperimentiem. Katrai no zinātnēm ir sava struktūra un sistematizācija. Fizikas uzdevumu tekstos jau ir integrēts reālās dzīves konteksts, bet atšķirība ir abu zinātņu jēdzienu skaidrojumos. Matemātikai ir svarīga nozīme fizikas procesu izpratnē, jo fizika balstās uz matemātisko modeļu veidošanu. Fizika un matemātika ir zinātnes ar atšķirīgiem mērķiem un atšķirīgu pieeju problēmu risināšanā (Garyayev, 2006). Abu zinātņu sadarbība saistīta ar matemātikas fundamentālo nozīmi fizikā. Apgūstot abas zinātnes starpdisciplināri, tiek parādīta konkrētā teorētiskā fakta nozīmība, ne tikai vienas zinātnes ietvaros, bet teorijas praktiskais pielietojums un nozīmība dzīvē un dabā (Bonka et al., 2010).

Matemātiskā modeļa izveides posmi:

- (1) kvalitatīva modeļa izveide, kurā tiek saskatīta reāla problēma un pareizi noformulēts uzdevums;
- (2) matemātiskā modeļa izveide, kurā reālās dzīves problēmu pārvērš par matemātikas problēmu;
- (3) matemātikas modeļa izskaitļošana un kvalitatīva izpēte, kurā atrisina matemātikas uzdevumu;
- (4) rezultātu iegūšana un to interpretācija, kurā matemātikas rezultātu interpretē par saprotamu reālai dzīvei un pārbauda tā patiesumu (Garyayev, 2006; Geske et al., 2013), tiek lietots arī cits posmu sadalījums (Broks, 1988; Moriyama, 2007). (Pētījumā tiks aplūkoti četri posmi.)

Matemātiskais modelis neskaidro iegūto rezultātu, neveic interpretējošu funkciju. Lai izprastu iegūto rezultātu, jāizmanto fiziskais modelis, bet fiziskajam modelim nepiemīt tāda universāluma pakāpe, kāda piemīt matemātiskajam modelim. Dabaszinātnes meklē atbildi uz jautājumu: kāda ir pasaule, tad matemātika izvērta sev mērķi zināt, kāda tā var būt visās iespēju bezgalībās (Garyayev, 2006). Jebkura matemātiskā modeļa izstrāde ir dabas, sabiedrības vai domāšanas objekta vai procesa interpretācija matemātikas valodā (Bonka et al., 2010). MM ir viena no matemātiskās izglītības pētījumu jomām, kurai tiek pievērsta īpaša uzmanība, tās mērķis ir izpētīt iespējas un īpatnības.

Modelēšanas uzdevumu risināšana nodrošina produktīvu mācīšanos neviendabīgās grupās, kur nepieciešamas dziļas iepriekšējās zināšanas; ieinteresētība un spriestspēja; attīstīta kritiskā domāšana; individualizēta un teorētiski orientēta mācīšanās; kur pieejamas plašas pētnieciskas laboratorijas (Blum & Borromeo-Ferri, 2009; Greefrath & Vorhölter, 2016; Niss, 2002).

MM kompetence. MM pamatā ir rūpīga visas informācijas pārbaude, tiek nedefinēta problēma un, balstoties uz doto informāciju, tiek izveidots matemātisks (abstrakts) vai loģisks modelis, kas patiesi apraksta konkrēto situāciju. MM saistās ar matemātiskā modeļa izveidi, ar modeļa iekšējās struktūras izpēti un ar tālāku matemātiskā modeļa interpretāciju. MM ir matemātikas mācīšanās process, kura laikā skolēns pārnes matemātikas zināšanas uz reālās dzīves procesu skaidrojumu, pielietojot matemātikas zināšanas, prasmes un iemaņas, kā arī modelēšanas prasmes veikt mērķtiecīgu modelēšanas procesu, lai īstenotu matemātiskās prasmes darbībā. Šai pārnesei ir nepieciešama modelēšanas kompetence.

MM kompetence ietver četrus savstarpēji saistītus komponentus: teorētisko, kur svarīga ir teorētisko zināšanu nozīme, jo dažādu vecuma grupu skolēnus māca atšķirīgos līmeņos; ar procesu saistītu, kur svarīga ir matemātiskās modelēšanas posmu izpratne; ar mācīšanos saistītu, kurš ietver divas galvenās kompetences: mācīšanās plānošanu un mācīšanās īstenošanu; ar

rezultātu izvērtēšanu saistītu, kurā uzsver teorētisko zināšanu pietiekamību, lai mācīšanās būtu produktīva un orientēta uz rezultātiem (Blum & Borromeo-Ferri, 2009; Niss, 2002).

MM kompetences veidošanas pamatskolas posmā prioritāti piešķir dabas procesu fiziskai izpratnei, savukārt vidusskolas posmā ekvivalenti tiek mācīta fiziskā un matemātiskā modelēšana, jo šajā posmā izglītības problēmas risināšanā ir jāpalielina secinājumu precizitāte un universālums. Datormodelēšana kļūst nozīmīga, kad skolēns jau ir izveidojis savu priekšstatu par fizisko procesu būtību un izveidojis savu zinātnisko vērtību sistēmu (Garyayev, 2006; Greefrath & Vorhölter, 2016; Moriyama et al., 2007).

Skolēniem ir jāapgūst prasme pārtulkot modeļa realitāti uz matemātikas valodu. Modeļa lietderību var novērtēt tikai ar problēmas atrisināšanu un interpretēšanu. Modeļa analīze dod iespēju veikt zinātniskus secinājumus par jaunveidotās sistēmas īpašībām un veikt praktiskus secinājumus par jaunveidotās sistēmas reaģēt spēju konkrētos ārējās vides apstākļos.

Problēma kā MM sākumpunkts. Matemātiskā modeļa veidošana un matemātiskās modelēšanas pielietošana ir divas atšķirīgas darbības. Matemātiskā modeļa veidošana sākas ar reālu problēmu un pakāpeniski virzās uz iespējami dažādiem risinājumiem. Reālu matemātisku modeļu veidošanā problēmas var rasties ar problēmu risinājumu no fiziskām disciplīnām, kas prasīs izmantot fizisko disciplīnu zināšanas. Jebkurš mācību priekšmets jā māca un jāapgūst sistēmiski, atsedzot šī priekšmeta kā konkrētas sistēmas uzbūves hierarhiju un līdztekus parādot šī priekšmeta kā sistēmveidojoša elementa vietu citu priekšmetu vidū. Sistēmisms ir modernā apmācības procesa fundament (Broks, 1988).

Matemātiskās domāšanas prasmes ir būtiskas, lai skolēni varētu interpretēt situācijas un radīt risinājumus problēmu situācijām. Domāšanas operācijas, kuras izmanto domāšanas procesā, ir objektu klasificēšana, salīdzināšana, secināšana, vispārināšana, analīze un sintēze. Matemātiskās domāšanas procesa attīstību veicina gan vienkārši, gan sarežģīti, gan nestandarta reāli uzdevumi. Kritiskā domāšana ir aktuāla visos modeļa posmos.

Metakognīcija ir domāšana par domāšanu, tā attiecas uz izpratni un prasmi kontrolēt savus domāšanas procesus, tā ir būtiska, veicot objektu atlasī un problēmu risināšanas pieeju meklēšanu, jo modelī ir jāiekļauj aplūkotās parādības galvenie fakti, kas saistīti ar sistēmu. Tā ietver paša skolēna domāšanas procesa uzraudzību un mācīšanās pašregulāciju (Reihenova, 2018a; Reihenova, 2018b). Matemātikas pielietojumam problēmu risināšanā un MM vajadzētu būt neatņemamai mācību programmas sastāvdaļai, jo tās būs noderīgas dzīvē (Chengnm, 2001).

Pētījuma rezultāti *Research results*

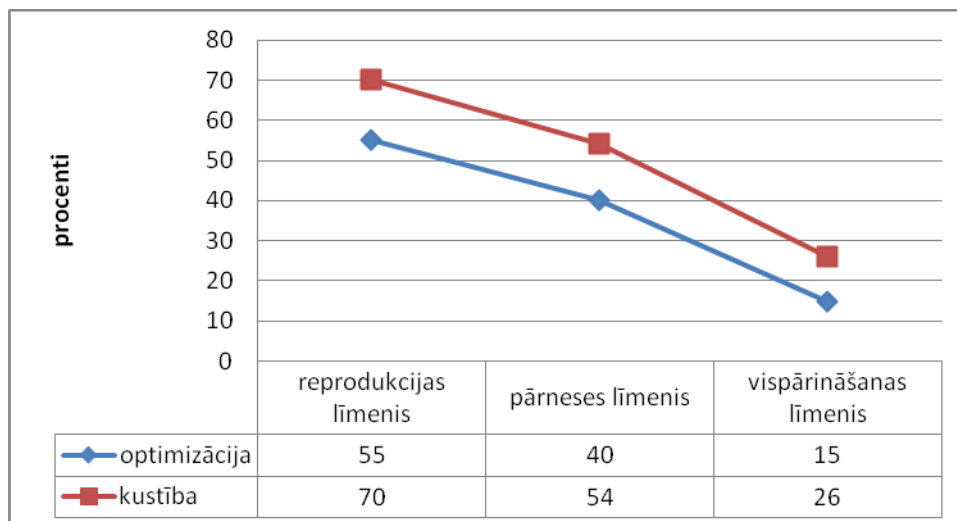
Pilotpētījums tika veikts ar mērķi noskaidrot, kā skolēni lieto MM kā mācīšanās metodi problēmuzdevumu risināšanā. Pētījums veikts 2019.gada decembrī, kurā piedalījās kādas vidusskolas eksperimentālās klases (EK) 29 skolēni un kontrolklašu (KK) 85 skolēni. Iegūto empīrisko datu analīzei un interpretācijai tika izmantotas gan kvalitatīvās, gan kvantitatīvās metodes (Mārtinsone et al., 2016). Kvantitatīvo datu analīze ļauj identificēt un interpretēt dažādus aspektus par pētāmo problēmu, bet tendenču atklāšanai izmantoti EK (n=29) kvantitatīvie rādītāji, savukārt iegūtie rādītāji tika pārbaudīti KK (n=85). Datu ieguvei izmantoti skolēnu MM darbi un datu sīkākai analīzei veikta aptauja ar atvērtiem jautājumiem, kurās KK skolēni (n=85) izvērtēja savu MM mācīšanās pieredzi matemātikas mācību stundu laikā. Pētījuma validitāti veido datu analīzes metožu un novērošanas iekšējā triangulācija.

Vienkāršos matemātiskos modeļus skolēni sāk veidot sākumskolā un pamatskolā, risinot teksta uzdevumus ar reālās dzīves saturu (Mencis, 2014). Modeļu veidošana balstās uz algebrisku vienādojumu, nevienādību, sistēmu un analītisku izteiksmju veidošanu (Mencis, 2014; Podnieks, 2014). Mācīšanās procesā modelēšanas uzdevumi paredzēti matemātikas pielietojumam, tie ir vienkāršoti skolēnu izpratnei. Pētījumā EK un KK skolēnu izpratne, par optimizācijas procesa un kustību uzdevumu apguves līmeņiem, ir atspoguļota attēlos.

MM uzdevumu izpratne tika analizēta, izmantojot komplekso prasmju struktūru, kas sastāv no savstarpēji saistītiem komponentiem, kritērijiem un līmeņiem (pietiekams, optimāls un augsts):

- (1) prasmes reproducēt (aktualizēt, atlasīt un lietot);
- (2) prasmes pārnest;
- (3) prasmes vispārināt (konkretizēt, klasificēt un abstrahēt) (Reihenova, 2019a).

Skolēnu snieguma līmenis ir augsts tajās konstrukta kategorijās, kurās skolēni veic darbības pēc noteikta algoritma, pielietojot reproduktīvās zināšanas, skatīt 1. attēlu. Palielinoties SOLO kognitīvajam līmenim, skolēnu prasmju apguves līmenis samazinās, kad skolēniem ir jāparāda zināšanu pārnese uz jaunu, vēl nezināmu situāciju. Visaugstāko kognitīvo līmeni, kur jāizmanto prasme vispārināt, sasniedza tikai 15% EK skolēnu, skatīt 1. attēlu.



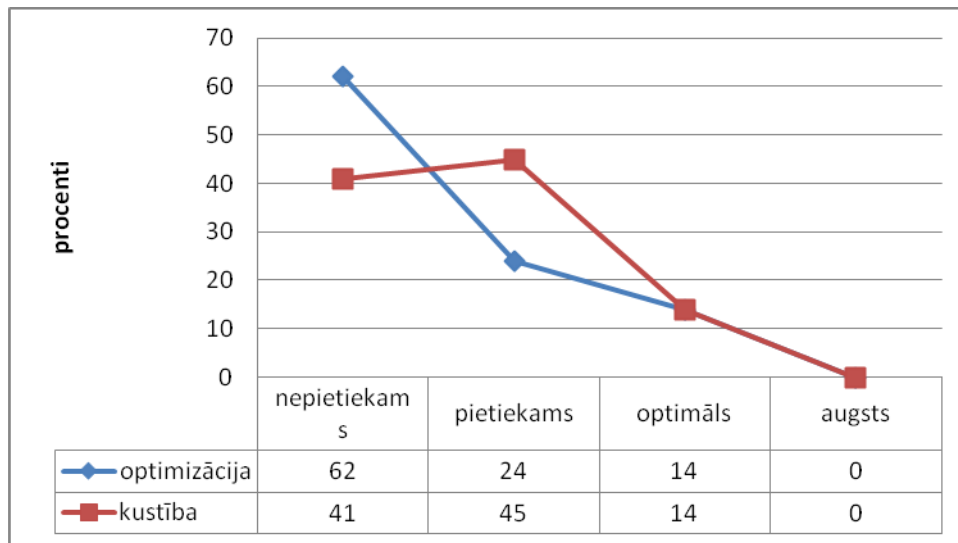
1. attēls. **Konstruktu kognitīvais līmenis EK (n=29)**

Figure 1 Cognitive level of constructs EC (n=29)

Prasmi, izveidot procesa aprakstam atbilstošu matemātisko modeli un to atrisināt reprodukcijas līmenī, ir apguvuši 55% EK skolēnu, bet pārneses līmenī-tikai 40% skolēnu, savukārt vispārināšanas līmeņa apguves prasmes ir nepietiekamas. Skolēni nepietiekamu uzmanību velta MM formalizācijas un interpretācijas posma izpildei. Prasmi, uzrakstīt zinātniskās atziņas par optimizācijas procesa iegūto rezultātu izvērtējumu, ir attīstījuši tikai 16% EK skolēnu. Vispārināšanas līmeņa uzdevumiem bija jāizveido matemātiski abstrakts modelis un tā patiesums jāpierāda. Šī konstrukta apguves līmenis EK ir tikai 15%, skatīt 1.attēlu.

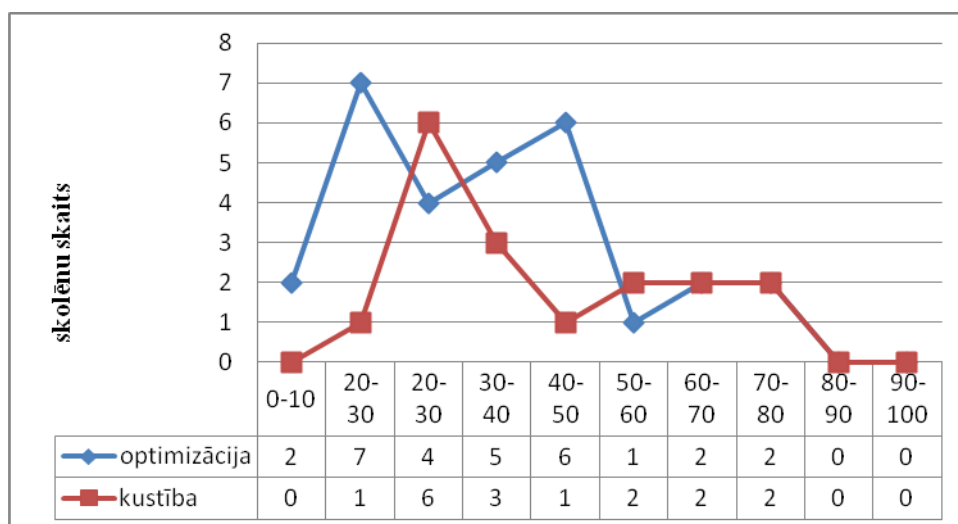
Matemātiskie modeļi, kuri balstās uz kustību problēmuzdevumu risināšanu, par divu objektu sastapšanās un panākšanas procesu izpratni, jau apgūti pamatskolā, tādējādi reprodukcijas līmeņa uzdevumu apguves līmenis ir 70% EK, kas ir par 15% augstāks nekā optimizācijas problēmuzdevumu izpratnē EK. Pārneses līmenis arī ir augstāks par 14% EK, bet vispārināšanas līmenis par 11% EK. To varētu izskaidrot ar atpazīstamu matemātisko modeļu lietošanu un mērķtiecīgi veiktu atkārtotības procesu, kā arī ar tēmas satura paralēlu apguvi fizikā un ar mācīšanās metožu daudzveidību, skatīt 1.attēlu.

No 2. attēla redzams, ka tikai 38% EK skolēnu apguvuši prasmi risināt optimizācijas MM uzdevumus pietiekamā un optimālā līmenī, bet kustību uzdevumus-59% EK skolēnu.



2. attēls. EK skolēnu prasmju apguves līmenis (n=29)
Figure 2 EC students' skills mastering level (n=29)

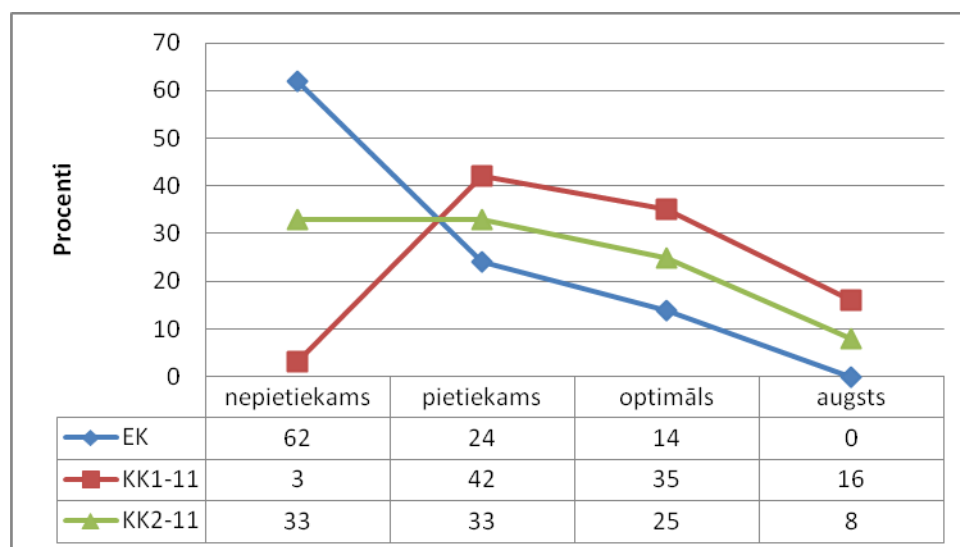
Ja salīdzina EK skolēnu apguves līmeņus abu veidu MM uzdevumu risināšanā, tad nepietiekamais apguves līmenis kustību uzdevumos samazinājās par 19%, pietiekamais līmenis paaugstinājās par 21%, savukārt optimālais un augstākais apguves līmenis palika nemainīgs. Risinot MM uzdevumus, svarīga atpazīstama parauga izmantošana. Sastapšanās un panākšanas procesus skolēni labi izprot pa horizontālu virsmu, bet procesu izpratne pa vertikāli un pa riņķa līniju rada problēmas, skatīt 2. un 3. attēlu.



3. attēls. Matemātiskās modelēšanas uzdevumu apguves līmenis EK (n=29)
Figure 3 Level of mastering of mathematical modeling tasks EC (n=29)

Viens no pētījuma uzdevumiem bija izpētīt, kā 10. un 11. klases skolēni risina MM uzdevumus, izmantojot vienus un tos pašus matemātiskos modeļus, bet izmantojot citas risināšanas metodes. Šiem skolēniem ir dažāds zināšanu līmenis un dažādas pieredzes uzdevumu risināšanā, tas ietekmē skolēnu prasmi ātri un racionāli atrisināt problēmu uzdevumus. Visām KK-11 (11. klasēm) matemātisko analīzi māca viens un tas pats skolotājs, bet matemātiku māca citi skolotāji. Visu klašu (EK un KK) skolēni risināja MM uzdevumus, kuru saturs, problēmu uzdevumu risināšanas laiks un vērtēšanas kritēriji palika nemainīgi.

KK skolēni īsākā laika posmā izprata problēmas nosacījumus, izveidoja matemātisko modeli, to atrisināja un novērtēja iegūtos rezultātus, jo pielietoja funkcijas atvasinājuma atrašanas algoritmu. MM iespējas paplašinās ar augstākās matemātikas jēdzienu un metožu lietošanu. Rezultāti atspoguļoja vienmērīgu izaugsmes dinamiku optimizācijas problēmu uzdevumu risināšanā. Augstāku apguves līmeni sasniedza KK-11 skolēni, skatīt 4. attēlu.



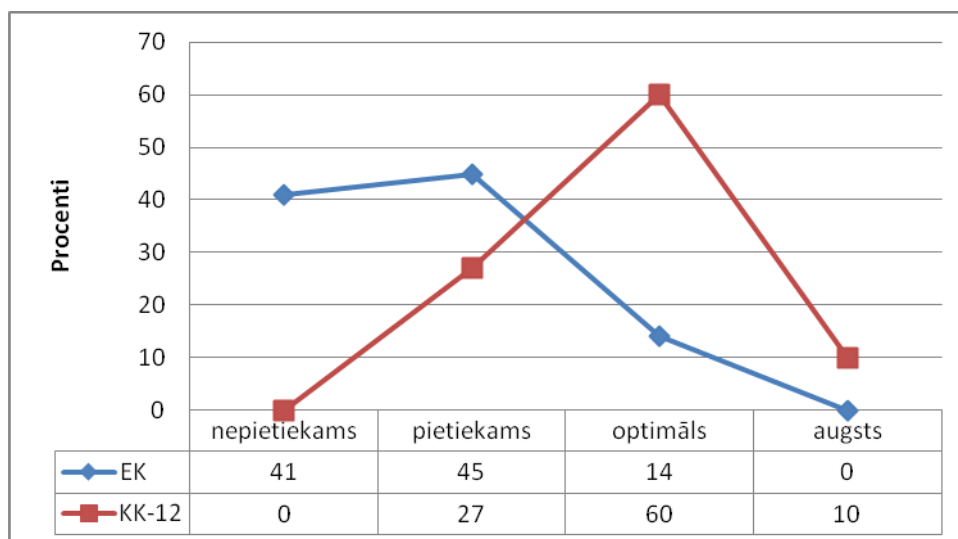
4. attēls. EK un KK-11 skolēnu MM prasmju apguves līmenis (optimizācija) (n=85)

Figure 4 EC and CC-11 students' MM skills mastering level (optimization) (n=85)

Ja EK mācās 10.klases skolēni, kuriem ir atšķirīgs zināšanu līmenis, tad KK-12 mācās 12. klases skolēni, kuri kustību uzdevumus risina pietiekamā, optimālā un augstā līmenī, skatīt 5. attēlu. Vērtēšanas kritēriji abām klašu plūsmām palika nemainīgi. Iegūtie rezultāti KK-12 atspoguļo strauju izaugsmes dinamiku problēmu uzdevumu risināšanā tikai līdz optimālajam līmenim, bet augstāka līmeņa dinamika mainījās neievērojami, skatīt 5. attēlu. Arī citi pētnieki uzsver, ka augstāka līmeņa uzdevumus prot risināt tikai 2% no visiem skolēniem (Palamarčuka, 1984).

EK skolēnu zināšanu bāze veidota uz pamatskolā iegūtajām matemātikas zināšanām, bet KK skolēnu zināšanas gan papildinātas, gan nostiprinātas matemātiskās analīzes un fizikas vidusskolas mācību kursā. EK un KK skolēni izmantoja daudzveidīgus MM simbolu veidus: zīmējumus, grafikus un formulas, katrai no tām ir dažāda vizuālā iespēja, taču KK-12 skolēni izmantoja daudzveidīgus simbolu veidus. Formula un zīmējums ir ērti, lai definētu vienu attiecību, savukārt lai sasaistītu vairākas attiecības vienlaikus, labāk ir izmantot shēmu. Tās lietoja KK-12 skolēni.

EK skolēnu zināšanu bāze veidota uz pamatskolā iegūtajām matemātikas zināšanām, bet KK skolēnu zināšanas gan papildinātas, gan nostiprinātas matemātiskās analīzes un fizikas vidusskolas mācību kursā. EK un KK skolēni izmantoja daudzveidīgus MM simbolu veidus: zīmējumus, grafikus un formulas, katrai no tām ir dažāda vizuālā iespēja, taču KK-12 skolēni izmantoja daudzveidīgus simbolu veidus. Formula un zīmējums ir ērti, lai definētu vienu attiecību, savukārt lai sasaistītu vairākas attiecības vienlaikus, labāk ir izmantot shēmu.



5. attēls. EK un KK-12 skolēnu MM prasmju apguves līmenis (kustība) (n=58)
 Figure 5 EC and CC-12 students' MM skills mastering level (n=58)

Skolēnu atbildes uz aptaujas jautājumu: kādas radās problēmas risinot MM uzdevumus, saistās ar matemātiskā modeļa izveidi - 63% KK skolēnu un ar matemātiskā modeļa atrisināšanu- 38% KK skolēnu. KK skolēni atzīmēja, ka piedāvātā problēma tika izprasta, pēc vispārinātu problēmu uzdevumu atrisināšanas un zinātnisko atziņu uzrakstīšanas.

No veiktā pētījuma var secināt, ka MM ir būtiska nozīme matemātikas izpratnes, kompetences un domāšanas attīstībā. Ir svarīgi, lai skolēni praktiski pielietotu matemātikā apgūtās problēmu risināšanas prasmes un spriešanas

prasmes, lai aktualizētu zināšanas par kopsakarībām lietišķās matemātikas problēmu risināšanā. Pielietot MM uzdevumu risināšanā, var visu līmeņu skolēni, bet skolēni ar augstu matemātiskās kompetences līmeni, ir labākā situācijā, jo prot risināt piedāvātās problēmas daudzveidīgi un radoši. Ir nepieciešams, radīt skolēniem MM mācīšanās vidi reālā situācijā.

Arī pētnieki akcentē MM nozīmi: matemātisko likumsakarību izpratne ar matemātisko modeļu palīdzību nodrošina zinātnisko zināšanu augstu apjēgšanas līmeni (Palamarčuka, 1984), bet visnopietnāko modeļu pētīšanai ir nepieciešami arī visnopietnākie profesionālie līdzekļi - matemātika un datorsimulācija (Podnieks, 2014).

Secinājumi **Conclusions**

MM ir viena no matemātikas mācīšanās metodēm. MM tiek raksturota kā reālas problēmas pārveidošanas darbība matemātiskā formā. Matemātisko modeļu veidošana ir svarīga visās ar matemātiku saistītās disciplīnās, kas ir apgūstamas skolā visās vecuma grupās. Skolēnam ir jāapgūst prasme, reālās dzīves problēmu sadalīt vienkāršos uzdevumos, lai veiktu problēmas detalizētu izpēti.

MM mācīšana ietver problēmu risināšanas prasmes un augsta līmeņa domāšanas prasmes pasaules problēmu atspoguļojumā. Matemātiskais modelis ir skolēna domāšanas operāciju rezultāts.

Mācību modelēšanas mērķis ir panākt, lai skolēni attīsta prasmi veidot, analizēt un novērtēt matemātiskos modeļus, kā arī izvirzīt teorētiskās atziņas. EK skolēniem MM problēmu uzdevumu risināšana ir pietiekamā līmenī, bet optimālā līmenī- 35% 11.klases skolēnu un 60% 12. klases skolēnu produktīvi risina problēmu uzdevumus uz zināma konteksta, ja uzdevumi tiek sistemātiski atkārtoti. EK skolēniem pietrūkst matemātikas un fizikas satura zināšanu un pieredzes reālās dzīves problēmas pārnest matemātiskas valodā.

Summary

Mathematical modeling is one of the methods of learning mathematics. Mathematical modeling is described as the process of transforming a real problem into a mathematical form. Mathematical modeling is important in all mathematical disciplines and can be learned at school for all age groups.

The student has to acquire the skill to divide the real-life problem into simpler tasks for a more detailed study of the problem.

Mathematical modeling is a purposeful process. The success of the activity depends on the goals the learner wants to achieve. Mathematical modeling is a major area of research in mathematical education that is of particular interest and aims to explore the possibilities and features in which the development and modeling of functional relationships are essential.

The aim of teaching modeling is to enable students to develop the skills to form, analyze and evaluate mathematical models and to advance theoretical knowledge. Experimental grade students solve mathematical modeling problems at a satisfactory level, while in grade 11, 35% of pupils and grade 12, 60% of pupils are optimally solving problem tasks in a known context if the tasks are repeated systematically. Experimental students lack the knowledge and experience of mathematics and physics content to transfer real-life problems to mathematical languages.

Literatūra References

- Blum, W., & Borromeo-Ferri, R. (2009). *Mathematical Modelling: Can It Be Taught and Learnt?* Retrieved from <https://pdfs.semanticscholar.org/ebc2/4e810efa2f5361b9accfc0097c2bca084b89.pdf>
- Bonka, D., France, I., Mencis, J., Vilciņš, J., Muceniece, I., Riemere, I., Čakāne, L., & Lāce, G. (2010). *Matemātika skolā*. Rīga: Lielvārds.
- Broks, A. (1988). *Sistēmas ap mums un mēs sistēmās*. Rīga: Zvaigzne.
- Chengnm, A.K. (2001). *Teaching Mathematical Modelling in Singapore Schools*. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.870.1449&rep=rep1&type=pdf>
- Čerāns, K. (2009). *Kas ir matemātisks pierādījums?* Rīga: Latvijas Universitāte.
- Dekarts, R. (1978). *Pārruna par metodi*. Rīga: Zvaigzne.
- Garyayev, A.V. (2006). *Fizicheskoye, matematicheskoye i kompyuternoye modelirovaniye prirodnkh protsessov i system na urokakh fiziki*. Retrieved from <https://www.elibrary.ru/contents.asp?issueid=1276579>
- Geske, A., Grīnfelds, A., Kangro, A., & Kiseļova, R. (2013). *Latvija OECD Starptautiskajā skolēnu novērtēšanas programmā 2012 – pirmie rezultāti un secinājumi*. Pieejams https://www.ipi.lu.lv/fileadmin/_migrated/content_uploads/Latvija_SSNP_2012_pirmie_rezultati_un_secinajumi.pdf
- Greefrath, G., & Vorhölter, K. (2016). *Teaching and Learning Mathematical Modelling*. Retrieved from <https://link.springer.com/content/pdf/10.1007%2F978-3-319-45004-9.pdf>
- Freudenthal, H. (1978). *Weeding and Sowing*. Retrieved from <https://epdf.pub/weeding-and-sowing-preface-to-a-science-of-mathematical-education.html>
- Mencis, J. (2014). *Matemātikas metodika pamatskolā*. Rīga: Zvaigzne ABC.
- Moriyama, J., Suzuki, T., Miyazaki, M., & Sakakibara, Y. (2007). *Integrated Learning of "Modeling" through Mathematics, Science and Technology*. Retrieved from <https://www.iteea.org/File.aspx?id=86696&v=4e822661>
- Niss, M. (2002). *Mathematical competencies and the learning of mathematics: the Danish komproject*. Retrieved from <http://www.math.chalmers.se/Math/Grundutb/CTH/mve375/1112/docs/KOMkompetenser.pdf>
- Palamarčuka, V. (1984). *Skola māca domāt*. Rīga: Zvaigzne.
- Mārtinsons, K., Pipere, A., & Kamerāde, D. (2016). *Pētniecība: teorija un prakse*. Rīga: RaKa.
- Podnieks, K. (2014). *Modelēšanas robežas: ielāpu sega kā vienīgā iespējamā pasaules aina*. Pieejams <http://www.ltn.lv/~podnieks/>
- Reihenova, A. (2018a). Vidusskolēnu domāšanas veidi matemātikas mācīšanās procesā. *Society. Integration. Education. Vol. II*, 405-418.

DOI: <http://dx.doi.org/10.17770/sie2018vol1.3427>

- Reihenova, A. (2018b). Self-motivated Secondary School Student in Learning Mathematics. *The 60st International Scientific Conference of Daugavpils University*. Retrieved from: https://dukonference.lv/files/978-9984-14-864-9_60_konf_kraj_B_Soc%20zin.pdf
- Reihenova, A. (2019a). Integrētās mācības matemātikas un dabaszinātņu mācīšanās procesā vidusskolā. *Society. Integration. Education. Vol. II*, 445-459. DOI: <http://dx.doi.org/10.17770/sie2019vol2.3929>
- SKOLA 2030. (2017). *Izglītība mūsdienīgai lietpratībai: mācību satura un pieejas apraksts*. Retrieved from <http://www.izm.gov.lv/images/aktualitates/2017/Skola2030Dokuments.pdf>
- VISC. (2017, 2018, 2019). *Vispārējā izglītība. Pārbaudes darbi*. Pieejams <https://visc.gov.lv/vispizglitiba/eksameni/statistika.shtml>
- Vedins, I. (2008). *Zinātne un patiesība*. Rīga: Avots.
- Zeps, D. (2009). *Matemātika un fizika ir viens un tas pats. Ceļā uz tās vienkāršošanos*. Retrieved from https://www.academia.edu/2739782/Matem%C4%81tika_un_fizika_ir_viens_un_tas_pats._Ce%C4%BC%C4%81_uz_t%C4%81s_vienk%C4%81r%C5%A1o%C5%A1anos?auto=download

STUDENTS` SELF-DIRECTED LEARNING IN THE PROCESS OF DEBATING

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Abstract. Nowadays methods promoting self-directed learning have become essential as thinking processes, deep understanding and an independent desire to explore and research the learning content gain importance. One of these methods is debating, which provides students the opportunity not only to be aware of topical problems in science and society, but also to understand the significance of them in their personal lives. The analysis of the survey show that for students with experience in debating, goal achievement is greatly influenced by individual interest and motivation, while for students without debating experience teacher's positive attitude is more important than personal interest and motivation to learn.

Keywords: components of self-directed learning, debating, self-directed learning, students.

Introduction

To achieve higher performance, teachers should apply an approach acknowledging that each student has different talents, abilities, attitudes, motivation and interests, which are important factors in reaching and setting learning goals. L. Dam (1995), in her analysis of the interaction between different components of the learning process, points out the necessity to involve students in the process of selection of learning content and learning methods (Dam, 1995) in order to understand personal significance of the learning process. It is important, because the lack of ability of a student to recognize the personal significance of the learning process can be the reason for a low motivation (Bondarevskaja, 2000). The reason might be students` opinion that they learn because it is important for teachers, parents, etc. Thus, the process of learning is entirely dependent on factors like the proficiency of the teacher, positive attitude towards the student or, in some cases, the socioeconomic factors.

While the author of the *significant learning* taxonomy D. Fink (2013) highlights the negative attitude towards learning as an increasing problem (Fink, 2013), which might be the result of negative effects of mechanical memorization and a lack of connections with real life situations (Maslo, 2015, p. 30). Mechanical memorization and a lack of real life connections in the learning process do not

promote thinking processes, deep understanding and an independent desire to explore and research the learning content. Since reproductive methods, which are based on mechanical memorization, are still commonly applied as „students in Latvia in general are good at tasks and activities that require memorizing or acting upon a familiar situation. However, there is a clear lack in skills and experience facing unfamiliar situations, as well as a lack of team work skills and an inability to apply theoretical knowledge in the real life situations (Valsts Izglītības satura centrs, 2017) and offering already „processed” information to students can only improve their ability to remember and reduplicate (Marlowe & Page, 1997, p. 9-11) and not to apply, analyse, evaluate and create.

It must be admitted that there is still a lack of the successful approach which could provide quality education for students with different learning needs, goals and interests as well as increase students` motivation and raise awareness of usefulness of learning in student`s personal life and in the life of a whole society, promote responsibility and implement approaches which highlight the correlations between the student`s individual goals and the goals set by official institutions.

In order to move towards the acquisition of competences, learning methods characterized by dynamic activities, problem-solving and reflection, become more relevant in the learning process (Weinert, 2001). One of these methods is debating, which also provides the opportunity for the students not only to be aware of and explore diverse issues/problems in science and society, but also to understand the significance of these problems in their personal lives.

The aim of the publication is: to describe pedagogical prerequisites for the promotion of self-directed learning and to assess the impact of self-directed learning component interactions on the process of goal achievement for students with and without experience in the process of debating.

The research methods used in the study include: the analysis of literature; data gathering method - survey; data processing and analysis methods (quantitative data processing with data mathematical statistical analysis and predictive analytics methods implemented through processing programs *Microsoft Office Excel 2010* un *SPSS (Statistical Package for the Social Sciences) v.22.a* logistic regression model was developed, the resulting logarithmic probability ratios calculated).

The components of self-directed learning

In order to implement self-directed learning, the learner himself must be open to change, to be fully engaged and focused, self-disciplined and self-directed (Zimmerman, 2001). The freedom of the individual to guide his learning process is also important because self-directed learning is authentic, different and unique

to every student (Savin-Baden & Major, 2004, p. 14). M.S. Knowles (1975) defines self-directed learning as the process in which a learner takes the initiative, identifies his own learning needs, sets goals, identifies available resources, selects the most appropriate learning strategy and evaluates learning outcomes (Knowles, 1975, p. 18). H.G. Schmidt (2000) is convinced that problem-solving is important in self-directed learning. He also highlights the role of the teacher in organizing students' cognitive activities, and at the same time he emphasizes the need for the student to lead his own learning and motivation to learn (Schmidt, 2000, p. 243). S. Naylor un B. Keogh (1999) emphasize the necessity to create a cognitive need, including stepping out of *the comfort zone* and highlighting a problem, as „learning occurs when a student is confronted with a new situation, creating new approaches and linking them with existing knowledge and understanding” (Naylor & Keogh, 1999).

Thus, the self-directed learning process can be viewed as a system of pedagogical relationships based on the students' learning activities. The need for positive change gains importance, especially in the learner's attitude towards learning. Analyzing important learning components in self-directed learning, it is revealed that:

- being aware of the common interests of himself and classmates, student can individually and collaboratively plan his own learning strategies and collaborate to complement each other's knowledge in the learning process;
- it is important to discover the relationship between intrinsic and extrinsic motives. Lack of motivation for students can occur due to the lack of values for successful, productive learning. Each student has his own individual understanding of the importance of learning and this is based on his or her values (Markova, 1983);
- belief is an important motivating factor: both the learner's belief that he can be a successful learner and the teacher's belief that he can guide the learner towards the learning goals. Attitudes are closely related to human actions or, conversely, inaction (Katz, 1960, p. 169), and negative attitudes towards the teacher, the learning area or context, and the learning process in general, can reduce the willpower that is an important prerequisite for a successful learning process;
- the objectives set can only be achieved through close interaction between the student, the school and society (Buckley, 1967) therefore, it is important for the student to answer the questions: What do I want to learn? and What do the others want me to learn? Thus understanding of individual and collective goals is raised, connections between

different goals are found and the learning process becomes personally meaningful;

- values are the strongest motives, e.g. responsibility for oneself and society as a whole, or, on the contrary, opposing one's own interests to the common interest of the whole society (Edwards, 2007).
- the main idea of reflection is not to find out what is right or wrong, but what has actually worked out or what should be done differently (Hattie, 2012);
- creating a cognitive need, including stepping out of the comfort zone and raising a problem, because „learning occurs when student is confronted with a new situation, creating new approaches and linking them with existing knowledge and understanding” (Naylor & Keogh, 1999).

The components of learning can be characterized within a specific framework of pedagogical relationships focusing on the necessity to develop learning strategies.

It can also be concluded that the interrelationship between the components of self-directed learning: responsibility, interests, goal setting, motivation, understanding of the application of knowledge, cognitive needs, positive attitudes, cooperation, beliefs, values and reflection become essential because:

- motivation contributes to both setting and achieving goals (Savin-Baden & Major, 2004);
- the achievement of goals is influenced by the interaction of different components and is achieved through close collaboration between the learner, the school and the community (Buckley, 1967); awareness of goals and self-confidence contribute to motivation (Savin-Baden & Major, 2004);
- the interest contributes to the students' motivation to learn and set learning goals (Harackiewicz & Hulleman);
- responsibility is important in achieving goals (Edwards, 2007); it is based on values that motivate people to act in a socially responsible manner (Wray-Lake & Syvertsen, 2011);
- belief is particularly important in the goal setting process (Borg, 2001); belief formation is influenced by family, culture, community, reflection, life experience, but the teacher is the creator of change in the learning process (Hattie, 2012). The teacher`s or student`s positive attitude towards the learning process can be facilitated by belief in the success of the learning process as well as positive feelings and emotions (Katz, 1960);

- the need for cognition stimulates the student's interest (Shhukina, 1988);
- values provide an understanding of the application of knowledge as well as an awareness of the importance of learning (Markova, 1983), students` values are largely determined by the family and the community, as the school is just a continuation of the formation process of student`s responsibility (Wray-Lake & Syvertsen, 2011).

After analysis of the theory, it can be concluded that understanding of the application of knowledge, beliefs, values, interest are important components of self-directed learning and the promotion of these learning components is clearly dependent on the professional competence of the teacher, the support of the student's family, friends and the society. It is also essential that the student is aware of the personal importance of the learning process. The presence of the components of motivation, responsibility and positive attitude to a large extent depends on the goals, beliefs, values, cognitive needs and interests of the learner. While the achievement of the goal in terms of learning outcomes (value dimension (Oliņa, France, & Namsone, 2018, p. 29); improvement of knowledge, skills and competences (Eurostat, 2016, p. 22; Deci & Ryan, 2000); active subject position (Maslow, 1954, p. 282)) influences all the components of self-directed learning that interact with one another. It must be admitted that self-directed learning can be fully realized through purposeful planning and implementing a student's learning strategy, which is a set of student's learning activities to achieve a goal (Pietersen, 2010).

Conducting and analyzing self-directed learning in the debate process

The debating method is successfully implemented in the learning process in different countries of the world, in formal and non-formal education. Applying the debating method in the learning process can lead to the development of competences as during debating problem solving, decision making, critical thinking, etc. have been developed (Brookfiel & Preskill, 2005).

To assess the impact of self-directed learning component interactions on the process of goal achievement of students with experience in the debating process, the survey (2017) was carried out. The survey included questions that can be aggregated on a Likert scale in numerical form (ordinate data) using the SPSS (Statistical Package for the Social Sciences) software for predictive analytics and statistical analysis. The survey results highlight that an important component of the learning process for 8th – 12th grade students (N=80) with different debating experience from different cities of Latvia (Liepaja, Riga, Iecava) is the achievement of goals, i.e. achievement of learning outcomes. The achievement of the goal depends on the interaction of different learning components (interests,

positive attitude of the teacher and the learner towards the learning process, understanding of the application of knowledge, beliefs, etc.). It was important to discover how changes in other learning components (analyzed: interest, motivation, understanding of the application of knowledge and positive attitude of the teacher) influence the achievement of the goals set by the learner. For this purpose, Ordinal Regression was used to create a logistic regression model and the resulting logarithmic probability relationship (logit). The data reveal that only two components - interest ($p = 0.042$) and motivation ($p = 0.035$) – of the analyzed components (interest, motivation, understanding of the application of the knowledge and positive attitude of the teacher) can reliably influence achievement of goals of respondents (see: Table 1).

Table 1 The Results of Ordinary Regression for Students with Debating Experience

<i>A component of self-directed learning</i>	<i>The ratio of the probability that the component will increase the achievement of goals, ROI</i>	<i>Confidence interval 95%</i>	<i>Statistical Reliability, p</i>
Interest	1,40	1,11-1,64	0,042
Motivation	1,74	1,20-3,02	0,035
Understanding of the application of the knowledge	1,17	0,95-1,92	0,633
Teacher`s positive attitude	1,32	1,04-1,63	0,542

It can be concluded that the understanding of the application of the knowledge and the positive attitude of the teacher have no statistically significant effect on the achievement of goals, and in the obtained model of ordinal regression only the interest (IA = 1.40) and motivation (IA = 1.74) influence the achievement of goals. Thus, with the increase in motivation for a 1-point Likert scale, the odds ratio (ROI) for reaching the goal would increase by 1-point Likert scale is “1.74” and the increase of interest in the 1-point Likert scale, the odds ratio (ROI) of reaching the target would increase by 1-point Likert scale is “1.40”.

To compare the impact of component interactions of self-directed learning on the process of goal achievement on students` with and without experience in the process of debating another survey (2019) (for control group- students without debating experience) was carried out. The analysis of survey identified the impact of the interaction of the self-directed learning components (analyzed: interest, motivation, understanding of the application of the knowledge and positive attitude of the teacher) on the achievement of the goals set by the students in the learning process. The respondents are the 8th-12th grade students (aged 15-20) of the research base school. Control group students provided answers to identically

formulated questions, which were included in the survey of the students with experience in debating. The findings reveal that achievement of goals, motivation to learn, and positive attitude of the teacher in the learning process are the highest rated components of self-directed learning by the control group.

In order to fully evaluate and compare the data from the debaters group and control group surveys, it was necessary to develop a mathematical model analogous to the students with debating experience survey data to predict how changes in the analyzed learning components affect achievement of the control group students. For this purpose, Ordinal Regression was used to make a logistic regression model and the resulting logarithmic probability relationship (logit). The analyzed data reveal that the achievement of the goals set by the students of the control group is credibly influenced by all four analyzed components: interest ($p = 0.003$), motivation ($p = 0.003$), understanding of the application of the knowledge ($p = 0.001$) and teacher's positive attitude ($p = 0.002$) (see Table No.2).

Table 2 The Results of Ordinary Regression for Students with Debating Experience

<i>A component of self-directed learning</i>	<i>The ratio of the probability that the component will increase the achievement of goals, ROI</i>	<i>Confidence interval 95%</i>	<i>Statistical Reliability, p</i>
Interest	1,37	1,15-1,62	0,003
Motivation	1,34	1,14-1,58	0,003
Understanding of the application of the knowledge	1,86	1,54-2,24	0,001
Teacher's positive attitude	1,99	1,59-2,50	0,002

The data reveal that all analyzed components have a statistically significant positive effect on the achievement of goals for the control group students, but the positive attitude of the teacher (ratio of the probability = 1.99) and understanding of the application of knowledge (ratio of the probability = 1.86) have the most influential effect. Interest and motivation also have statistically significant positive effects, but these effects are significantly smaller.

It can be concluded that it is the positive attitude of the teacher that is particularly important for the control group students (students without experience in the debating process) and insignificant for respondents with experience in debating.

Conclusions

1. Self-directed learning process can be characterized by intentional, purposeful and self-planned learning activities as well as a wide range of

- individual learning differences. The structure of self-directed learning process consists of interrelated and mutually influencing components: values, understanding of the application of knowledge, motivation, goal setting, confidence, responsibility, interest, attitude, reflection.
2. Students' learning process is influenced by a variety of interactions between internal and external motivation, e.g. the learning environment, their intellectual background and social background, their engagement and their pedagogical potential. Focusing on short-term (performance) goals, e.g. good grades in the test and the lack of professional competence of teachers are significant causes for the lack of students' motivation.
 3. Debating is an argument-based dialogue that provides detailed information and does not resemble everyday conversation. By implementing debating method in the pedagogical process, students can not only be aware of a variety of topical issues in science and society, but also understand the significance of these problems in their personal life.
 4. The survey reveals that for students with experience in debating, goal achievement is greatly influenced by individual interest and motivation. While students without debating experience are more influenced by the teacher's positive attitude, which even is more important than the student's own interest and motivation to learn. It can also be concluded that if the teacher's positive attitude towards the student decreased by 1 Likert scale item, the chances of reaching the goal in the learning process would also be reduced.

References

- Bondarevskaja, E. (2000). *Teorija i praktika ličnostno-orientirovanogo obrazovanja*. Rostov-na-Donu: Bulat.
- Borg, M. (2001). Key concepts in ELT: Teachers' beliefs. In: *ELT Journal*, 55(2), 186-188.
- Brookfiel, S., & Preskill, S. (2005). *Discussion as a way of teaching*. San Francisco: Jossey-Bass.
- Buckley, W. (1967). *Sociology and Modern Systems Theory*. New-Jersey: Prentice-Hall; 1st Edition.
- Dam, L. (1995). *Learner autonomy 3 - From theory to classroom practice*. Dublin: Authentic Language Learning Resources Ltd.
- Deci, E., & Ryan, R. (2000). Intrinsic and extrinsic motivations. Classical definitions and new directions. In *Contemporary Psychology*, 25, 54-67.
- Edwards, A.L. (1957). *Techniques of attitude scale construction*. New-York: Appletion-Century-Crofts.
- Eurostat. (2016). *Classification of learning activities*. Luxembourg: Publications Office of the European Union.
- Fink, L.D. (2013). *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses*. San Francisco: John Wiley & Sons Jossey Bass.

- Grow, G.O. (1991). Teaching learners to be self-directed. In *Adult education quarterly*, 41(4), 125-149.
- Harackiewicz, J., & Hulleman, C. (2010). The Importance of Interest: The Role of Achievement Goals and Task Values in Promoting the Development of Interest. In: *Social and Personality Psychology Compass*, 4(1), 42-52.
- Hattie, J. (2012). *Visible Learning for Teachers: Maximizing Impact on Learning*. New York: Routledge.
- Knowles, M.S. (1975). *Self-directed learning: A guide for learners and teachers*. New York: Association Press.
- Markova, A. (1983). *Formation of learning motivation in school age: a Handbook for teachers*. Moscow: Prosveshchenie.
- Marlowe, B., & Page, M. (1997). *Creating and Sustaining the Constructivist Classroom*. California: Corwi.
- Maslo, I. (2015). *Izaicinājumi un iespējas 18-24-gadīgo jauniešu priekšlaicīgas mācību pārtraukšanas prevencijai*. Rīga: Valsts izglītības attīstības aģentūra, Latvijas Universitāte, Pedagoģijas, psiholoģijas un mākslas fakultātes Pedagoģijas zinātniskais institūts. Pieejams http://sf.viaa.gov.lv/library/files/original/iesp_jas_prevencijai.pdf
- Maslow, A.H. (1954). *Motivation and Personality*. New York: Harper and Bros.
- Naylor, S., & Keogh, B. (1999). Constructivism in Classroom: Theory into Practise. In *Journal of Science Teacher Education*, 10, 93-106. DOI: <https://doi.org/10.1023/A:1009419914289>
- OECD. (2016). *Low-Performing Students: Why They Fall Behind and How To Help Them Succeed*. PISA. Paris: OECD publishing.
- Oliņa, Z., Namsone, D., & France, I. (2018). Kompetence kā komplekss skolēna mācīšanās rezultāts. In *Mācīšanās lietpratībai* (18-43). Rīga: LU Akadēmiskais apgāds.
- Pietersen, G.W. (2010). *Strategic Learning: How to Be Smarter Than Your Competition and Turn Key Insights into Competitive Advantage*. New Jersey: John Willey & Sons.
- Savin-Baden, M., & Major, C.H. (2004). *Foundations of Problem-Based Learning*. Berkshire: Society for Research into Higher Education and Open University Press.
- Schmidt, H.G. (2000). Assumptions underlying self-directed learning may be false. *Medical Education*, 34, 243–245.
- Shhukina, G. (1988). *Pedagogicheskie problemy formirovaniya poznavatel'nyh interesov*. Moskva: Pedagogika.
- Valsts Izglītības satura centrs. (2017). *Izglītība mūsdienīgai lietpratībai: mācību satura un pieejas apraksts*. Rīga. Pieejams <https://domaundari.lv/cepure/Macibu%20satura%20un%20pieejas%20apraksts.pdf>
- Weinert, F.E. (2001). Concept of competence: A conceptual clarification. In D.S. Rychen & L.H. Salganik (Eds.), *Defining and selecting key competencies* (pp. 45-65). Ashland: Hogrefe & Huber Publishers.
- Wray-Lake, L., & Syvertsen, A. (2011). The Developmental Roots of Social Responsibility in Childhood and Adolescence. In *Youth development: Work at the cutting edge*, 134, 11-25. New Jersey: Wiley-Blackwell.
- Zimmerman, B.J. (2001). Theories of self-regulated learning and academic achievement: An overview and analysis. In B.J. Zimmerman & D.H. Schunk (Eds.), *Self-regulated learning and academic achievement: Theoretical perspectives*. (pp. 1-37). Mahwah: Lawrence Erlbaum Associates Publishers.

TOOLS FOR CHILDREN FITNESS IN THE PHYSICAL EDUCATION OF PRIMARY SCHOOL PUPILS

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Abstract. *The results of pedagogical experiment that lasted from 2017 to 2018 are published in this research. 82 children took part in the experiment, among them were 42 boys and 40 girls. The actual age of children was nine years old. The purpose of the work was to discover the influence of fitness tools on physical development, physical preparation, psycho-emotional condition on younger school-age pupils. There was noticed a significant improvement of results of physical development according to Kettle index. In particular, it is about high level (from 16,9% to 43,1%), decreasing the average (from 54,4% to 46,8%) and especially the low level of physical development (from 28,7% to 10,1%), ($p < 0,05$). Probably, positive changes appeared in the result of Ruffier Dickson tests, improvement indicators of intermediate level (from 4,8% to 14,1%), ($p < 0,05$), decreasing in indicators of lower-intermediate level (from 38,4% to 16,7%), ($p < 0,05$). The stable dynamics was noticed in the results of physical preparation ($p < 0,05$), in particular after “30m run” exercise. Boys have got the result from $6,2 \pm 0,7$ sec to $5,4 \pm 0,5$ sec, girls - from $6,9 \pm 0,5$ sec to $6,1 \pm 0,5$ sec. The exercise “tilting torso forward from sitting position” represented result 3,9cm among boys and 5,5cm among girls; the exercise “long jump from place” represented 14,7cm among boys and 22,5cm among girls; in the exercise “shuttle running” boys got result from $11,7 \pm 1$ sec to $9,2 \pm 0,9$ sec and girls – from $12,1 \pm 1,2$ sec to $10,2 \pm 1$ sec. What is more, positive and statistically important changes ($p < 0,05$) where in results of pupils’ psycho-emotional condition evaluation. We have noticed increasing in levels of well-being, activeness, mood.*

Keywords: *physical education, junior schoolchildren, aerobics.*

Introduction

The modern educational system today is inextricably linked with physical education, as an essential component in the formation of a fully developed personality. One of the most important periods in the process of a person's development is junior school age, because at that age, the foundation of health, development of physical and mental qualities, motor activity, ground of a healthy lifestyle is laid and strengthened.

The educational process of elementary school today is increasingly overloaded with subjects that develop only mental faculties, and at the same time does not take into account the decline in the level of physical development of modern children, the deterioration of their health. At the same time, it is fashionable to introduce innovations in education and upbringing, but they have little to do with the field of physical education, which enhances the already critical health condition of schoolchildren. (Moskalenko, 2009; Krusevich, 2010; Bodnar et al., 2016).

As the scientists point out, innovative technologies in the physical education of junior schoolchildren (Bodnar et al., 2015; Bodnarchuk et al., 2018;) are one of the possible ways of optimizing the physical education of the young generation. Recently some aerobics techniques, which are recommended to use in physical education of children of all ages have appeared in the practice of physical education, because they are aimed at increasing the level of health, physical fitness, mental faculties, forming a culture of personality and ideas about a healthy lifestyle, interest in exercises and serve as a prevention of various diseases.

The methodology and concrete ways to increase the efficiency of physical education system for children of elementary school age are carried out in the following directions: improvement of standard base (Sorokolit, 2017); development of the physical education system concept (Moskalenko, 2009); the development of the need for motor activity, increasing the adaptive capacity and the personal physical culture of schoolchildren is researched in the works of Ognistij, 2010; Butenko et al., 2017; Bodnarchuk et al., 2018). The questions of healthy lifestyle, development of physical and mental qualities touched upon in the works of Vilchkovsky, 2004; Moskalenko, 2018. The application of different forms of physical education is disclosed in the works of Weinberg, Gould, 2003; Sacheck & Hall, 2014; Sarkauskiene, 2019. Some aspects of the theoretical substantiation of various means of aerobics for children can be found in the works of domestic and foreign authors (Hawley & Franks, 2000; Starchenko, 2014).

However, the problem of the search and scientific substantiation of the use of aerobics for children in the educational process of junior pupils, which corresponds to the methodological requirements adopted in the theory and practice of physical education, is still relevant.

The purpose of the work was to discover the influence of fitness tools on physical development, physical preparation, psycho-emotional condition on younger school-age pupils.

Methodology

In the research such methods as analysis and special researches and methodological literature synthesis; anthropometrical methods; method of psycho-emotional diagnostics (WAM); pedagogical testing; physiological methods; pedagogical experiment; methods of mathematical statistics were used. In order to determine physical development indicators of 9-years-old pupils in the research were conducted anthropometrical evaluations such as body length (BL) and body weight (BW), that represent the level of morphological specifics. What is more, length-weight Kettle index was calculated in the research. The index of Ruffier Dickson was used for evaluating pupils' physical efficiency. It was made by measuring heart beating in calm situation, in first 15 sec after exercising and last 15 sec from the first minute after exercising. For measuring level of physical preparation such activities as "30 m run", "tilt of the torso forward with sitting position", "long jump from place" and "shuttle running 4x9m". In order to evaluate psycho-emotional condition we have applied generally accepted method of operative evaluating of well-being, activity and mood (WAM). WAM is a chart containing 30 pairs of opposite characteristics, reflecting the studied features of the psycho-emotional condition (condition of health, activity, mood). Children, in the presence of a psychologist, were asked to select in each pair the characteristics that most closely corresponded to their condition, and to indicate the figure corresponding to the degree (strength) of the expressiveness of this characteristic. The total number of points in each of the criteria was within the range of 10-70. Estimates exceeding 40 points showed a favorable state of the children and can be evaluated as an average; below 40 points is considered as an unfavorable condition and, accordingly, a poor rating of their own condition, Estimates that were in the range of 50 points and above evidenced – a high grade of their own condition.

The results were processed by mathematical statistics methods. The pedagogical experiment was conducted in Lviv secondary school I-III level № 66 and in Lviv specialized school I-III levels with foreign languages deep learning № 45. Pupils from third forms have taken part in the experiment. In the research 82 pupils have taken part, among them were 42 boys and 40 girls. The actual age of all pupils was 9 years old in the beginning of the experiment.

Results

The hypothesis about positive influence of children fitness tools on physical development indicators, physical preparation and psycho-emotional sphere of 9-years-old pupils become the basis of elaborating and implementing author methodic in the process of physical education in elementary school. The evaluation of effectiveness of the author program was measured by conducting pedagogical experiment during 2017-2018 studying years.

To implement the research plan, the most interesting, emotional and effective means of aerobics for children were chosen: game aerobics, animal aerobics and game stretching. Animal aerobics involves the implementation of general development exercises to music with simulation, imitation of various animals' movements with the simultaneous pronunciation of sounds, recitation of poems, the performing of songs. Game aerobics includes an exercise combination of games of different intensity (active games, sports games, folk games, fun, relay race) to musical accompaniment. The implementation of the means of aerobics for was carried out in combination with the use of innovative approaches in conducting physical education lessons: a lesson-game, a lesson-fairy tale, a lesson-trip, a lesson-competition.

Systematization and generalization of the library and e-resources allowed forming the purpose of the lessons using the means of game aerobics, animal aerobics and game stretching, which was to improve the level of physical development, physical fitness and emotional state of junior pupils. Based on the purpose of the program, the main provisions of the program were clearly defined: adequacy of the load according to the individual characteristics of the pupils; using exercises of low intensity, increasing the heart rate by 20–30% from the initial state at the preparatory stage; creation of optimal conditions for stimulation of the cardiovascular and respiratory system activity at loads of 40–50% intensity from the maximum oxygen consumption (at heart rate 140–155 beats per minute); use of high and moderate intensity exercises at the main stage; gradual increase in the load, due to the increase in the volume of exercises, and in the future due to the gradual increase in the intensity of exercises.

The program was developed for a period of 6 months (70 classes) and was divided into two stages: preparatory (10 classes) and basic (60 classes). Task of the preparatory stage: to familiarize children with the basic concepts of game aerobics, animal aerobics and game stretching; teach the games rules and the main motor actions accompanying songs and recitatives; to raise the interest of children in exercising. Task of the main stage: to improve the level of physical condition of students through the use of means of game aerobics and animal aerobics, the content of which includes aerobic and respiratory exercises that have a positive effect on the functioning of the cardiovascular and respiratory system of the body;

to improve the level of physical fitness with the help of means of animal aerobics and game aerobics, which promote development of speed, strength and coordination qualities and means of game stretching aimed at development of flexibility; to raise a steady interest in classes through the use of role-playing, game elements and musical accompaniment during lessons.

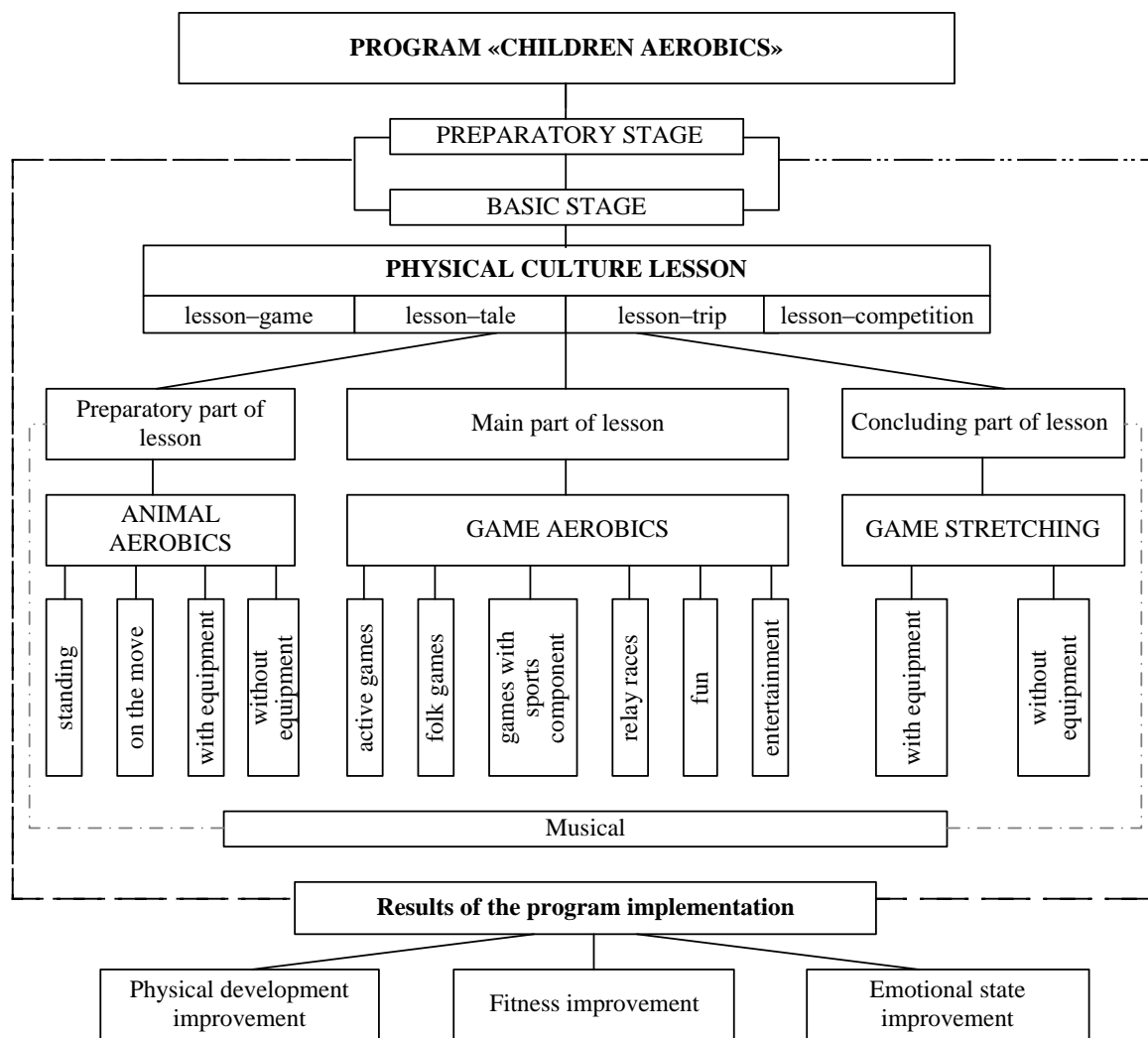


Figure 1 Scheme of «Children Aerobics» program implementation

At each lesson, the means of game aerobics, animal aerobics and game stretching were combined (Fig. 1). The preparatory part of the lesson included the use of means of animal aerobics, which was carried out in the form of aerobic simulation exercises staying at place and in motion with a variety of sports equipment (balls, sticks, hoops, dumbbells, ribbons, fit-balls) to musical accompaniment. Means of animal aerobics used to prepare the body for the main part of the lesson, as well as for the prevention of posture defects, flat feet. The music pace in the preparatory part was mostly moderate. In the main part of the

lesson included exercises aimed at the formation of motor skills and game aerobics. Means of game aerobics included: active and folk games, games with elements of sports (basketball, badminton, volleyball, tennis and football), relay and fun. The preference was given to games of high and moderate intensity to musical accompaniment. The music pace of the main part was mostly fast and very fast. The final part included the means of game stretching aimed at stretching, relaxing tense muscles, restoring and bringing to normal the functional and mental parameters. Complexes of exercises were performed with and without special equipment at a slow pace to music.

Junior pupils' physical fitness is very important while optimizing the process of physical education. The analysis of the pupils' physical fitness results according to the Kettle index shows that more than half of the children (54.4%, 60.2%) have an average level of physical fitness before the experiment, one third of them (25.7%, 28.7%) have a low level and only (14.1%, 16.9%) showed a high level of physical development (Fig. 2).

In the experimental and control groups, the data of physical fitness of pupils at the beginning of the pedagogical experiment did not differ ($t = 0.061$, $p > 0.05$).

As a result of the experimental method influence, there is an improvement in the indices of children physical fitness by the Kettle index in pupils of control and experimental groups, which is natural, as all the children attended physical education lessons. However, in the experimental group pupils, there is a significant improvement in the results of physical development before and after the experiment, in particular the high level (from 16.9% to 43.1%) and the decrease in the average (from 54.4 to 46.8%), and especially low level of physical development (from 28.7 to 10.1%) ($p < 0.05$). Instead, in the control group pupils, no such significant changes were observed ($p > 0.05$).

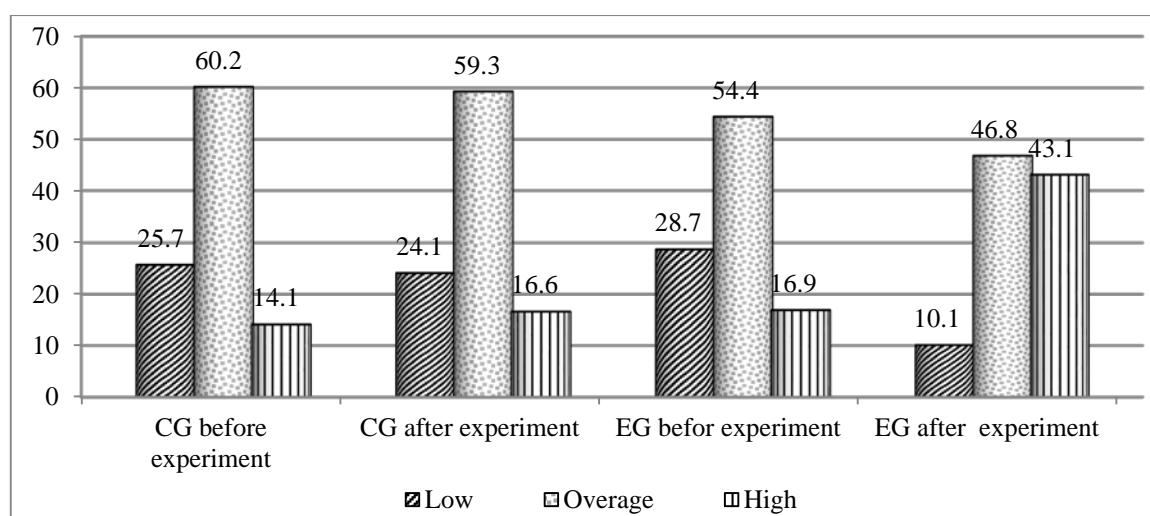


Figure 2 Indices of physical fitness by Kettle index, % (n = 82)

Positive changes also occurred in the results according to the Ruffier Dickson's test in both experimental and control groups, due to the physiological development of a child's body (Table 1).

Table 1 Levels of cardiovascular system functional status according to Ruffier Dickson index, % (n = 82)

Levels	CG		EG	
	before	after	before	after
High	0	0	0	0
Above average	5.2	5.4	4.8	14.1
Average	52.7	55.8	51.3	69.2
Below average	37.1	36.2	38.4	16.7
Low	5.0	2.6	5.5	0

Notes: EG – experimental group, CG – control group

However, there is a significant improvement in the result ($p < 0.05$) only in the experimental group pupils. Thus, as a result of the implementation of the pilot program, there was a decrease in the indices below the average level (from 38.4% to 16.7%), growth in the indices above the average level (from 4.8% to 14.1%), and indices of low level were not detected at all. The obtained results testify to the effectiveness of the author's methodology, since it included a number of aerobic exercises, as well as games and breathing exercises (poems, songs, recitatives) of certain dosage, volume, and intensity) that the pupils did during lessons which included aerobics for children. Unfortunately, it is necessary to note the fact that none of the research groups shows a high level, which depends to a large extent on the children's lifestyle, that is an area for further research.

Positive changes in the results of the junior pupils' physical fitness level in the experimental group ($p < 0.05$) in the conditions of the pedagogical experiment were found (Table 2). The indicator in control classes increased for 0.3 sec among boys and for 0.4 sec among girls in the test exercise "30 m Run" after the experiment was finished. The crucial growth was noticed among experimental classes, in particular both girls and boys got result higher for 0.8 sec.

After the exercise «tilt of the torso forward from sitting position» in the control group, the index increased in the boys by 1.3 cm, in girls – by 2.4 cm, and in the experimental group by 3.9 cm and 5.5 cm, respectively. In the experimental group significantly increased the index after the test exercise, «Long jump», so that the boys demonstrated an improvement of 14.7 cm, the girls – 22.5 cm, whereas in the control group such significant changes did not occur. After the test exercise «Shuttle running 4 × 9 m» there was a similar tendency in favor of the experimental group.

Table 2 Indices of junior pupils' physical fitness, (n = 82)

Test	Sex	Control group		Experimental group		t_{CG-EG}	
		before	after	before	after	before	after
Running 30 m (sec)	boys	6.4±0.5	6.1±0.4	6.2±0.7	5.4±0.5	0.05	0.03
	girls	6.8±0.5	6.4±0.4	6.9±0.5	6.1±0.5	0.05	0.04
Tilt the torso forward from sitting position (cm)	boys	3.3±3.4	4.6±3.1	3.5±4.2	7.4±4.6	0.05	0.04
	girls	7.5±5.2	9.9±5.6	7.2±4.4	12.7±4.5	0.05	0.02
Long jump from place (cm)	boys	135.2±12.0	143.5±13.9	140.1±17.5	154.8±14.2	0.05	0.04
	girls	123.1±16.3	129.8±16.7	127.3±12.3	149.8±15.8	0.05	0.03
«Shuttle» running 4 × 9 m (sec)	boys	11.9±1.0	10.2±1.0	11.7±1.0	9.2±0.9	0.05	0.03
	girls	12.6±1.3	10.9±1.1	12.1±1.2	10.2±1.0	0.05	0.01

Thus, after completing the experiment, the difference between the indices in the experimental and control groups was: running 30 m – boys – 0.7 s, girls – 0.3 s; tilting of the torso forward from sitting position – boys – 2.8 cm, girls – also 2.8 cm; long jump – boys – 11.3 cm, girls – 20.0 cm; «shuttle» running 4 × 9 m – boys – 1.0 s, girls – 0.7 s. The children, who studied under the experimental program, achieved significantly higher results ($p < 0.05$) compared with the control group in four types of the test exercises.

The analysis of the obtained results allowed us to establish that the change of indices in the experimental group pupils, in relation to the pupils of the control group, is characterized by a high level of statistical probability ($p < 0.05$), which confirms previous studies of scientists about the sensitive period of development of these qualities in children aged nine and causes the need for additional focus on the development of important, vital physical qualities of junior pupils.

The research revealed the influence of the author's program on the psycho-emotional state of children as well, the evaluation of which was carried out using the method of determining the state of well-being, activity, and mood (WAM). After the experiment, we can state that in the experimental group pupils, the indices of emotional state, namely the state of well-being, activity and mood increase towards a favorable high level ($p < 0.05$) (Table 3). Thus, in the experimental group pupils, after an experiment, a high (favorable) level of well-being increased from 51.2% to 55.3%, the average (norm) level – from 30.3% to 36.1%, and a decrease in the low (unfavorable) level – from 18.5% to 8.6%. A similar tendency is observed in the state of activity: the growth of a high level in the experimental group occurred from 51.5% to 57.6%, the average – from 29.1% to 34.2% and a decrease in the low level – from 19.4% to 8.2%. As for mood, we also state the growth of the high level from 60.2% to 69.3%, the average level – from 26.3% to 28.1%, and a significant decrease in the low level of

mood – from 13.5% to 2.6%. Instead, in the control group there were no positive changes at all.

Table 3 Indices of junior pupils psycho-emotional state, % (n = 82)

Levels of emotional state	Well-being				Activity				Mood			
	CG		EG		CG		EG		CG		EG	
	before	after	before	after	before	after	before	after	before	after	before	after
High	49.1	47.2	51.2	55.3	53.1	52.4	51.5	57.6	58.3	58.4	60.2	69.3
Average	28.3	27.4	30.3	36.1	28.2	27.6	29.1	34.2	26.3	27.1	26.3	28.1
Low	22.6	25.4	18.5	8.6	18.7	20.0	19.4	8.2	15.4	14.5	13.5	2.6

Notes: EG – experimental group, CG – control group

In our opinion, the growth of the psycho-emotional state in the experimental group pupils was due to the introduction of interesting, non-typical, high-emotional means, methods and interactive forms of conducting of physical culture lessons for junior schoolchildren who not only performed physical exercises, but also received positive emotional feelings and enjoyed motor activity.

Thus, it can be argued that the developed program with the use of aerobics for children in the process of physical education of junior pupils is effective and can be used to improve their physical development, psycho-emotional state and increase physical fitness of primary school children.

Discussion

Recently the educational load of pupils in general education schools has grown so much that caused by this low physical activity and restriction of muscular work becomes the cause of diseases of the organism's various systems (Moskalenko, 2009; Krusevich, 2010). The counteraction to the negative effects of limiting the motor activity of children is physical education and sports, which can be an important factor in the preservation and strengthening of health, comprehensive development, improvement of efficiency and reduction of fatigue, increase of resistance of the organism to various diseases during the period of study (Bodnar et al., 2015; Dubogai, 2017). The system of physical education at the school is aimed at the comprehensive implementation of a wide range of recreational, educational and educational tasks, respectively, it is relevant to find adequate means and methods to achieve the goals (Butenko et al., 2017; Bodnarchuk et al., 2018). One of the ways to optimize physical education is to introduce in the process of physical education aerobic technologies for children that are aimed at increasing the level of health, physical fitness, mental faculties, forming a person's ideas about a healthy lifestyle (Saykina, 2009; Starchenko, 2014).

The results of our research were confirmed and supplemented by scientists' well-known developments from this particular sphere (Vilchkovsky, 2004; Kozina et al., 2007; Palchuk, 2012; Tomenko, 2013; Pangeleva, 2017; Moskalenko, 2018).

As a result of application of the author's program using the means of children aerobics in the experimental group, the functional parameters by Ruffier Dickson index and the results of physical development according to Kettle index have significantly improved. The obtained results prove the positive influence of the developed method. The combination of aerobic and respiratory exercises improves the functioning of the cardiovascular and respiratory systems, and allows pupils to balance the weight-growth indices in accordance with individual standards.

After the pedagogical experiment, there was an improvement in the level of indices of physical fitness in the experimental and control groups, which is a consequence of the biological development of the organism and directed pedagogical influence. The use of aerobics for children of different intensity contributes to the improvement of the indices of overall endurance, flexibility, agility, speed and strength qualities, which is confirmed by significantly higher results of physical fitness and functional test in the experimental group pupils.

The obtained results showed that the implementation of the developed program positively influenced the psycho-emotional state of the children in the experimental group, which is important, as one of the main tasks of physical education is to increase the motivation and developing a stable interest in physical exercises. Conducting classes to musical accompaniment, introduction of interesting, non-typical, high-emotional exercises, game method and innovative approaches to the lesson: lesson-game, lesson-fairy tale, lesson-trip, and lesson-competition have positively influenced the indices of well-being, activity and mood of pupils during the pedagogical experiment. The developed program of the use of aerobics for children allows solving the problems of physical education for pupils of junior school age, first of all, strengthening of health, providing of harmonious development of an organism, increase of physical fitness level taking into account favorable periods of development of children's physical qualities and increase of motivation for motor activity.

Conclusions

There is a discrepancy between the ever-greater need for a healthy lifestyle in schoolchildren and the real content of education and upbringing; the need to introduce innovative technologies for the preservation and strengthening of children's health and the lack of research in this area; the popularity of aerobics

technologies in the system of physical education and the scanty scientific substantiation of the use of aerobics in the educational process of children.

The developed program with the use of aerobics for children was aimed at improving the level of physical development, physical fitness and psycho-emotional state of junior schoolchildren and was divided into two stages. During physical education lessons, it was supposed to solve the following tasks: to improve the level of children's physical fitness through the use of game aerobics and animal aerobics, the content of which includes aerobic and respiratory exercises that have a positive effect on the functioning of the cardiovascular and respiratory system of the body; to improve the level of physical fitness with the help of animal aerobics and game aerobics, which promote development of speed, strength, and coordination qualities, and game stretching aimed at development of flexibility; to raise a steady interest in exercising through the use of role-playing, game elements and musical accompaniment during the lessons.

As a result of the introduction of aerobics for children in the process of physical education in the experimental group, there was a significant improvement in the results of physical development, according to Kettle index, in particular, a high level (from 16.9% to 43.1%) and a decrease in the average (from 54.4 to 46.8%) and especially low level of physical development (from 28.7 to 10.1%) ($p < 0.05$). Probably positive changes occurred according to Ruffier Dickson test results ($p < 0.05$), namely, improving the above average level (from 4.8 to 14.1%), a decrease in lower than the average level (from 38.4 to 16.7%).

The analysis of the physical fitness results showed that in the experimental group the indicators of the test exercise «30 m run» were significantly improved. Among boys results were from 6.2 ± 0.7 sec to 5.4 ± 0.5 sec, among girls - from 6.9 ± 0.5 sec up to 6.1 ± 0.5 sec; «Tilt the body forward from sitting position» – 3.9 cm among boys, and 5.5 cm among girls, «Long jump from place» – boys got result 14.7 cm, girls – 22.5 cm, «Shuttle running 4×9 m» – boys' results are from 11.7 ± 1.0 sec to 9.2 ± 0.9 sec, girls' – from 12.1 ± 1.2 sec to 10.2 ± 1.0 sec.

The results of the study showed that due to the influence of the author's program the psycho-emotional state ($p < 0.05$) (well-being, activity, and mood) of the experimental group was significantly improved: the indices of high level as for well-being increased from 51.2% to 55.3%; activity – from 51.5% to 57.6%; mood – from 60.2% to 69.3%

Consequently, the above results of the study prove the effectiveness of the implementation of the program that includes aerobics for children and can be recommended for optimization of the physical education of junior schoolchildren.

References

- American Alliance for Health, Physical Education, Recreation and Dance. (2005). *Physical education for lifelong fitness: the Physical Best teacher's guide*. Champaign, IL: Human Kinetics.
- Bodnar, I., Petryshyn, Y., Solovei, A., Rymar O., Lapychak, I., Shevtsiv, U., Ripak, M., Yaroshyk, M., & Sorokolit, N. (2016). Health complaints and well-being complaints among secondary school children. *Journal of physical education and sport*, 16(3), 905-909.
- Bodnar, I., Rymar, O., Solovey, A., & Datskiv, P. (2015). Objective criterias for determining the functional-reserve opportunities of middle-school-age pupils. *Pedagogy, psychology and medical and biological problems of physical education*, 11, 11-19.
- Bodnarchuk, O., Rymar, O., & Solovey, A. (2018). Interaction of school and family in physical education of first grade pupils. *Journal of physical education and sport*, 18(2), 1092-1098.
- Butenko, H., Goncharova, N., & Saienko, V. (2017). Physical condition of primary school children in school year dynamics Department of Theory and Method Published. *Journal of Physical Education and Sport*, 21(2), 543-549.
- Hawley, E., & Franks, B. (2000). *Health-Related Aerobics*. 367. Kyiv.
- Krutsevych, T., & Bezverkhnya, G. (2010). *Recreation in physical culture of different population groups*. Kyiv.
- Moskalenko, N.V. (2009). *Theoretical and methodological foundations of innovative technologies in the system of physical education of younger students ("Physical culture, physical education of different population groups")*: author. diss. of the Doctor of Science in Physical education and sport. 42. Kyiv.
- Ohnystyj, A. (2010). *Theoretical and methodical principles of preschool children' physical education*. 132 Ternopil.
- Sacheck, J.M., & Hall, M. (2014). Current Evidence for the Impact of Physical Fitness on Health Outcomes in Youth. *American Journal of Lifestyle Medicine*, 2. DOI: <https://doi.org/10.1177/1559827614537780>
- Sarkauskiene, A., Noble, B., & Kardeliene, L. (2019). Non – formal physical education influence on health related physical fitness of children. *Society. Integration. Education. Proceedings of the International Scientific Conference. IV*, 252-267. DOI: <http://dx.doi.org/10.17770/sie2019vol4.3865>
- Sorokolit, N., Shyan, O., Lukjanenko, M., & Turchyk, I. (2017). Improvement of 5-9th grades schoolchildren physical education in ukraine by using variable modules curriculum. *Journal of Physical Education and Sport*, 17(4), 2110-2115.
- Starchenko, A.Y. (2014). Children's fitness as one of the effective ways of improving the health and physical education of preschool-age children. *Pedagogical sciences: theory, history, innovative technologies*, 2(36), 177-184.
- Weinberg, R., & Gould, D. (2003). *Foundations of sport & exercise psychology: third edition*. Human Kinetics.

SKOLAS VADĪBAS DARBĪBU IETEKMĒJOŠIE FAKTORI: LATVIJAS GADĪJUMA IZPĒTE

Identifying Factors Influencing School Leadership Practices: Case Study of Latvia

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Abstract. *Based on the analysis of research literature and empirical data, the study aims to identify significant factors affecting school leadership practices in Latvia. In addition to studies of scientific literature, the authors used qualitative research methods – in-depth interviews with 7 school leadership teams of the same municipality and expert focus group discussion to describe the influencing factors that are relevant in the context of Latvia. As a result of the study, the authors identified that school leaders' work experience, beliefs and mental models, social skills and impact of the external parties have an influence on their practices.*

Keywords: *influencing factors, school effectiveness, school leadership.*

Ievads

Introduction

Gan zinātniskā literatūra, gan pētījumi parāda, ka skolas vadība ir būtisks skolēnu mācīšanās ietekmējošs faktors (Leithwood, Harris, & Hopkins, 2008; Leithwood & Jantzi, 2006; Hallinger, 2011). Tas ir jo īpaši būtiski pašreizējā Latvijas kontekstā, kad vispārējā izglītībā tiek īstenota mācību satura un pieejas reforma. Skolas vadītājiem pārmaiņu procesu vadīšanā un ieviešanā ir būtiska loma (Fullan, 2015) un tādējādi viņiem ir ietekme uz to, cik veiksmīgi šī reforma var tikt īstenota skolas līmenī.

Apzinoties skolas vadības darbību nozīmīgumu, pētījuma autori izstrādā efektīvas skolas vadības modeļus (Saleniece, Namsone, Čakāne, & Butkēviča, 2019), kuru ilgtermiņā plānots izmantot kā pamatu skolas vadības profesionālās pilnveides pieejas un risinājumu izveidei.

Šī pētījuma mērķis ir izpētīt skolas vadības darbības ietekmējošos faktorus, konkrētāk fokusējoties uz Latvijas skolas vadītāju priekšstatu izpēti par viņu praksi ietekmējošiem faktoriem un izmantojot kvalitatīvo pētīšanas

metodoloģiju – intervijas ar vienas pašvaldības 7 skolu vadības pārstāvjiem un ekspertu fokusgrupas diskusiju.

Metodoloģija *Methodology*

Pētījums balstās uz kvalitatīvo pētīšanas metodoloģiju, un kā datu vākšanas metode ir izvēlēta daļēji strukturēta intervija un izglītības ekspertu fokusgrupas diskusija.

Pētījuma ietvaros ir notikusi 21 intervija ar vienas pašvaldības 7 skolu vadības komandām – direktoru un diviem vietniekiem. Ekspertu fokusgrupas diskusijā piedalījās 12 izglītības eksperti, kuri nodarbojas gan ar pētniecību, gan ar pedagogu un skolas vadības profesionālās pilnveides aktivitātēm, tajā skaitā, arī konkrētajās 7 skolās.

Kā datu apstrādes metode izvēlēta tematiskā kodēšana. “Kods” ir apzīmējums, nosaukums kādai interviju teksta daļai, kas satur kādu pētniecības jautājuma kontekstā būtisku ideju, domu. Tas pats kods tiek piešķirts citām interviju teksta daļām, kas apzīmē tādas pašas vai līdzīgas idejas (Gibbs, 2007 in Cohen, Manion, & Morrison, 2011). Interviju kodēšanas noslēgumā līdzīgie kodi (piemēram, “iepriekšējā darba pieredze”, “vadības prasmes”, u.c.) tiek apvienoti lielākās tematiskās kategorijās, kas veido faktoru grupas, kas aprakstītas sadaļā “Rezultāti un diskusija”. Primāri tematiskās kodešanas struktūra saturiski balstās uz Hallinger (2011) skolas vadības modeli, kas apvieno pēdējo pāris desmitgažu vadošo skolas vadības pētnieku idejas. Piemēram, šajā modelī norādīts, ka skolas vadības rīcību tiešā veidā ietekmē “uzskati un vērtības” un “zināšanas, prasmes un pieredze” un papildu ietekmējošie vides faktori (Hallinger, 2011).

Tādējādi pētījuma ietvaros tiek salīdzināts Hallinger (2011) modelis un citi literatūras izpētē identificētie pētījumi, pieejas ar Latvijas situāciju, analizējot pētījuma ietvaros iegūtos datus un izdarot secinājumus par Latvijai specifiskiem aspektiem, kas ietekmē skolas vadības darbību, rīcību.

Primāri tiek apskatītas divas lielas ietekmējošo faktoru grupas:

(1) Iekšēji faktori – indivīda līmenis:

- Kas kļūst par skolu vadītājiem (pieredze, zināšanas)?
- Kādi ir skolu vadītāju uzskati un priekšstati par savu lomu, par vadības darbu, par skolu, par to, kas ir vērtīgs (uzskati un vērtības)?
- Kādas vadītāja prasmes ir būtiskas (prasmes)?

(2) Ārēji jeb kontekstuālie faktori:

- Vai un kāda ir “ārējo spēku” ietekme uz vadītāja rīcību (institucionālā sistēma, kopiena, sabiedrības kultūra)?

Galvenais pētniecības jautājums ir: Kādi ir galvenie skolas vadības darbību ietekmējošie faktori Latvijas skolas vadītāju skatījumā (kas ir tie faktori, uz kuriem atsaucas paši skolu vadītāji, kuri faktori tiek izcelti, kuri faktori raksturo Latvijas kontekstu).

Teorētiskais ietvars *Theoretical Framework*

Skolas vadības pētniecībā skolas vadītāju darbību efektivitāte un tās ietekme uz skolēnu mācīšanos ir pēdējās pāris dekādēs plaši pētīta joma (Hallinger, 2011; Leithwood, Harris, & Hopkins, 2008; Leithwood & Jantzi, 2006). Salīdzinot ar pētniecību par efektīvām skolas vadītāju darbībām – kādas tās ir, mazāk pētīts jautājums ir tas, kādi ir faktori, kas ietekmē skolas vadītāju darbu. Turklāt, šī pētījuma ietvaros autori koncentrējas uz faktoriem, kas ietekmē Latvijas skolas vadības efektivitāti pašu skolas vadītāju skatījumā,

Skolas vadība ik dienas izdara izvēles par labu kādai konkrētai vadības pieejai, rīcībai. Zinātniskajā literatūrā tiek apskatīti faktori, kas ietekmē šīs izvēles un skolas vadības darbu.

Kopumā iespējams izdalīt divas lielas faktoru kategorijas jeb kopas: individuāli jeb iekšējie faktori un kontekstuālie jeb ārējie faktori. Lai arī šādu dalījumu neizmanto visi autori un daudzos no modeļiem, pieejām ir grūti nošķirt un novilkt robežas, šādu pieeju ir iespējams identificēt dažādu autoru izstrādātos modeļos par veiksmīgu vai efektīvu skolas vadību.

Hallinger (2011), kas ir autors vienam no zināmākajiem skolas vadības modeļiem, kas aptver 40 gadu pētniecības rezultātus, izceļ divas galvenās individuālo jeb iekšējo faktoru grupas, kas ietekmē skolas vadību – “uzskati un vērtības” un “zināšanas, prasmes un pieredze”; un vairākas ārējo faktoru grupas, proti, Hallinger norāda, ka skolas vadība darbojas atvērtā sistēmā, kuru ietekmē “sabiedrības kultūra”, “institucionālā sistēma”, “skolas organizācija” un tas, kādi ir “darbinieki un kopiena” (Hallinger, 2011).

Tās pārklājas un tajā pašā laikā tiek papildināts Gurr, Drysdale un Mulford (2006) izstrādātajā “Austrālijas modelī veiksmīgai skolas vadībai”, kur aprakstīti šādi individuālie jeb iekšējie skolas vadītāja darbu ietekmējošie faktori: īpašības, kompetences, vērtības un uzskati, attieksme pret pārmaiņām, konkurējošu vērtību radoša vadīšana, pieredze, profesionālā mācīšanās, redzamība, uzticēšanās, paredzētais darba termiņš skolā, savas lomas skaidrība.

Tāpat pētījumi parāda, ka ja skolas vadītājam piemīt noteiktas rakstura īpašības – atvērtība, gatavība mācīties, elastīga domāšana, izturība un optimisms – viņa darbība ir efektīva un tas savukārt atstāj ietekmi uz skolu un skolēnu mācīšanos (Leithwood, Harris, & Hopkins, 2008). Tāpat ir autori, kas akcentē to, ka skolas vadības efektivitāti vistiešāk ietekmē skolas vadītāja sociālās prasmes,

kas izpaužas gan kā skolas vadītāja emocionālā inteligence, gan kā skolas vadītāja-politiķa prasmes (ietekme, tīklošanās spēja, u.c.) (Taliadorou & Pashiardis, 2015).

Savukārt pie ārējiem jeb kontekstuāliem faktoriem tiek atzīmēta, piemēram, sociāli ekonomiskā situācija, citu organizāciju programmas un politikas, vietējās kopienas gaidas un atbalsts (Gurr, Drysdale, & Mulford, 2006). Pollock, Wang un Hauseman (2017) izceļ šādas faktoru grupas, kas ietekmē skolas vadības darbību efektivitāti – mācību darba vadība, administratīvie/vadības pienākumi, sadarbības un attiecību veidošana, izglītības politikas iniciatīvas un ārējās ietekmes (piemēram, tehnoloģiju attīstība vai skolēnu skaita izmaiņas).

Rezultāti un diskusija *Results and Discussion*

Balstoties uz Hallinger (2011) skolas vadības modeli, interviju un ekspertu fokusgrupas diskusijas rezultātā iespējams identificēt sekojošas galvenās skolas vadības darbību ietekmējošas faktoru grupas, kuras kā būtiskas atzīmē paši skolu vadītāji:

(1) **Darba pieredze** – Pētījuma ietvaros veiktās intervijas parāda, ka ļoti bieži par skolas direktoru vai direktora vietnieku kļūst skolotāji – “Iepriekš strādāju par sākumskolas skolotāju” (Intervējamais). Jāņem vērā, ka skolas vadītāja loma būtiski atšķiras no skolotāja lomas. Gan skolas mērķi un stratēģiskās plānošanas mērogs, gan attiecību veidošana ar dažādām iesaistītajām pusēm (skolas vadība – skolotājs, skolas vadība – pašvaldības vadītājs, izglītības pārvaldes speciālisti, u.c.) atšķiras no skolotāja mērķiem un plānošanas mēroga (konkrēts mācību priekšmets/i, mācību stunda) un skolotāja attiecību veidošanas ar dažādām iesaistītajām pusēm (skolotājs – skolēni, u.c.). Iespējams secināt, ka ja skolotājam nav iespējams veidot un attīstīt ar vadīšanu saistītas kompetences, tad pastāv risks, ka skolotājs, lai arī formāli jaunā sociālajā lomā, turpina īstenot savā iepriekšējā lomā pieredzētās pieejas, tādējādi apdraudot efektīvu partnerību un komunikācijas veidošanu, mērķtiecīgu skolas attīstības plānošanu.

Efektīva skolas vadība nesākas no amata nomaiņas. Tricia Browne-Ferrigno, balstoties uz savu pētījumu par skolas vadītāju sagatavošanu, atzīmē, ka iespējams runāt par “tapšanu par skolas vadītāju” un ka tas ir process, kas aptver (a) vadības lomas konceptualizācija, (b) sākotnēju socializāciju jaunā profesionālajā kopienā, (c) lomas-identitātes transformāciju, (d) mērķtiecīgu iesaisti, kas balstās konkrētos karjeras mērķos (Browne-Ferrigno, 2003). Šajā pār-tapšanas procesā būtiska loma ir refleksijai – spējai izvērtēt, pārdomāt pārmaiņas attiecībā uz savu identitāti, piederību jaunai profesionālajai kopienai.

Šī pētījuma ietvaros veiktajās intervijās vairāki intervējamie atsauca uz nepietiekamu vadītāja darba pieredzi vai nepietiekamu kādas konkrētas darbības veikšanas pieredzi kā vienu no vienu no viņu darbu ietekmējošiem faktoriem:

- Intervētājs: “Vai Jūs regulāri runājat ar katru [skolotāju]?”
- Intervējamais: “Man nav tādas pieredzes, nerunājam. [..] Nu, nevaru apgalvot, ka man sanāk. Sāku apjaust, kā varu palīdzēt. Sāku ar dokumentiem.”

Skolas vadītāju profesionālās kompetences un jo īpaši ar vadību (stratēģiskā plānošana, komunikācija, partnerību veidošana, u.c.) saistītu prasmju attīstība ir būtiska. Ja skolas vadītājiem nav šādu iespēju vai nav motivācijas attīstīt vadības prasmes, tad viņu lomas īstenošana ir apgrūtināta. TALIS 2018 pētījums parāda, ka Latvijā tikai 36% skolu vadītāju ir pabeiguši apmācību programmu vai kursus par skolas vadību vai direktoru izglītības programmu vai kursus (OECD vidēji – 54%), savukārt 45% no viņiem pirms stāšanās direktora amatā ir pabeiguši izglītības vadības programmu vai kursus (OECD vidēji – 54%). Tas kopumā raksturo Latvijas situāciju – lielai daļai skolu vadītāju pietrūkst specializētas izglītības, profesionālās pilnveides.

(2) **Priekšstati un domāšanas modeļi** – iepazīstoties gan ar zinātnisko literatūru, gan analizējot pētījuma ietvaros iegūtos datus, iespējams secināt, ka viens no visbūtiskākajiem skolas vadības darbību ietekmējošiem faktoriem ir individuālie priekšstati un domāšanas modeļi. Senge, kurš ir viens no pamatlicējiem idejai par “organizāciju, kas mācās”, atzīmē, ka domāšanas modeļi ir “vienkārši vispārinājumi kā piemēram “nevienam nevar uzticēties” vai tikpat labi arī kompleksas teorijas kā piemēram “mani individuālie pieņēmumi par to, kāpēc manas ģimenes locekļi viens pret otru izturas tā, kā viņi izturas”” (p. 164, Senge, 2006). Viņš arī uzsver, ka domāšanas modeļi ir aktīvi un tie nosaka to, kā mēs rīkojamies. Būtībā skolas vadības priekšstati, domāšanas modeļi, pieņēmumi gan par savu lomu, gan par attiecībām ar kādu no grupām lielā mērā ietekmē to, kāda šī loma ir un kādas attiecības ar katru konkrēto grupu veidojas. Respondenti intervijās netieši apstiprina, ka, lai panāktu kādas ārējas pārmaiņas, pārmaiņas darbībā, nepieciešams mainīties iekšēji, mainīt domāšanu: “Mainām uztveri, jābūt gataviem mainīties” (Intervējamais), “Nepieciešamība mainīt domāšanu” (Intervējamais).

Jau 1990.gadā viens no skolas vadības pētniecības pamatlicējiem Leithwood ar autoru kolektīvu atzīmēja, ka skolas vadības praktiskās darbības ietekmē (1) ārējās ietekmes, (2) skolas vadītāja domāšanas/mentālie procesi, ar to saprotot viņa uzskatus, vērtības un problēmu risināšanas pieejas (Leithwood, Begley, Bradley Cousins, 1990). Šajā kontekstā Taylor norāda uz sakarību starp skolas vadības efektivitāti un skolas vadības pārliecību, ka “katrs skolēns var” (Taylor in Leithwood, Begley, Bradley Cousins, 1990).

Tāpat intervijās gūtie dati parāda atšķirīgus skolas vadības pārstāvju uzskatus par savu lomu, proti, atbildot uz jautājumiem, kas saistīti ar viņu lomu, tiek minēti dažādi sekojošie aspekti: “skolotāji sagaida skaidru notikumu gaitu, skaidrus mērķus” (Intervējamais), “pieskatīt dokumentāciju” (Intervējamais), “mans pienākums ir domāt par visu” (Intervējamais), “administrācijai ir jānodrošina atbalsts” (Intervējamais), “tāpēc arī piekritu šim darbam – lai palīdzētu” (Intervējamais).

Ekspertu fokusgrupas diskusijā atzīmēti arī traucējoši skolas vadības domāšanas modeļi, kas var radīt riskus skolas attīstībai un pārmaiņu ieviešanai – piemēram, “dubultmorāle jeb runāt vienu un darīt citu” (Fokusgrupas dalībnieks), “demonstrācija, ka viss (papīri) ir kārtībā un ar to saistīta izlikšanās” (Fokusgrupas dalībnieks) u.c.

(3) **Vadītāja sociālās prasmes** – prasme sadarboties un veidot attiecības ar skolotājiem un vecākiem, kā arī citiem sadarbības partneriem (pašvaldība); atsaucoties uz literatūras izpētes sadaļā minēto uzsvaru uz skolas vadības sociālajām prasmēm, kā arī tādām skolas vadītājam būtiskām vērtībām kā atvērtība u.c., interviju rezultātā kā ietekmējošu faktoru ir iespējams izcelt arī skolas vadības kapacitāti sadarboties un veidot cieņpilnas attiecības ar skolotājiem un vecākiem. Ir skolas vadības pārstāvji, kuru attiecību modeli ar skolotājiem var raksturot šādi - “Vienmēr administrācija vainīga. Es to neuztveru personīgi, jo vienmēr tā būs” (Intervējamais). Tāpat arī vērtējot respondentu atbildes par skolas vadības un skolas attiecībām ar vecākiem, iespējams saklausīt gan to, ka notiek sarunas, tikšanās, gan arī to, ka vecāki “bombardē” (Intervējamais) skolu.

(4) **Ārējo spēlētāju ietekme (ārēja motivācija)** – ņemot vērā, ka vispārējās izglītības iestādes vadītāju pieņem darbā (un arī atbrīvo no darba) attiecīgās izglītības iestādes dibinātājs – pašvaldība, tad starp skolas vadību un pašvaldību pastāv savstarpēji ciešas un atkarīgas attiecības. Lielākā daļa intervējamo norāda uz to, ka pašvaldības darba pieeja, stratēģiskais redzējums būtiski ietekmē arī skolas darbu:

“Tāda īpaša pasūtījuma vai redzējuma, vai sistēmiskas pieejas diemžēl, diemžēl nav. Droši vien kaut kādu stratēģisku pieeju, plānojot darba uzdevumus vai mērķus, mēs gribētu vairāk redzēt; es arī gribētu, lai izglītības pārvalde būtu iedziļinājusies konkrēti manas skolas specifikā” (Intervējamais);

“Sadarbība saimnieciskos jautājumos, bet skolas attīstība, tālākizglītība... katra skola “dreifē”, kā nu prot” (Intervējamais);

“Mums būtu vajadzīgs vienots redzējums, bet pastāv konkurence, nomelnošana” (Intervējamais).

Tāpat intervijās, komentējot sadarbību ar pašvaldību, respondenti min tādas vārdus, kā “rakstīt paskaidrojumu” un “kontroles mehānismi”. Šajā kontekstā

vērtīgi vilkt paralēles ar zinātniskajā literatūrā aprakstītajiem trīs skolas vadības modeļiem:

- Menedžera pieeja (angļu val. – managerial) – primāri skolas vadītājs vada valdības iniciētas aktivitātes; viņa galvenā loma ir saistīta ar veiksmīgu ārēji noteiktu pārmaiņu ieviešanu;
- Mācību vadība (angļu val. – instructional) – skolas vadītājs tiek uztverts kā būtiskākais zināšanu resurss, domājot par skolas mācību satura un pieejas attīstību;
- Uz pārmaiņām orientētā pieeja (angļu val. – transformational) – balstās uz uzskatu, ka skola var būt ne tikai ārēji noteiktu pārmaiņu ieviešana, bet arī pārmaiņu iniciētāja; tas paģēr skolas vadītāja attiecības un sadarbību ar skolotājiem un citām iesaistītajām pusēm, lai īstenotu skolas prioritātes (Bush & Glover, 2014).

Šādā pašvaldība-skola attiecību un sadarbības modelī **skolas vadība primāri ieņem menedžera jeb no ārpusē uzdotu uzdevumu izpildītāja lomu**. Arī izglītības eksperti fokusgrupas diskusijā atsaucas uz skolu vadītāju teikto par savu salīdzinoši pasīvo un izpildītāja lomu izglītības politikas ieviešanā - “pie mums ir pierasts – ko man liks, to es darīšu. Sagaidīsim augstā ministrijas norādījumus un tad arī darīsim. Šajā valstī vienmēr ir bijušas instrukcijas, kā un ko darīt. Kādi ir pierādījumi? Tādi, ka es pati esmu bijusi mācību pārzine” (Fokusgrupas dalībnieks).

Fokusgrupas diskusijas laikā eksperti secina, ka šie “ārējie spēki”, kurus skolu vadītāji nosauc, kā tos, kuriem jāatbild par kādām darbībām, ir ne tikai pašvaldība un Izglītības un zinātnes ministrija, bet arī Izglītības kvalitātes valsts dienests (IKVD) – “Ir vēl viena institūcija – IKVD, kas kaut ko kontrolē, kas veido brīdinājuma sistēmu” (Fokusgrupas dalībnieks), “Skolu vadītāji pauž bailes no IKVD, no akreditācijas” (Fokusgrupas dalībnieks). Fokusgrupas diskusijas dalībnieki secina, ka ievērojama daļa skolu “strādā uz ārējo dzinuli” t.skaitā “strādā uz akreditāciju”, proti, savā darbībā primāri fokusējas uz atskaitīšanos un atbildēšanu valsts vai pašvaldības iestādēm.

Šāds atskaitīšanās modelis ietekmē skolas vadības iniciatīvu, atbildību un spēju veidot un virzīt pārmaiņas. Tas var kļūt par paša skolas vadītāja domāšanas veidu – gaidīt, kad tiks dots uzdevums nevis virzīties, darīt, iniciēt pārmaiņas pašam. Tāpat arī šāda pieeja var tikt pārnesta uz skolas ikdienas praksi, skolas vadības un skolotāju attiecībām; ņemot vērā, ka skolas vadītājs nereti ir piemērs skolotājiem. Viens no intervijas respondentiem atzīst:

“Mēs baidāmies pateikt, ka kaut kur nesanāks, kā tu dari. Tā sajūta, ka nevar kļūdīties...” (Intervējamais).

(5) **Resursi (nauda un laiks)** – gan intervijās, gan arī ekspertu fokusgrupas diskusijā parādās arī nauda un laiks kā būtisks ietekmējošais faktors, kāpēc skolas vadība var vai nevar kaut ko īstenot.

(6) **Sistēmiski, izglītības politikas konteksti** – papildus vietēja mēroga kontekstiem, kurus lielā mērā iezīmē pašvaldība kā vēl viens būtisks skolas vadības darbību ietekmējošs faktors jāatzīmē arī izglītības politikas nacionālā mērogā ietekme un dažādas sistēmiskas pārmaiņas, iniciatīvas:

“[Esam] lielu pārmaiņu priekšā, ņemot vērā valsts prasības, pilsētas prasības, ņemot vērā mūsu iekšējās prasības” (Intervējamais).

Secinājumi *Conclusions*

Skolas vadības darbības ietekmē gan iekšēji (skolas vadītāja prasmes, zināšanas, vērtības, uzskati), gan ārēji (vide, konteksti, atbildības sviras) faktori. Kopumā skolas vadības darbu ietekmējošie faktori ir būtisks pētniecības objekts, tā kā to izpratne sniedz iespēju novērtēt, kāpēc kādas no skolas vadības darbībām kādā no kontekstiem nav efektīvas.

Analizējot Latvijas 7 skolu vadītāju un vietnieku intervijas un ekspertu fokusgrupas diskusijas rezultātus, autori secina, ka liela nozīme skolas vadības darbā ir tās domāšanai, proti, uzskatiem, pieņēmumiem, priekšstatiem. Skolas vadības uzskati par to, kāda ir efektīva skolas vadība, kāda ir efektīva sadarbība ar vecākiem, kāda ir efektīva skolotāju atbalstīšana, u.c., būtiski ietekmē to, kas notiek skolā un kā tā spēj īstenot savu efektivitātes potenciālu. Tāpat apzinoties skolas vadītāju darbību ietekmi uz skolēnu mācīšanos (Leithwood, 2006, 2008; Hallinger, 2011; Waters, Marzano, & McNulty, 2003), ir būtiski apzināties šo priekšstatu nozīmi skolas vadības darbā.

Attiecībā uz ārējiem faktoriem pētījums parāda tendenci, ka skolas vadības motivāciju lielā mērā ietekmē dažādi ārēji spēki (pašvaldība, ministrija, IKVD). Šādas savstarpēji atkarīgas attiecības nodrošina tas, ka tiek īstenots uzraudzības un atskaitīšanās modelis, kurā skolai ir jāparāda tās sniegums, “jāsaņem atzīme”. Tas ir pretrunā ar aktuālajos normatīvajos aktos uzņemto kursu un nostiprināto ideju par skolas autonomijas palielināšanu. Papildus šāda veida attiecību modelis tiek ieviests arī skolas vidē, skolas sistēmā, tādējādi apdraudot iniciatīvu, atbildības uzņemšanos.

Summary *Kopsavilkums*

Based on the analysis of research literature and empirical data, the study aimed to identify significant factors affecting school leadership practices in Latvia. Research on effective school leadership and school leadership practices is critical, considering that Latvia is undergoing a

nation-wide curriculum reform in general education, with an aim to develop students' 21st century skills. Research shows that school leadership has a key role in the way how the change is managed and reforms are implemented at the school level. Thus, awareness and understanding of the factors affecting school leadership practices provides an opportunity to support school leadership in becoming more effective with regard to change management.

In research literature, the factors affecting school leadership practices are divided into two main groups: external factors and internal factors. In addition to studies of scientific literature, the authors used qualitative research methods – in-depth interviews with 7 school leadership teams of the same municipality and expert focus group discussion to describe the influencing factors from the perspective of the school leaders themselves; and that are relevant in the context of Latvia.

As a result of the study, the authors identified that school leaders' work experience, beliefs and mental models, social skills and impact of the external parties have an influence on their practices. The research contributes to understanding of the specifics of school leadership in Latvia, and gives signals to educational researchers and policy makers about barriers and opportunities related to school improvement, governance, school leadership development and their capacity building. Furthermore, this research is a contribution to a large-scale study conducted by the authors, looking at the effectiveness of the school from the perspective of school leadership factors, teacher-related factors and environmental factors.

Literatūras saraksts

References

- Browne-Ferrigno, T. (2003). Becoming a Principal: Role Conception, Initial Socialization, Role-Identity Transformation, Purposeful Engagement. *Educational Administration Quarterly*, 39(4), 468-503. DOI: 10.1177/0013161X03255561
- Bush, T., & Glover, D. (2014). School leadership models: what do we know?. *School Leadership & Management*, 34(5), 553-571. DOI: 10.1080/13632434.2014.928680
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research Methods in Education* (6th ed.), New York: Routledge.
- Fullan, M. (2015). *The new meaning of educational change* (5th ed.), New York: Teachers College Press.
- Crow, G., Day, C., & Møller, J. (2016). Framing research on school principals' identities. *International Journal of Leadership in Education*. DOI: 10.1080/13603124.2015.1123299
- Gurr, D. (2017). A Model of Successful School Leadership from the International Successful School Principalship Project. In Leithwood K., Sun J., Pollock K. (Eds.), *How School Leaders Contribute to Student Success. Studies in Educational Leadership* (pp. 15-30), vol 23. Springer, Cham.
- Hallinger, P. (2011). Leadership for learning: lessons from 40 years of empirical research. *Journal of Educational Administration*, 49(2). DOI: 10.1108/09578231111116699
- Leithwood, K., Begley, P., & Bradley Cousins, J. (1990). The Nature, Causes and Consequences of Principals' Practices: An Agenda for Future Research. *Journal of Educational Administration*, 28(4). DOI: 10.1108/09578239010001014
- Leithwood, K., Harris, A., & Hopkins, D. (2008). Seven strong claims about successful school leadership. *School Leadership and Management*, 28(1), 27-42. DOI: 10.1080/13632430701800060

- Leithwood, K., & Jantzi, D. (2006). Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practices. *School Effectiveness and School Improvement*, 17(2). DOI: 10.1080/09243450600565829
- Organisation for Economic Co-operation and Development., & Teaching and Learning International Survey. (2018). *Country Note: Latvia*. Paris: OECD, Teaching and Learning International Survey.
- Pollock, K., Wang, F., & Hauseman, D.C. (2017). Complexity and Volume: An Inquiry into Factors That Drive Principals' Work. In Leithwood K., Sun J., Pollock K. (Eds.), *How School Leaders Contribute to Student Success. Studies in Educational Leadership* (vol. 23, pp. 209-238), Springer, Cham.
- Saleniece, I., Namsone, D., Čakāne, L., & Butkēviča, A. (2019). Towards a context-specific school leadership competence framework: a case study of Latvia. *Proceedings of the ATEE spring conference*, 7-8.06.2019. Riga, Latvia.
- Taliadorou, N., & Pashiardis, P. (2015). Examining the role of emotional intelligence and political skill to educational leadership and their effects to teachers' job satisfaction. *Journal of Educational Administration*, 53, 642 – 666. DOI: 10.1108/JEA-02-2014-0025

ИСПОЛЬЗОВАНИЕ ЭЛЕМЕНТОВ ФРАКТАЛЬНОЙ ГЕОМЕТРИИ КАК СРЕДСТВО ЭСТЕТИЧЕСКОГО ВОСПИТАНИЯ МЛАДШИХ ШКОЛЬНИКОВ

The Use of Fractal Geometry Elements as a Means of Aesthetic Education of Primary School Students

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Abstract. *Currently, the issue of aesthetic education is becoming one of the key issues in the field of education. The relevance of the article is due to the fact that mathematics has great aesthetic potential, which is not always revealed in the process of teaching mathematics in elementary school. An important role in revealing the beauty of mathematical content in elementary school is played by the familiarity of schoolchildren with a young rapidly developing mathematical field - fractal geometry. In order to prove the effectiveness of using fractal geometry elements for the formation of aesthetic representations of younger schoolchildren, a formative experiment was carried out, with the help of testing we diagnosed changes in the level of formed aesthetic representations, feelings and judgments of younger schoolchildren during the experimental work. The tools and methods of using the elements of fractal geometry in the study of mathematics in elementary school are described. The results of the study allow us to conclude that the familiarity of primary schoolchildren with fractals increases the interest of students in mathematics. The amazing simplicity of fractals and the diversity of their forms contributes to the formation of aesthetic ideas and feelings among younger students. The construction of fractals in the study of geometric objects in elementary school makes it possible to show students that aesthetic pleasure is provided not only by art, but also by the joy of creativity in other fields of activity, including teaching.*

Keywords: *aesthetic education, aesthetic representations, fractals, primary school students.*

Введение

Introduction

Актуальность задачи повышения качества духовно-нравственного воспитания личности связана с изменениями, происходящими в сфере образования, переосмыслением его содержания, целей и задач. В условиях современного информационного общества проблема эстетического воспитания подрастающего поколения относится к одним из главных для области образования.

Эстетические представления младших школьников являются определенной ступенью эстетического освоения ими окружающего мира. Опираясь на требования ФГОС НОО можно сделать вывод, что общеобразовательное учреждение должно способствовать развитию у обучающихся художественного вкуса, учить анализировать явления с позиции эстетики, создать условия для нравственного развития личности. Приобщение школьников к красоте способствует их духовному обогащению, вызывает у них желание создавать прекрасное в разных видах деятельности.

Принято считать, что эстетически воспитывать школьников в основном целесообразно на занятиях по предметам гуманитарного цикла. Однако естественно-математические дисциплины, в том числе и математика, обладают значительным эстетическим потенциалом.

Актуальность проблемы духовно-нравственного, эстетического воспитания школьников средствами математики обуславливает необходимость теоретического и экспериментального исследования процесса развития эстетической культуры обучающихся при изучении математики с целью определения средств и методов организации образовательной деятельности, направленной на формирование у учащихся эстетических представлений.

В данной статье раскрываются некоторые аспекты методики организации деятельности младших школьников при изучении математического содержания, нацеленной на формирование у школьников эстетических представлений, на использование элементов фрактальной геометрии как средства эстетического воспитания младших школьников на уроках и внеклассных занятиях по математике.

Теоретическая основа темы *The theoretical background*

Ученые, изучающие педагогические и методические аспекты эстетического воспитания на уроках и на внеклассных занятиях в современной школе (Gubanihina, 2017; Emelina, 2016; Firstova, 2016; Petrakova, 2016 et al.), акцентируют внимание на необходимости возрождения духовно-нравственной и эстетической культуры обучающихся.

В рамках проблематики исследования под эстетическим воспитанием будем понимать целенаправленный процесс развития творческой личности, которая будет способна чувствовать, ценить и создавать художественные ценности (Lihachev, 1985). Вслед за И.Ф. Гончаровым (Goncharov, 2006) будем рассматривать эстетическое воспитание в школе как организованный процесс развития у обучающихся эстетического осознания, художественного вкуса, чувства прекрасного, потребности видеть, осознавать и ценить

красоту окружающего мира. Согласно И.Ф. Гончарову (Goncharov, 2006), целью эстетического воспитания в образовательном пространстве школы является формирование эстетической культуры школьника, причем под эстетической культурой автор понимает элемент духовной культуры личности, связанный с эстетическим отношением человека к окружающей природе и искусству, с опытом художественной деятельности, отражающий совокупность приобретенных в процессе деятельности эстетических знаний, чувств, интересов, сформированный художественный вкус.

Начальной ступенью эстетического освоения школьниками окружающей действительности являются эстетические представления, формируемые в начальной школе. Они расширяют кругозор младшего школьника и, благодаря эмоциональной насыщенности, раскрывают важнейшие процессы духовного мира ребенка. Под эстетическими представлениями будем понимать сформированный чувственно-наглядный образ, который может служить основой для оценки личностью реальных объектов окружающего мира - источников эстетических переживаний ребенка. Эстетические представления, с одной стороны, всегда образны, красочны, личностно-значимы, с другой - отличаются общностью, в них отражаются общие эстетические свойства реальных объектов, окружающих человека.

Обладает ли математика красотой? О значении красоты математики задумывались многие ученые. Дж. фон Нейман писал о том, что математика движима практически лишь эстетическими мотивами. Известный физик 20 века А. Пуанкаре полагал, что люди, которые знают тайны математики, испытывают наслаждение, похожие на те, которые люди испытывают при прослушивании музыки или разглядывании живописи. Они восхищаются изящной гармонией чисел и форм, восхищаются, когда какое-либо новое открытие раскрывает перед ними неожиданные перспективы (Puankare, 1990).

Красота математической науки связана со спецификой и особенностями предмета математики, который характеризуется богатым содержанием математических формул и понятий, совершенной структурой математического языка, эстетикой доказательств, красотой геометрических объектов, изяществом способов решения математических задач и универсальностью математических методов. Красота математического объекта раскрывается в процессе математической деятельности через логичность рассуждений и доказательств; простоту, оригинальность и неожиданность математической модели; соответствие математического объекта его стандартному образу (Sarancev, 2003, 45).

К средствам эстетического воспитания обучающихся при изучении математического содержания педагогичаще всего относят изящные

геометрические объекты и преобразования плоскости. Среди геометрических фигур, обладающих значительным эстетическим потенциалом, следует назвать фракталы. Исследователи, занимающиеся теорией и методикой обучения математике, указывают на возможность и целесообразность знакомства учащихся школ и студентов при изучении математического содержания с элементами фрактальной геометрии (Babkin, 2007; Gorshkov, 2013; Leguta, 2017; Sekovanov, 2006; Sederbakka, 2019). Однако система начального образования остается без методического обеспечения включения фракталов в образовательное пространство урока.

Возможность использования некоторых элементов фрактальной геометрии в целях эстетического воспитания младших школьников обусловлена красотой, изяществом фракталов, на которую указывал Б. Мандельброт (Mandel'brot, 2002), создавший данный математический объект и указавший на его эстетическую ценность.

Теоретическое осмысление проблемы формирования эстетических представлений, художественного вкуса младших школьников при изучении математического содержания в контексте модернизации образования вызвало необходимость рассмотрения геометрического объекта – фрактала, его эстетического потенциала. Термин «фрактал» образован от латинского причастия «fractus» и означает «изломанный», «фрагментированный» (Voloshinov, 1984). Фрактал – сложная геометрическую фигуру, обладающая свойством самоподобия, составленная из частей, каждая из которых подобна всей фигуре целиком (Mandelbrot, 1982).

Проблема взаимосвязи математического содержания фракталов и искусства интересовала Б. Мандельброта. Может ли геометрическая форма восприниматься людьми, далекими от математики, как имеющая художественную ценность, как декоративная, как произведение искусства? Б. Мандельброт отвечал: Если геометрическая форма – фрактал, то ответ – да (Mandelbrot, 1989, 21). В работе Дж. Бриггса «Фракталы: образцы хаоса: открытие новой эстетики искусства, науки и природы» (Briggs, 1992), в исследованиях Л. Кочик (Kocic, 2002), в исследованиях фракталов в искусстве (Wilson, Wasserman, & Lowndes, 2009; Abraham, 2015; Duhno, 2018; Trubeckov & Trubeckova, 2016; Voloshinov, 2002) раскрывается красота фракталов, рассматриваются фракталы в различных видах искусства.

Считаем, что фракталы – средство, включение которого в процесс обучения школьников математике будет способствовать не только формированию геометрических представлений учеников, но и формированию их эстетических представлений, художественного вкуса.

Позицию в организации эстетического воспитания младших школьников при изучении математического содержания представим следующими положениями.

1. Общеобразовательное учреждение должно способствовать развитию у обучающихся художественного вкуса, учить школьников анализировать явления с позиции эстетики, создать условия для нравственного развития, формировать эстетические представления. В свете концепции интеграции содержания гуманитарных наук и математики эстетическое воспитание, формирование эстетических представлений младших школьников будет более интенсивным, если процесс освоения соответствующего предметного содержания будет взаимосвязан на уровне диалога культур, дающего возможность рассматривать объекты окружающего мира, предметы искусства с позиции точных наук, математики.

2. К содержанию понятия «красота математики» следует отнести порядок, логическую строгость рассуждений и доказательств; простоту, оригинальность, неожиданность математической модели; универсальность использования математического объекта как в других разделах математики, так и при анализе явлений и процессов реального мира, природы, искусства. Большинству данных критериев отвечают объекты фрактальной геометрии, которые кроме математической информации несут в себе и значительную эстетическую составляющую.

3. Элементы фрактальной геометрии могут быть использованы как для эстетического воспитания обучающихся, развития у них представлений о красоте, так и для формирования учебных умений, связанных с построением геометрических фигур, с преобразованиями плоскости.

4. С целью формирования у обучающихся эстетических представлений при изучении математического содержания с использованием элементов фрактальной геометрии следует предоставить условия для развития творческих способностей младших школьников.

Методы и организация исследования *Methodology and organization of the research*

Проведенное исследование включало

- поисковый этап, цель которого – определение средств эстетического воспитания младших школьников при изучении ими предмета «математика»;
- формирующий этап, цель которого – формирование у младших школьников эстетических представлений при изучении ими математического содержания. Эмпирическая часть исследования

проводилась в рамках бакалаврского научного проекта Васильевой М.К. Базой исследования являлись ученики четвертых классов Муниципального бюджетного образовательного учреждения «Погранично-таможенно-правовой лицей» (МБОУ «ПТПЛ») (40 человек), учителя (21 человек) МБОУ «ПТПЛ» и МБОУ «Средняя общеобразовательная школа №23».

Исследование проводилось с использованием таких методов как

- ✓ анкетирование учителей с целью обоснования цели исследования; определения затруднений методического характера, связанных с формированием эстетических представлений школьников при работе с математическим содержанием;
- ✓ теоретический анализ научно-методической литературы с целью определения средств, форм и методов эстетического воспитания младших школьников при изучении ими математики;
- ✓ эксперимент, направленный на формирование эстетических представлений младших школьников при изучении ими математических дисциплин.

На начальном этапе опытно-экспериментальной работы нами было проведено анкетирование педагогов.

Не все педагоги согласны с тем, что в процессе обучения на уроках математики должны решаться задачи эстетического воспитания (14,7%). Большинство педагогов (81%) считает, что формировать эстетические представления следует уже с младшего школьного возраста. Педагоги назвали предметы, обладающие эстетическим потенциалом - русский язык, окружающий мир, технология, изобразительное искусство, музыка. К методам работы учителя, которые в большей мере способствуют эстетическому воспитанию, были отнесены: беседы, экскурсии, дискуссии, игры, викторины, классные часы, просмотр фильмов, деловые игры. Педагоги затруднялись назвать средства, методы и приемы эстетического воспитания учащихся при изучении предметов естественно-математического направления. 33,3% опрошенных не удовлетворены работой своих коллег по эстетическому воспитанию школьников, 14,3% оценивают эффективность эстетического воспитания учащихся школой только на «удовлетворительно», 52,4% - затруднились дать оценку работы школы в этом направлении.

Таким образом, в ходе анкетирования педагогов было выявлено, что учителя понимают важность и необходимость эстетического воспитания в школе, понимают его значение для дальнейшего формирования личности школьника, однако, не все согласны с тем, что на сегодняшний день в школе в полной мере решаются вопросы эстетического воспитания.

После того, как анкетирование было пройдено педагогами и установлена актуальность проблемы исследования, была проведена диагностика уровня сформированной эстетических представлений у младших школьников. С этой целью была разработана анкета и были определены следующие уровни сформированности эстетических представлений обучающихся: высокий, средний, низкий.

Диагностика уровня сформированности эстетических представлений младших школьников на констатирующем этапе эксперимента показала преобладание среднего уровня показателей.

Также была проведена диагностика доминирующей перцептивной модальности С. Ефремцева (Efremcev), для определения ведущей модальности учеников экспериментальной группы.

Для эмпирического осмысления педагогического опыта развития эстетических представлений младших школьников средствами фрактальной геометрии был проведен формирующий этап эксперимента.

При работе с учениками использовались следующие виды заданий.

1. Сложение оригами. На первом этапе деятельность заключалась в сложении оригами, начиная от базовых фигур (двойной квадрат, двойной треугольник, дверь и др.), заканчивая сложными модульными. Это первая «рукотворная» встреча школьников с фракталом.

2. Построение фракталов по заданным алгоритмам. Построение дерева Пифагора, салфетки Серпинского, ковра Серпинского. Например, алгоритм построения ковра Серпинского:

1. Начертите на весь лист квадрат со стороной 9 см.
2. Разделите каждую сторону квадрата на 3 равные части. Разделите квадрат на 9 одинаковых квадратов.
3. Центральный квадрат закрасьте любым цветом.
4. С каждым из восьми оставшихся квадратов проделайте процедуры, как в 1, 2, 3 пунктах. (рис. 1)

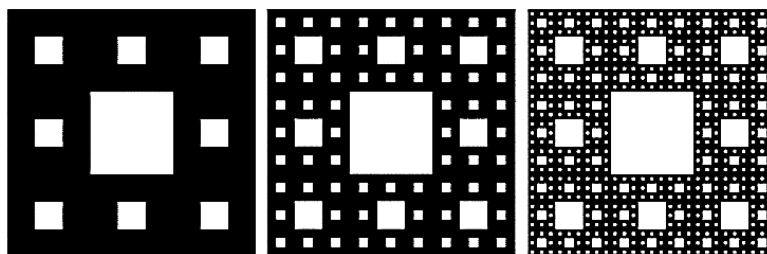


Рисунок 1. Ковер Серпинского
Figure 1 Carpet Sierpinski

3. Построения фракталов методом итераций с использованием практического метода (вырезание фигур).

4. Анализ построенных фракталов с целью описания расположения элементов фрактала друг относительно друга, формулирование алгоритма его построения.

5. Групповые задания. **Анализ фракталов в живой** (кораллы, морские раковины, цветы и растения, кроны деревьев и др.) **и неживой природе** (границы географических объектов, береговые линии, горные хребты, кристаллы, морозные узоры и др.).

6. Анализа произведения живописи, на которых изображены фракталы и невозможные фигуры, например, гравюры М. Эшера «Меньше и меньше», «Рыбы и чешуйки», Джозеф Пресли «Виолончели», работы Жанет Парк и Марк Таусенда, и др. На этом этапе использовались компьютерные изображения.

7. Создании собственных изображений, содержащих фрактальные элементы. Формы проведения уроков были нестандартными, например, урок-квест, урок-исследование, урок-поединок, урок-лаборатория и т.д.

Результаты исследования

Results of the research

Для выявления уровня сформированности эстетических представлений учащихся на контрольном этапе эксперимента школьникам была предъявлена анкета, включающая 10 вопросов и одно практическое задание.

У младших школьников, которые не принимали участие в формирующем эксперименте (контрольная группа учеников) изменений в уровне сформированности эстетических представлений практически не наблюдалось.

В группе школьников, которые участвовали в экспериментальном обучении, отмечается положительная динамика в формировании эстетических представлений, что выражается в увеличении процента учащихся, достигших высокого уровня сформированности представлений, и снижении процента школьников, находящихся на низком уровне сформированности эстетических представлений. Анализ анкет учащихся показал, что на контрольном этапе эксперимента высоким уровнем сформированности эстетических представлений обладают 30% обучающихся, средним уровнем обладают большинство обучающихся – 65%, низким – всего 5% обучающихся группы. На 25% увеличилось количество детей, имеющих высокий уровень эстетических

представлений, 20 % детей, характеризующихся низким уровнем, перешли на средний уровень.

На рис. 2 представлена сравнительная диаграмма уровней сформированности эстетических представлений обучающихся на констатирующем и контрольном этапах эксперимента.

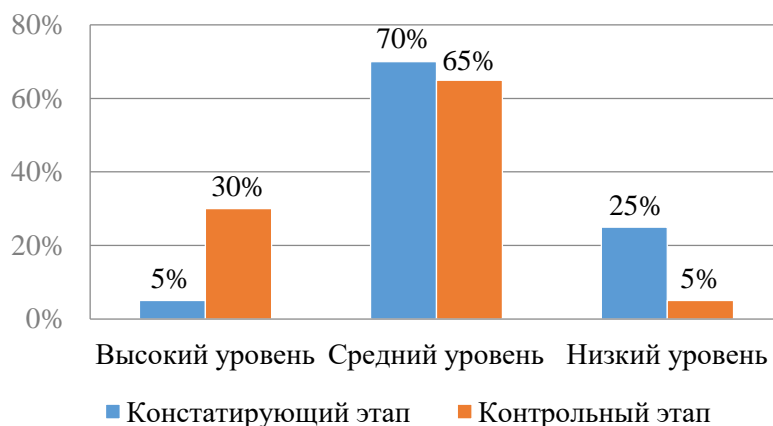


Рисунок 2. Сравнительная диаграмма уровней сформированности эстетических представлений учащихся на констатирующем и контрольном этапах эксперимента

Figure 2 Comparative diagram of the levels of formation of aesthetic representations of students at the ascertaining and control stages of the experiment

Для статистической обработки результатов проведенного исследования был применен непараметрический критерий знаков. Соотнесение экспериментальных данных с таблицей критических значений позволяет отклонить нулевую гипотезу и принять альтернативную гипотезу, что свидетельствует о достоверности результатов исследования.

Апробация методики формирования эстетических представлений учащихся средствами математики на этапе контрольного среза показала, что в экспериментальном классе повысился интерес к художественным видам деятельности на уроках математики, к рассмотрению предметов искусства, предметов живой и неживой природы средствами математики. Приведем некоторые ответы детей на вопрос «Как ты считаешь, в чём заключается красота математики?» - «Можно составлять красивые фигуры», «Математика красива и в природе», «Математика помогает художникам красиво нарисовать картины», «Это красивые фигуры», «Помогает увидеть необычные фигуры вокруг нас».

Отметим также, что анализ результатов исследования позволил сделать вывод о том, что наибольшие изменения в формировании эстетических представлений произошли у «визуалов»: 78,6% учеников, воспринимающих большую часть информации с помощью зрения,

перешли на более высокий уровень сформированности эстетических представлений, что еще раз подтверждает целесообразность использования визуальных геометрических объектов в целях формирования эстетических представлений школьников, их художественного вкуса, формирования эстетического отношения личности к окружающему миру, к произведениям искусства.

Обобщение *Conclusions*

Результаты проведенного исследования показали положительное влияние включения элементов фрактальной геометрии на формирование эстетических представлений младших школьников при изучении ими математики. При изучении геометрических понятий и формировании у младших школьников умений строить геометрические фигуры в ходе экспериментальной работы включались задания на построение и анализ фракталов (дерево Пифагора, ковер Серпинского, салфетка Серпинского и др.), анализ фракталов в живой и неживой природе, складывание оригами, анализ произведений живописи, предоставлялись условия для развития творческих способностей учащихся в процессе обучения.

Проведенное эмпирическое исследование позволило сделать выводы о том, что проводимая с младшими школьниками работа способствовала формированию не только предметных знаний и умений, но и эстетических представлений обучающихся. Выводы по итогам исследования дают основание говорить о целесообразности формирования эстетических представлений младших школьников, их художественного вкуса при изучении математики с использованием визуальных геометрических объектов, обладающих значительным эстетическим потенциалом – фракталов.

На основании результатов исследования выявилась необходимость более целенаправленной работы в образовательных учреждениях по формированию эстетических представлений при изучении не только гуманитарных, но и естественных наук, в частности и математики.

Summary

The modernization strategy of education in the modern conditions of information and multicultural space requires the school to improve the quality of spiritual, moral, aesthetic education of the individual.

- ✓ The theoretical understanding of psychological, pedagogical, mathematical and scientific-methodical literature allowed us to formulate a position in the

organization of the process of formation of aesthetic representations of younger students in the study of mathematical content.

- ✓ In the light of the concept of integrating the content of the humanities and mathematics, the formation of aesthetic representations of younger schoolchildren will be more intensive if the process of mastering the corresponding subject content is interconnected at the level of dialogue of cultures, which makes it possible to consider objects of the world, objects of art from the perspective of exact sciences, from the perspective of mathematics.
- ✓ Fractals can be used as a means of forming aesthetic representations of students, which, in addition to mathematical information, carry a significant aesthetic component.
- ✓ The priority of productive educational activities of primary schoolchildren, providing conditions for the development of students' creative abilities in the learning process.

Empirical studies on the implementation of these provisions led to the following conclusions.

1. The inclusion of fractal geometry elements in the process of teaching mathematics contributed to the formation of aesthetic ideas in younger students.
2. The novelty of certain concepts requires a certain skill from the teacher, and often, the acquisition of new knowledge (from the field of fractal geometry, art).
3. Decorate the teaching of a school course in mathematics can modern computer technology.

Литература

References

- Abraham, R. (2015). Haos I fraktaly Parizha. *Fraktaly kak iskusstvo*, 62–71.
- Babkin, A.A. (2007). *Izucheniej elementov fraktal'noj geometrii kak sredstvo integracii znaniij po matematike I informatike v uchebnom processe pedkolledzha: diss. ... kand. ped. nauk: 13.00.02. Vologda.*
- Briggs, J. (1992). *Fractals: The Patterns of Chaos: Discovering a New Aesthetic of Art, Science, and Nature*. Touchstone, NY.
- Duhno, A.B. (2018). Fraktal kak jazyk iskusstva. Vzaimovlijanie nauchnogo I hudozhestvennogo opyta. *Hudozhestvennaja kul'tura*, 3(25), 38-61.
- Efremcev, S. *Diagnostika dominirujushhej perceptivnoj modal'nosti*. Retrieved from <https://psycabi.net/testy/289-test-audial-vizual-kinestetik-diagnostika-dominiruyushchej-pertseptivnoj-modalnosti-s-efremtseva>
- Emelina, T.V. (2016). Jesteticheskoe vospitanie shkol'nikov v pedagogicheskoj teorii I praktike. *Vestnik Kemerovskogo universiteta*, 2, 217-220.
- Firstova, N.I. (2016). Rol' jesteticheskogo vospitanija na urokah matematiki v srednej shkole. *Obrazovatel'nye resursy I tehnologii*, 2(14), 88-92.

- Goncharov, I.F. (2006). *Jesteticheskoe vospitanie shkol'nikov sredstvami iskusstva I dejstvitel'nosti*. Moskva: Junipress.
- Gorshkov, A.A. (2013). Izuchenie jelementov fraktal'noj geometrii v shkole kak sredstvo jesteticheskogo vospitanija uchashhihsja. *Vestnik Kostromskogo gosudarstvennogo universiteta im. N.A. Nekrasova*, 181-185.
- Gubanihina, E.V. (2017). Jesteticheskoe vospitanie na urokah matematiki v nachal'noj shkole. *Obrazovanie: proshloe, nastojashhee I budushhee*, 57-60.
- Kocic, L.M. (2002). Art Elements in Fractal Constructions. *VISMATH*, 4(1). Retrieved from <http://www.mi.sanu.ac.rs/vismath/ljkocic/index.html>
- Lihachev, B.T. (1985). *Teorija jesteticheskogo vospitanija shkol'nikov*. Moskva: Prosveshhenie.
- Leguta, A.N. (2017). Razvitie interesa k matematike u uchashhihsja osnovnoj shkoly sredstvami fraktal'noj geometrii. *Problemy sovremennoj nauki I obrazovanija*, 79-83.
- Mandelbrot, B.B. (1982). *The Fractal Geometry of Nature*. New York.
- Mandelbrot, B.B. (1989). Fractals and an Art for the Sake of Science. *Leonardo. Supplemental Issue, 2, Computer Art in Context: Art Show Catalog*, 21-24.
- Mandel'brot, B. (2002). *Fraktal'naja geometrija prirody*. Moskva: Nauka.
- Petrakova, T.I. (2016). Duhovno-nravstvennoe vospitanie shkol'nikov v cennostnom kontekste sovremenno obrazovanija. *Jaroslavskij pedagogicheskij vestnik*, 15-20.
- Puankare, A. (1990). *O nauke*. Moskva: Nauka.
- Sarancev, G.I. (2003). *Jesteticheskaja motivacija v obuchenii matematike*. Saransk, PO RAO.
- Sederbakka, G.J. (2019). Razrezaj, skleivaj I postroj fractal. *Sovremennye problem obuchenija matematike v shkole I vuze*, 127-130.
- Sekovanov, V.S. (2006). *Metodicheskaja Sistema formirovanija kreativnosti studenta universiteta v processe obuchenija fraktal'noj geometrii*. Kostroma: KGU im. N.A. Nekrasova.
- Trubeckov, D.I., & Trubeckova, E.G. (2016). Fraktal'noe iskusstvo. *Izvestija vuzov. PND*, 24, 84-102. DOI: <https://doi.org/10.18500/0869-6632-2016-24-6-84-102>
- Wilson, K.L., Wasserman, J.A., & Lowndes, F. (2009). Picture and social concept: a fractal-concept analysis of advertising art. *Visual Communication*, 8(4), 427-448.
- Voloshinov, A.V. (2002). Ob jestetike fraktalov I fraktal'nosti iskusstva: sinergeticheskaja paradigma. *Nelinejnoe myshlenie v naukei I skusstve*. 213-246

ЭМПИРИЧЕСКОЕ ИССЛЕДОВАНИЕ СФОРМИРОВАННОСТИ У МЛАДШИХ ШКОЛЬНИКОВ КОММУНИКАТИВНЫХ УНИВЕРСАЛЬНЫХ УЧЕБНЫХ ДЕЙСТВИЙ

Empirical Study of the Formation of Communicative Universal Educational Actions in Younger Students

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Abstract. *Effective pedagogical management of the formation of communicative skills in schoolchildren is impossible without monitoring the degree of their formation. The article presents the materials of diagnostic tools, including a questionnaire, criteria and nominative indicators for assessing the degree of formation of the components of communicative universal educational actions. The questionnaire is adapted to the age characteristics of younger students. On the basis of the developed criteria and indicators, a theoretical model of possible levels of mastery by younger students of the communicative actions of interaction, interiorization and cooperation is proposed. The article introduces the results of determining the levels of formation of communicative universal educational actions among elementary school graduates. The study was based on an analysis of literary sources, a survey of primary school students and theoretical modeling.*
Keywords: *criteria, nominative indicators and levels of formation of communicative universal actions; younger schoolchildren.*

Введение *Introduction*

Актуальность исследования данной проблемы обусловлена тем, что Федеральный государственный образовательный стандарт начального общего образования в России (FGOS, 2011) в качестве главной цели образования называет освоение выпускниками начальных школ универсальных учебных действий (УУД), включая коммуникативные.

Высокая степень сформированности у младших школьников коммуникативных универсальных учебных действий является залогом благополучия в их будущей взрослой жизни. Умение договариваться, убедительно аргументируя свою позицию, убеждая и где-то уступая; способность строить понятные для партнёра отношения, уважительно относясь к противоположной точке зрения и сохраняя доброжелательные отношения в ситуации конфликта, выступает гарантом эффективности взаимодействия с партнёром в любом виде деятельности. Практикующие учителя начальных школ, понимая, что от уровня сформированности коммуникативных УУД зависит успеваемость учащихся, степень комфорта при взаимоотношениях со сверстниками, контактность детей, много внимания уделяют формированию коммуникативных умений.

Однако эффективное педагогическое управление формированием коммуникативных УУД невозможно без мониторинга степени их сформированности, для которого необходимо иметь систему критериев и шкалированные номинативные показатели для осуществления наблюдения за младшими школьниками, а также адаптированные к их возрастным возможностям вспомогательные диагностические материалы.

Выше сказанное выступает обоснованием актуальности настоящей статьи, цель которой состоит в презентации диагностического инструментария, результатов его использования в практике работы учителей начальной школы, а также содержательной характеристике уровней сформированности компонентов коммуникативных универсальных учебных действий у младших школьников.

Проведенное исследование основывалось на анализе литературных источников, педагогическом наблюдении, тестировании, анкетировании младших школьников и теоретическом моделировании.

Базой для экспериментального исследования выступили обучающиеся 4 (выпускных) классов МБОУ «Погранично - таможенно - правовой лицей» (№ 22) г. Пскова и МБОУ СОШ №24 им. М.Б. Раковского г. Липецка.

Результаты теоретического исследования *The results of theoretical research*

Осуществленный анализ теоретических источников, посвященных проблеме формирования и диагностирования коммуникативных компетенций, умений, действий (Babina & Chernysheva, 2019; Vitkovskaya, 2019; Veretennikova, 2015; Afanasyev, 2014; Tyurikova, 2014; Khuzeeva, 2014; Сомма, 2014 и др.) показал, что большинство исследователей в основу своих работ кладут следующие базовые позиции.

- Коммуникация, рассматриваемая в широком значении как социальное взаимодействие, как общение, «обслуживая совместную деятельность группы людей, их сообщества, предполагает не только обмен информацией, но и установление контактов, кооперацию (организацию и осуществление совместной деятельности), а также процессы межличностного восприятия, включая понимание партнера или партнеров» (Bozhovich, 1999, p. 43)
- Основная функция коммуникативных действий заключается в обеспечении сознательной ориентации школьников на позиции других людей (Belkin, 2000).

Некоторые научные работники (Tyurikova, 2014) показатели сформированности коммуникативных универсальных учебных действий у обучающихся отождествляют со свойствами действий, описанных П.Я. Гальпериным в его теории о поэтапном формировании умственных действий (Gal'perin, 1966), а именно, с формой выполнения действия, с его полнотой (развернутостью), разумностью, сознательностью (осознанностью), обобщенностью, критичностью и освоенностью.

Такие показатели не позволяют практикующим педагогам активно их использовать в своей образовательной деятельности для диагностики уровней сформированности коммуникативных УУД. Учителям начальных классов, как правило, предлагают руководствоваться следующими показателями: умение детей работать в паре и группе; умение оформлять свою мысль в устной речи; умение выразительно читать и пересказывать текст; выполнение норм в общении со сверстниками и взрослыми; умение выполнять различные социальные роли в группе (лидера, исполнителя, оппонента и др.) в соответствии с задачами учебной деятельности (Khuzeeva, 2014).

В литературных источниках (Tsukerman, 2005; Tsukerman, 2010) описаны методики Цукерман Г.А. «Кто прав?», «Узор под диктовку», задание «Рукавички», методика Ж. Пиаже «Левая и правая стороны», задание «Архитектор-строитель», задание «Совместная сортировка», которые используются школьными психологами для «качественного», то есть по содержанию, оценивания сформированности коммуникативных УУД у младших школьников. Однако из-за своей трудоёмкости в организации и последующей обработке они не получили широкого распространения среди учителей начальных классов.

Для квалитетического (количественного) оценивания степени сформированности у младших школьников коммуникативных универсальных учебных действий и удобства учителей при осуществлении ими педагогического наблюдения за детьми в процессе учебной деятельности

нами были разработаны критерии и прошкалированы их номинативные показатели.

Представим критерии для диагностирования коммуникативных действий, входящих в группу, условно обозначенную «коммуникация как взаимодействие».

Первый критерий - «*способность убеждать собеседника*», имеет три номинативных показателя:

- ученик не умеет объяснить собственную позицию (0 баллов);
- ребёнок испытывает сложности при отстаивании собственной точки зрения (1 балл);
- учащийся умеет убеждать собеседника в правильности своего мнения (2 балла).

Второй критерий- «*готовность принять иную, отличную от своей, точку зрения*».

- При *склонности к конформизму* ученик готов принять иную, отличную от своей, точку зрения, для того, чтобы не иметь проблем. У такого ребенка почти никогда нет собственного мнения: он является сознательным или бессознательным приспособленцем (1балл).
- При *объективности* учащийся осознаёт и допускает наличие разных точек зрения, но требует их аргументации (2 балла).
- При *категоричности, безапелляционности* обучающийся на отрез отказывается принимать иные точки зрения, пытается любыми способами переубедить собеседника (0 баллов).

Третий критерий, обозначенный как «*наличие толерантности в оценке поступков и деятельности других людей*», проявляется с помощью двух показателей:

- *интолерантен*, то есть учащийся нетерпим к различным оценкам одного и того же поступка, по его мнению, «не может быть различных оценок» (0 баллов);
- *толерантен* – ученик проявляет лояльность в оценке поступков и деятельности других людей (2 балла).

Четвертый критерий - *готовность к сосуществованию и сотрудничеству в решении вопросов межличностного, группового взаимодействия*- имеет три показателя.

- Ученик способен сотрудничать с другими детьми, в том числе и с теми, которым присущи иные менталитет и образ жизни, например, мигрантами (2 балла).

- Учащийся способен сосуществовать с другими людьми, в том числе и с теми, которым присущи иные менталитет и образ жизни, но не готов с ними сотрудничать (1 балл).
- Школьник испытывает дискомфорт при сосуществовании с детьми иного менталитета и образа жизни (0 баллов).

Пятый критерий - *способность к регуляции поведения в процессе общения* - может быть *низкая*, когда младший школьник не соблюдает принятые в сообществе правила поведения в процессе общения (0 баллов); *средняя*, если ребенок легко усваивает нормы взаимодействия в процессе общения людей (1 балл); *высокая* - учащийся принимает правила поведения, может сам в процессе взаимодействия вносить коррективы в установленные правила (2 балла).

Шестой критерий - *умение расшифровать по внешним признакам эмоциональное состояние индивида*. Если ученик не может расшифровать по внешним признакам эмоциональное состояние индивида, то в этом случае он получает 0 баллов; если способен точно это делать - 2 балла; если иногда ошибается - 1 балл.

Седьмой критерий - *способность индивида к трансляции (демонстрации) собственного эмоционального состояния для информирования адресата об оказанном им воздействии с целью коррекции адресатом его дальнейшей стратегии общения* выявляется также с помощью трёх номинативных показателей.

Если ребенок не умеет корректно продемонстрировать собственное эмоциональное состояние для информирования адресата об оказанном им воздействии с целью коррекции адресатом его дальнейшей стратегии общения, то он получает 0 баллов, если умеет - 2 балла.

Далее опишем критерии для диагностирования коммуникативных действий, входящих в группу, условно обозначенную «коммуникация как кооперация».

Восьмой критерий - *умение договариваться, убеждая партнёра по деятельности, при поиске общего решения находить нужные аргументы, при необходимости уступать*.

Если младший школьник способен аргументировать свою позицию, прислушиваться к иной точке зрения и легко уступать в споре, когда его убедили, то получает 2 балла; если считает себя всегда правым в любом споре, не слышит разумных доводов и не аргументирует свою позицию, то - 0 баллов; если с трудом подбирает аргументы и соглашается только под давлением - 1 балл.

Девятый критерий - *способность сохранять доброжелательное отношение друг к другу в ситуации конфликта интересов*, имеет три показателя.

- Учащийся быстро прощает одноклассника после ссоры - 2 балла.
- Школьник считает бесполезным долго сердиться после ссоры с одноклассником - 1 балл.
- Ученик долго сердится после ссоры с одноклассником - 0 баллов.

Десятый и одиннадцатый критерии относятся к группе коммуникативных действий под условным названием «коммуникация как интериоризация».

Десятый критерий - *способность строить понятные для партнёра высказывания.*

- Ученик умеет строить понятные для партнёра высказывания, в случае затруднения умеет переформулировать их другими словами (2 балла).
- Школьник испытывает трудности при построении предназначенных для партнёра высказываний (1 баллов).

Одиннадцатый критерий - *умение с помощью вопросов получать необходимые сведения от партнёров по деятельности.*

- Обучающийся умеет составлять вопросы для того, чтобы получить необходимые сведения от партнёров по деятельности (2 баллов).
- Ученик не способен составлять нужные вопросы для того, чтобы получать необходимые сведения от партнёров по деятельности (0 баллов).

В научной литературе, посвященной изучению коммуникативных УУД (Турикова С.А., 2014), выделяют следующие уровни их сформированности у школьников.

Низкий уровень учебных действий как целостных «единиц» деятельности: ученик осуществляет только отдельные операции, способен повторять действия учителя, не планирует и не контролирует свои действия, заменяет учебную задачу задачей заучивания и воспроизведения.

Средний уровень заключается в неадекватном переносе школьником учебных действий на новые виды задач: при изменении условий задачи он не способен самостоятельно внести коррективы в действия.

Высокий уровень: обобщение учебных действий на основе выявления общих принципов построения новых способов действий и выведение нового способа для каждой конкретной задачи.

Представим подготовленную нами теоретическую модель возможных уровней сформированности коммуникативных универсальных учебных действий у младших школьников.

Низкий уровень (менее 8 баллов): ребенок отказывается принимать иные точки зрения, пытается любыми способами переубедить собеседника, не ориентируется на позицию других людей, отличную от собственной, не

уважает иную точку зрения; не умеет обосновывать собственное мнение. Он интолерантен в оценке поступков и поведения других людей. Считает, что «не может быть различных оценок».

Школьник испытывает дискомфорт при сосуществовании с детьми иного менталитета и образа жизни, в частности мигрантами; не соблюдает принятые в сообществе правила поведения в процессе общения.

Он не может расшифровать по внешним признакам эмоциональное состояние индивида; не умеет корректно демонстрировать собственное эмоциональное состояние для информирования адресата об оказанном им воздействии; считает себя всегда правым в любом споре, не слышит разумных доводов и не аргументирует свою позицию. Ученик не способен составлять вопросы для того, чтобы получать необходимые сведения от партнёров по деятельности. Он не способен сохранять доброжелательное отношение друг к другу в ситуации конфликта интересов, долго сердится после ссоры с одноклассником.

Средний уровень - от 9 баллов до 16 баллов: у такого ребенка зачастую нет собственного мнения; ориентируется на позицию других людей, но с трудом может её отстоять, правильно аргументировать. Может ошибаться при расшифровке по внешним признакам эмоционального состояния индивида. Школьник испытывает трудности при построении предназначенных для партнёра высказываний и составлении вопросов для того, чтобы получить необходимые от него сведения.

Он легко усваивает нормы взаимодействия в процессе общения людей, способен сосуществовать с другими людьми, в том числе и с теми, которым присущи иные менталитет и образ жизни, но не всегда готов с ними сотрудничать. Школьник считает, бесполезным долго сердится после ссоры с одноклассником. Понимает важность умения договариваться и при необходимости уступать.

Высокий уровень - более 16 баллов: дети обладают готовностью к коммуникативному взаимодействию, то есть умеют убеждать собеседника в правильности своего мнения; осознают и допускают наличие разных точек зрения, но требуют их аргументации; толерантны в оценке поступков и деятельности других людей.

Ученики способны сотрудничать с другими детьми, в том числе и с теми, которым присущи иные менталитет и образ жизни, например, мигрантами; принимать правила поведения, при необходимости в процессе взаимодействия вносить в них коррективы; умеют корректно демонстрировать собственное эмоциональное состояние для информирования адресата об оказанном им воздействии с целью коррекции адресатом его дальнейшей стратегии общения; легко уступать в споре, когда их убедили, быстро прощать после ссоры.

Способны к интериоризации в процессе коммуникации, то есть умеют строить понятные для партнера высказывания, в случае затруднения умеют переформулировать их другими словами; получать необходимые сведения по внешним признакам партнера по общению, а также, умело составляя вопросы для партнёра по деятельности.

Организация и результаты эмпирического исследования *Organization and results of an empirical study*

Цель эмпирического исследования заключалась в определении уровней сформированности коммуникативных УУД младших школьников с помощью стандартизированного педагогического наблюдения, опираясь на выявленные критерии и прошкалированные показатели, метода анкетирования и тестирования в школах Псковской и Липецкой областей.

В опытной работе приняли участие 110 учеников четвертых классов «Погранично – таможенно - правового лицея» (№ 22) г. Пскова и 84 младших школьника МБОУ СОШ №24 им. М.Б. Раковского г. Липецка.

Включенное фронтальное наблюдение за учащимися осуществлялось учителями четвертых классов, принявших участие в опытной работе, во время осуществляемой ими урочной деятельности в течении двух месяцев (март, апрель) в 2019 году.

Результаты наблюдений заносились учителями в протоколы в кодированной форме на основании представленных выше в статье критериев и номинативных показателей. Осуществленное авторами шкалирование показателей позволило упростить процедуру определения достигнутых четвероклассниками уровней сформированности коммуникативных УУД. Предварительные выводы о низком, среднем или высоком уровнях делались в том случае, когда наблюдалось приближение к одному из теоретически возможных уровней и количество набранных школьниками баллов укладывалось в указанный выше диапазон: менее 8 баллов; от 9 до 16 баллов; более 16 баллов.

Следующий этап диагностирования предполагал уточнение или коррекцию предварительных выводов на основании проведенного анкетирования и инвентивно-элективного тестирования младших школьников.

Для учителей-практиков могут представлять интерес материалы разработанного нами опросника, адаптированного к возрастным особенностям обучающихся начальных классов.

Первая часть анкеты содержала вопросы, позволяющие уточнять готовность детей к коммуникативному взаимодействию.

1. Если моё мнение не совпадает с мнением одноклассника, то:
 - я готов с ним согласиться;
 - я остаюсь при своём мнении;
 - я пытаюсь его переубедить.
2. Выбери подходящее тебе высказывание.
 - Я считаю, что умею убеждать одноклассников в правильности своего мнения.
 - Я испытываю сложности, если мне надо отстаивать собственную точку зрения.
 - Я не умею объяснять другим, почему я так считаю.
3. Я согласен со следующим утверждением:
 - «бывают разные оценки одного и того же поступка».
 - «не может быть различных оценок одного и того же поступка».
4. Выбери высказывание, которое соответствует тебе.
 - Я не люблю, когда мне приходится соглашаться и менять собственное мнение на поступки людей.
 - Я обычно прислушиваюсь к мнению одноклассников при оценке поступков людей.
 - Я люблю обсуждать и давать оценку поступкам людей вместе с одноклассниками.

Вторая часть анкеты включала вопросы, позволяющие диагностировать готовность детей к кооперации в процессе коммуникации.

5. Выбери высказывание, которое соответствует тебе.
 - Я долго сержусь после ссоры с одноклассником.
 - Я считаю «глупым» долго «дуться» после ссоры с одноклассником.
 - Я быстро прощаю одноклассника после ссоры.
6. Выбери высказывание, которое соответствует тебе.
 - Я легко уступаю в споре, если меня убедили.
 - Мне трудно, но я пытаюсь научиться уступать в споре, если я не прав.
 - Я должен всегда быть правым в любом споре.
7. Согласен ли ты со следующим высказыванием: «Я считаю, что всегда надо убеждать собеседника, пусть даже силой».
 - Да, согласен. Нет, не согласен.

Третья часть опросника состояла из вопросов, направленных на диагностирование способности детей к интериоризации в процессе коммуникации.

8. Если одноклассники тебя не понимают, то ты
 - пытаешься сказать то же самое, но, другими словами.
 - повторяешь то же самое, но значительно громче.

- не пытаешься им объяснить.
- 9. Умешь ли ты понять по внешним признакам, что тебя обманывают?
 - Я всегда чувствую, когда меня обманывают.
 - Я иногда могу догадаться, что меня обманывают.
 - Я не знаю, как можно определить по внешним признакам, что тебя обманывают.

Четвертая часть анкеты была направлена на определение степени стеснения при общении, умения преодолеть проявления смущения, застенчивости, стыдливости.

- 10. Сможешь ли ты выполнить без стеснения, то, что я скажу.
Нужно встать, и проходя между рядами товарищей, внимательно посмотреть в глаза каждому. Затем встать перед классом и громко крикнуть: «Здравствуйте, друзья!»
Да Нет

Уже в процессе экспериментальной работы мы обнаружили необходимость дополнительных диагностических материалов для выявления степени готовности младшего школьника понимать партнера по общению и предложили учителям-экспериментаторам тест, включающий шесть заданий.

- 1. Объясни и запиши, что означают действия собеседника.
 - А. При разговоре с тобою собеседник прикасается к твоему плечу, к руке, поглаживает по спине.
 - Б. При разговоре с тобою собеседник отступает от тебя на полшага.
 - В. При разговоре с тобою собеседник повышает голос.
 - Г. При разговоре с тобою собеседник начинает говорить тише и тише.
 - Д. Собеседник при разговоре делает длинные паузы.
- 2. Соедини стрелочками позы и состояния собеседника.
(Детям предлагаются изображения поз и перечень следующих состояний человека: «мне скучно»; «состояние боязни, страха»; «наслушался вдоволь, хочу сам говорить»; «я готов с вами говорить откровенно»; «я лгу»; «мне очень интересно, что вы говорите»).
- 3. Укажи буквой Ж жёсткий вариант отказа, и буквой М – его мягкий вариант.
 - Ученик посмотрел прямо в глаза однокласснику, который предложил ему сигарету, и спокойно, но очень уверенно сказал: «Нет, я хочу долго жить».
 - На предложение закурить одноклассник сделал рукой решительный отстраняющий жест и громко сказал: «Нет!».

- Одноклассник исподлобья, опустив подбородок, презрительно сощурился, сказал: «Нет! И тебе не советую!»
4. «Ты увидел, что твой младший брат пнул ногой маленького котёнка. Запиши, с какими словами ты к нему обратишься».
 5. Сформулируй и запиши вопросы, которые помогут тебе узнать, что хочет остановивший тебя сосед по подъезду.
 6. «Ты новенький?

Выбери и отметь галочкой фразы, которые уточняют, что именно хочет узнать твой одноклассник («О чем ты хочешь меня спросить?»; «Зачем тебе это знать?»; «Я не совсем понял, это допрос?»; «Ты хотел узнать...?»)

Разработанные нами материалы диагностирования в своей совокупности позволили выявить уровни сформированности коммуникативных учебных действий у 194 испытуемых начальных классов. Представим полученные результаты в таблице.

Таблица 1. Результаты диагностирования уровней сформированности коммуникативных учебных действий у младших школьников г. Пскова и г. Липецка
Table 1 The results of diagnosing the levels of formation of communicative educational actions in primary school students in Pskov and Lipetsk

Образовательные учреждения	Уровни сформированности коммуникативных учебных действий (в процентах)		
	Низкий уровень	Средний уровень	Высокий уровень
«Погранично – таможенно - правовой лицей» (№ 22) г. Пскова	37%	47%	16%
МБОУ СОШ №24 им. М.Б. Раковского г. Липецка.	33%	52%	15%

Как видно из таблицы, распределение обучающихся по уровням сформированности у них коммуникативных УУД близко к кривой нормального распределения, что позволяет говорить о стабильности диагностируемого свойства при единообразии процедуры обследования и его строгой регламентации.

Обобщение **Conclusions**

Для квалиметрического оценивания степени сформированности у младших школьников коммуникативных универсальных учебных действий с

помощью методов педагогического наблюдения, анкетирования и тестирования могут быть использованы следующие критерии:

- способность убеждать собеседника;
- готовность принять иную, отличную от своей, точку зрения;
- наличие толерантности в оценке поступков и деятельности других людей;
- готовность к сосуществованию и сотрудничеству в решении вопросов межличностного, группового взаимодействия;
- способность к регуляции поведения в процессе общения;
- умение расшифровать по внешним признакам эмоциональное состояние индивида;
- способность индивида к трансляции (демонстрации) собственного эмоционального состояния для информирования адресата об оказанном им воздействии с целью коррекции адресатом его дальнейшей стратегии общения;
- умение договариваться, убеждая партнёра по деятельности, при поиске общего решения находить нужные аргументы, при необходимости уступать;
- способность сохранять доброжелательное отношение друг к другу в ситуации конфликта интересов;
- способность строить понятные для партнёра высказывания;
- умение с помощью вопросов получать необходимые сведения от партнёров по деятельности.

Диагностические материалы, используемые для определения уровней сформированности коммуникативных действий у младших школьников, должны быть направлены на выявление у них действий по интеракции (взаимодействию), кооперации и интериоризации.

Summary

The following criteria can be used for the qualimetric assessment of the degree of formation in junior schoolchildren of communicative universal educational actions using the methods of pedagogical observation, question in gand testing:

- the ability to convince the interlocutor;
- willingness to accept a different point of view different from one's own;
- the presence of tolerance in assessing the actions and activities of other people;
- readiness for coexistence and cooperation in resolving issues of interpersonal, group interaction;
- the ability to regulate behavior in the process of communication;
- the ability to decipher by external signs the emotional state of the individual;

- the ability of an individual to broadcast (demonstrate) their own emotional state to inform the addressee about the impact they have had in order to correct the addressee's further communication strategy;
- the ability to negotiate, convincing an activity partner, to find the necessary arguments when searching for a common solution, to concede if necessary;
- the ability to maintain a friendly attitude towards each other in a situation of conflict of interest;
- the ability to build understandable statements for the partner;
- the ability to use the questions to receive the necessary information from partners in the activity.

Diagnostic materials used to determine the level of formation of communicative actions in younger students should be aimed at identifying their actions on interaction (interaction), cooperation and interiorization.

Литература References

- Afanasyev, N.V. (2014). *Starting psychological and pedagogical diagnostics of universal educational actions of fifth grade students*. Vologda: WIRO.
- Babina, N.F., & Chernysheva, E.I. (2019). Monitoring of communicative universal educational actions. *Teoriya i praktika prioritnykh nauchnykh issledovaniy: Sbornik nauchnykh trudov po materialam VII Mezhdunarodnoy nauchno-prakticheskoy konferentsii*, 33-34.
- Belkin, A.S. (2000). *Osnovy vozrastnoy pedagogiki: uchebnoye posobiye dlya stud. vyssh. ped. ucheb. zavedeniy*. M.: Izdatel'skiy tsentr Akademiya.
- Bozhovich, Ye.D. (1999). *Protsessucheniya: kontrol', diagnostika, korrektsiya, otsenka*. M.: MPSI.
- Comma, O.V. (2014). *Diagnostics of the formation of communicative educational actions among students of grades 5-7*. Volgograd: Teacher.
- Federal'nyy gosudarstvennyy standart nachal'nogo obshchego obrazovaniya*. (2011). M. Gal'perin, P.YA. (1966). *Psikhologiya myshleniya i ucheniye o poetapnom formirovanii umstvennykh deystviy //Issledovaniya myshleniya v sovremennoy psikhologii*. M.: Nauka.
- Khuzeyeva, G.R. (2014). *Diagnostika i razvitiye kommunikativnoy kompetentnosti detey mladshchego shkol'nogo vozrasta*. M.: VLADOS.
- Tsukerman, G.A. (2005). *Vidyobshcheniya v obuchenii*. Tomsk: Peleng,
- Tsukerman, G.A. (2010). *Kak mladshiye shkol'niki uchatsya uchit'sya*. M, Riga: Pedagogicheskiy tsentr «Eksperiment».
- Tyurikova, S.A. (2014). *Razvitiye kommunikativnykh universal'nykh uchebnykh deystviy u uchashchikhsya 5-7 klassov v protsesse izucheniya inostrannogo yazyka*. PhD Thesis. Cheboksary: Chuvash State Pedagogical University named after I.Ya. Yakovleva
- Veretennikova, L.K. (2015). Formation of communicative-creative competences of junior high school students on the basis of individual educational strategies. *Shkola budushchego*, 2, 50-54.
- Vitkovskaya, I.M. (2019). *Tekhnologiya obucheniya v sotrudnichestve kak sredstvo formirovaniya universal'nykh uchebnykh deystviy mladshih shkol'nikov*. *Izvestiya Volgogradskogo gosudarstvennogo pedagogicheskogo universiteta*, 3(136), 32-36.

THE PHILOSOPHICAL UNDERSTANDING OF COMPASSION AS A METHODOLOGICAL FOUNDATION FOR ITS FORMATION IN PRIMARY SCHOOL CHILDREN

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Abstract. *The relevance of the article is determined by the need for a philosophical aspect in the study of the category “compassion” for the discovery and understanding of new pedagogical possibilities of educational activity in primary school.*

The purpose of the article is to convey to the pedagogical community the quintessence of the philosophical positions reflecting the ideas of compassion in world culture.

The methodology of the present study was the civilizational and axiological approaches; the historical and genetic method (theoretical), the study of the experience of educational organizations and personal pedagogical experience in school (empirical) were used in the work.

The authors concluded that compassion in the process of education should be perceived as a priority of moral health of the pupils.

The compassion is “stored” in the “collective unconscious” of humanity, reflecting the thoughts and feelings common to all people, resulting from their common emotional past. For formation at pupils of compassion it is essential to cause them emotional response created by the teacher, the pedagogical situation, that there is some “moral habit” (“emotional skill”), a member of the “Super-Ego” personality, in other words, conscience. The authors show the ways and methodical means that provide awakening, raising from the depths of the subconscious some innate need to do goodness, the desire to help.

Keywords: *compassion; philosophical position; pupil; pedagogical ways and means.*

Introduction

In the history of philosophy, the category “compassion”, in spite of cultural pluralism, was understood extremely closely, namely, as one of the greatest universal values (Zen'kovskij, 2001; Daniljuk, Kondakov, & Tishkov, 2011; Solovyova & Guseva, 2014), as a “central cultural value” (J. Heyzingi, 1992); as a virtue bestowed from above, which helps to overcome sinfulness, etc.

Studying the ideas of Confucius, who believed that “if one is striving for compassion, there will be no evil” and “only a compassionate person can both

love people and hate them” (Semenenko, 1998, 266), suggests the correction of the goal of moral education of students: development in modern schoolchildren of “spiritual principles” of compassion, since with their help it is possible to maintain peace and smooth social contradictions in our difficult “unkind time”. This educational goal is consistent with the statement of the French writer Francois Rene de Chateaubriand: “... The source of evil is vanity, and the source of good is compassion” (Ermishin, 2006, 1350).

The words of professor I.F. Kharlamov, who claims that every “comprehensively developed person must develop in himself < ... > compassion” also sound significant in this contest (Kharlamov, 2004, 37).

Thus, the relevance of the study is determined by the urgent need of our pragmatically inclined society, which is divided and torn apart by contradictions, in considering compassion as a social medicine, a drug that should saturate children's souls with ideals of morality and ideas of good within the walls of a modern school.

The purpose of the article is to convey to the pedagogical community the quintessence of the philosophical positions reflecting the ideas of compassion in the world culture.

The article presents materials obtained using the following research methods: theoretical (historical-genetic method), empirical (study of the experience of educational organizations and personal pedagogical experience in school).

The Results of Theoretical Research

The study of foreign philosophical works (Kramer, 1977; Kuzishhin, 2003; Titarenko, 2002; Vasil'eva, 2001; *Chzhuan-czy*, 2005; Semenenko, 1987) using civilizational and axiological approaches, and the subsequent comparison of their materials with modern philosophical and pedagogical scientific sources allowed us to formulate the following positions.

First, compassion has been traditionally interpreted as the high moral quality of a perfect person (ideal, supernatural gift, humanity, supreme wisdom, “oil” in the lamp of the soul, etc.) and was considered to be the goal of education. In modern pedagogy, the upbringing of qualities in children (Shhurkova, 2010) has been replaced by the upbringing of value orientations, values, one of which is compassion (Daniljuk, Kondakov, & Tishkov, 2011).

Secondly, when defining the concept of “compassion”, the key term was “readiness” (willingness to help financially, verbally, spiritually). Most vocabulary and encyclopedic articles (Shapovalova, 2009; Ozhegov, 1986; Dal', 1935; Stepin, 2010; Davydov, 1993; Efremova, 2006; *Slovar' russkogo jazyka*, 1983; *Slovar' po jetike*, 1989) also define compassion as willingness

(willingness to help someone, come to the rescue, forgive someone, show indulgence, do good to everyone, give alms, give good advice, to an open dialogue with those in need of help etc.), revealing the activity-oriented character of nurturing compassion in schoolchildren.

Thirdly, since the times of ancient Egyptians and Indians (for example, “The Teaching of Ptahhotep (Kuzishhin, 2003),” the hymns of the “Rigveda” (1972), compassion has also been understood pragmatically, namely, as financial support (alms, welfare) or as activities aimed to provide this help (charity, philanthropy, care, patronage), targeting the pedagogical community to organize volunteer activities.

Fourth, the position in which compassion was seen as feeling (compassion, regret, pity, sympathy, duty, condescension, the combination of suffering and different types of love, etc.) does not lose its relevance; basically it implied the ability to rejoice together from the heart at an act of help, empathy for the afflicted, directing teachers to implement the emotiogenic function of the content of education.

The modern scientific community has advanced in revealing the essential elements, details and signs of the “compassion” category, revealing “exits” not only in the field of educational organization (pedagogy), but also in the field of valeology.

For example, the position of the American psychologist K. Nelson and her colleagues, who experimentally proved that showing compassion, doing good deeds, acts of altruism, leads to an improvement of mood and well-being, which gives the student positive emotions and benefits his mental health, is of interest (Nelson, Layous, Cole, & Lyubomirsky, 2016).

P.A. Sorokin in the context of evolutionary psychology (the theory of creative altruism) described the ideal typology of altruism based on large-scale interviews and questionnaire studies (Sorokin, 1954), which allows to expand the methodological tools of nurturing compassion in extracurricular activities.

S. Sprecher and B. Fehr developed a scale of compassionate love, which allows to identify the stages of relations with close people, among which the key place is “compassionate love” (Sprecher & Fehr, 2005), which gives educators the right to consider it as a principle of family education.

Scientist K. Nef performed a study aimed at disclosing the content of the scale of compassion for oneself (self-compassion), through which it was experimentally proved that self-compassion significantly correlates with the positive results of a person’s mental health (reducing depression and anxiety, life satisfaction) (Nef, 2003). She developed a scale of self-compassion, which includes the following items: kindness to oneself and others, social desirability, self-criticism, social closeness, emotional intelligence, perfectionism, anxiety, depression, satisfaction with life. For practicing educators, the materials of this

study make it possible to diagnose the degree of self-acceptance (autosympathy), friendliness or hostility to one's own "I" when students are forming a positive self-concept.

To solve the problem of effective socialization of schoolchildren, teachers can be advised to refer to the results of a study made by C. Oveis, E. Horberg, and D. Keltner, who experimentally studied the influence of pride and compassion as social functions in the process of identifying a person in the society (Oveis, Horberg, & Keltner, 2010).

Using the historical genetic method (Koval'chenko, 2003) in the analysis of Russian philosophical thought in the study of the compassionate behavior of the Russian people allowed us to discover the following.

- The ideas of good-naturedness have always been characteristic of the Russian mentality; they have passed “a deep understanding of the moral meaning of life as responsibility to ancestors and descendants” (Novickaja, 2018, 5).
- Compassionate behavior has always been a “necessary condition for personal moral health” of a Russian person (Ključevskij, 1990, 78). In the work “Good People of Ancient Russia”, the pre-revolutionary philosopher V.O. Klyuchevsky says that “pity for the poor and wretched is the feeling with which a Russian woman was born into the world” (Ključevskij, 1990, 81).
- Alms given “from hand to hand”, moreover, secretly, so that no one would know about the act of help, was a Russian tradition. A pedagogical understanding of this phenomenon will help the educator to teach children the reflection of their own actions, since true compassion is selfless, does not require a “reward” even as praise, recognition of a good deed.

Thus, the compassion is “stored” in the “collective unconscious” of the Russian people, reflecting thoughts and feelings and arising from their common emotional past.

The Research Methodology

The methodology of the present study was the civilizational and axiological approaches. In the work, the historical and genetic method (theoretical) was used, the study of the experience of educational organizations (MBOU “Pskov Pedagogical Complex Education Center”, MAOU “Lyceum of Economics and Fundamentals of Entrepreneurship No. 10”) and personal pedagogical school experience (empirical).

The Interpretation of the Results of the Study

The implemented philosophical and pedagogical analysis of literary sources made it possible to consider compassion as a personal readiness to selflessly do good, help those in need, fulfill one's human duty, not being afraid to make demands and, at the same time, show indulgence and tolerance.

Compassion should be understood as the basis for the formation of a student's moral and ethical orientation. Namely, from the sensual level of compassion, its simplest manifestations (pity, empathy, sympathy) to good thoughts and deeds. Then it is rising to a new level – “compassion”, sincere joy one feels after an act of help, to the level of forgiveness and help to an unpleasant person, ill-wisher or enemy.

Now we illustrate what has been said with the examples of educational activities of elementary schoolchildren.

So, at the lesson of Natural Environment in the first grade studying the topic “You and Your Friends” (the author of the school textbook is A.A. Vakhrushev and others), the teacher can offer a learning situation that causes pupils to show compassion of a sensual level, inviting them to perform the following tasks.

The worksheet depicts a picture of a crying child who has broken his knee. After examining the image, the teacher asks schoolchildren to answer a number of questions: what feelings did they have towards the child after studying the picture; what color would they choose to express their feelings towards the crying personage, etc.

After listening to the ideas of children and discussing them, the teacher offers pupils to express their sympathy for the crying child using speech clichés (“Don't cry, let's treat the wound with iodine and bandage”, “You are a boy – men don't cry!”, “It's not worth grieving!”, “You'll get over it”, etc.), choosing the most suitable for this situation.

For example, during a Reading lesson in the second grade when working on a story “Blizzard” by V.A. Sukhomlinsky, teacher can offer pupils to imagine themselves to be the main characters who were alone during the blizzard on the way to school, and, using the mood lexicon, try to convey the feelings of the children.

After discussing this task with the pupils, the teacher invites them to think what they would do if they were the story's characters, how they would behave during a heavy snowstorm. In case of difficulty, ready-made answer variants are given for discussion using the “Good-Bad” method (“I will call for the adults”; “I will return home”; “I will wait until the end of the blizzard in the shelter (under the tree)”; “I will offer to go to school together”; “I will be brave and courageous and I will run quickly;” “I will be still feeling scared”), which involves highlighting the strengths and weaknesses of each decision.

The next important conclusion of the study is the idea that for formation of compassion in a child it is essential to evoke in him an emotional response to a particular situation in order to subsequently form a “moral habit”, the so-called “emotional skill”, expressed in the fact that if this is not done, if you don’t provide help, you will feel a certain “moral awkwardness”.

Here is a fragment of a Natural Environment lesson in the fourth school grade on the topic “The 19th Century History Pages” (the authors of the textbook are A.A. Pleshakov and others).

The teacher suggests that primary school children read the text and mark it up at the end of each sentence (INSERT method).

In the spring of 1831, walking with his tutor Merder along the embankment of the Fontanka River, the future Emperor Alexander II noticed that an old man was lying on one of the barges under a dirty matting and was groaning. The Tsarevich ran across the shaky boards to the old man’s barge.

Merder, seized by fear that the throne heir will fall into the water, rushed after him and saw how Alexander was carefully wiping the face of the unfortunate with a handkerchief. The teacher gave the Tsarevich a gold coin, which he put into the old man’s hand.

After discussing the work with the text, the elementary school teacher gives the following task – “Using the “thick” and “thin” questions, formulate the question(s) to which you would like to find answer(s) after reading this text”. Some examples of the children’s questions are: “Why did Alexander II approach the old man?” (“Thick” question), “Could the teacher Merder be punished for “overlooking” the future emperor?” (“Thin” question), etc.

After listening to the questions formulated by the pupils, the teacher immediately answers the “thin” questions, writes problem questions on the board for further discussion during the lesson: “Think about why Alexander II himself did not disdain to approach the beggar?”, “Why did he wipe the face of the beggar?”, “Is it possible to say that the future emperor showed compassion in helping the old man?”, “Explain why he helped him?”, “Could he just walk past, because he is the sovereign?”, “Do you think the future emperor told about his gesture to brothers and sisters? Why?” and other questions.

Then the teacher asks the younger schoolchildren to put themselves in the place of Alexander II and think about why he expressed compassion, not being afraid, for example, to get a serious illness from a homeless person and get sick; why the future sovereign could not have acted any other way?

After listening to the ideas of the children, the teacher asks to read the proverbs and answer again: “Don’t judge a watermelon by the peel (Don’t judge a book by its cover), don’t judge a the person by the dress”, “Do your duty without thinking about the outcome”, “Who helped soon, he helped twice”, “To save a friend is to save yourself”, “If we don’t help others, we’ll get lost ourselves”, etc.

As a result, younger schoolchildren come to the conclusion that Alexander II could not have acted differently; he fulfilled his moral, human duty without any hesitation.

Thus, the most important task of the teacher is to ensure that the student is developing an emotional skill that encourages him to show compassionate behavior. At the same time, it is important that the student would want to help not because of rational thinking, but because he cannot do otherwise, because he will “feel bad” from inaction. In modern psychological and pedagogical science, such an emotional skill is included in the structure of the “Super-Ego” of an individual, speaking in ordinary language, of conscience.

A growing person must set a high bar in his development, reaching a certain “ideal”. The teacher’s task is to help the child realize that ideal behavior is compassionate behavior, and “compassion is the feeling of strong people who can come to the rescue”, “mercy is not a weakness, but a strength” (Solovejchik, 2017, 183).

We will illustrate the above-stated ideas with an example of a classroom hours in elementary school (1-2 grades).

The teacher begins the classroom hour by showing pupils a few photos of their peers. Photos offered for boys and girls differ. For girls, a handsome athletically built young man is depicted, in the other picture there is an “ordinary”, common, unremarkable pupil, and for boys, on the contrary, their girl peers are shown, having the same characteristics.

After that the teacher asks the pupils to give a descriptive characteristic (both external and internal) to their peers in the photo, to express who they would like to be friends with and why, which of these children in the photo is in their opinion beautiful, strong, attractive, etc. As a rule, younger schoolchildren prefer peers from the first photos.

Later on the teacher says that he witnessed two situations during the school break. 1. “I watched during the break the boy and the girl shown in the first photo “nibbling” sunflower seeds, and when the bell rang, they quickly tossed them into the nearest flower pot. “At the door of their classroom, I asked them to clean up after themselves, but the children began to shake their heads and say that this was not their litter”. 2. “At the next break in the school corridor, I noticed that the flower pot is clean and the children shown in the second photo are watering the flowers from a glass, each time again and again going to the toilet for water. I asked them: “Are you on duty today?” The response was: “No, the soil in the flower pot is very dry ...”.

After an emotional pause, the teacher again asked the younger schoolchildren to describe their peers in the photos and say with whom they would like to be friends and why, which of these children in the photos actually turned out to be beautiful and strong in their opinion and why?

At the end of the discussion, younger schoolchildren come to the conclusion that physical appearance doesn't make a person strong and beautiful, but personal qualities like the willingness to "help plants" in this case.

Conclusions

Summarizing the main results of the study, we came to the following conclusions.

- The formation of compassion as a universal value in contemporary schoolchildren can contribute to the consolidation of the world community in the future.
- Compassion as the ideal of a perfect person must be considered as one of the goals of education in a contemporary school.
- The emotiogenic function of education is realized through cultivating compassion in educational activities.
- It was revealed that manifestation of compassion by pupils helps to improve their mental and moral health.
- When interpreting the concept of "compassion", the key term is "readiness" (willingness to help financially, verbally, spiritually).
- The basis of volunteer activity is not only pragmatic understanding of compassion, but also compassionate activities (such as charity, philanthropy, care, patronage)
- For formation of compassion in pupils it is essential to evoke emotional response, which will develop a moral habit that is part of "Super-Self" or "Super-Ego" structure of a personality.
- The scale of self-compassion can act as an additional tool for diagnosing a positive self-concept formation degree in schoolchildren.

References

- Neff, K. (2003). The Development and Validation of a Scale to Measure Self-Compassion. *Self and Identity*, 2, 223-250.
- Nelson, S.K., Layous, K., Cole, S.W., & Lyubomirsky, S. (2016). Do Unto Others or Treat Yourself? *The Effects of Prosocial and Self-Focused Behavior on Psychological Flourishing. Emotion*, 1-12.
- Oveis, C., Horberg, E.J., & Keltner, D. (2010). Compassion, Pride, and Social Intuitions of Self-Other Similarity. *Journal of Personality and Social Psychology*, 4, 618-630.
- Sprecher, S., & Fehr, B. (2005). Compassionate love for close others and humanity. *Journal of Social and Personal Relationships*, 22, 629-652.
- Chzhuan-czy. Put' polnoty svojstv.* (2005). (L. Pozdneeva. Trans.). Moskva: Jeksmo.
- Dal', V.I. (1935). *Tolkovyj slovar' zhivogo velikoruskogo jazyka* (t.2). (A. I. Bodujena-de-Kurtene. Ed.). Sankt-Peterburg: Tovarishhestvo M. O. Vol'fa.

- Daniljuk, A.Ja., Kondakov, A.M., & Tishkov, V.A. (2011). *Koncepcija duhovno-nravstvennogo razvitija i vospitanija lichnosti grazhdanina Rossii*. Moskva: Prosveshhenie.
- Davydov, V.V. (1993). *Rossijskaja pedagogicheskaja jenciklopedija* (t.2). Moskva: Bol'shaja rossijskaja jenciklopedija.
- Efremova, T.F. (2006). *Sovremennyj tolkovyj slovar' russkogo jazyka* (t.2). Moskva: AST.
- Ermishin, O.T. (2006). *Aforizmy. Zolotoj fond mudrosti*. Moskva: Prosveshhenie.
- Harlamov, I.F. (2004). *Pedagogika*. Minsk: Vysshaja shkola.
- Heyzingi, J. (1992). *Homo ludens. V teni zavtrashnego dnja* (V.V. Oshis, Trans.). Moskva: Progress.
- Kljuchevskij, V.O. (1990). *Istoricheskie portrety. Dejatel'nyje istoricheskoj mysli*. Moskva: Pravda.
- Koval'chenko, I.D. (2003). *Metody istoricheskogo issledovanija*. Moskva: Nauka.
- Kramer, S.N. (Ed.). (1977). *Mifologija drevnego mira* (V.A. Jakobson. Trans.). Moskva: Vostochnaja literatura RAN.
- Kuzishhin, V.I. (Ed.). (2003). *Istorija Drevnego Vostoka: Teksty i dokumenty*. Moskva: Vysshaja shkola.
- Novickaja, M.Ju. (2018). Duhovno-nravstvennoe vospitanie na osnove tradicionnoj otechestvennoj kul'tury. *Nachal'naja shkola*, 8, 3-8.
- Ozhegov, S.I. (Ed.). (1986). *Slovar' russkogo jazyka*. Moskva: ID Oniks.
- Rigveda. Izbrannye gimny*. (1972). (T. Ja. Elizarenkova. Trans.). Moskva: Glavnaja redakcija vostochnoj literatury izdatel'stva "Nauka".
- Semenenko, I.I. (1987). *Aforizmy Konfucija*. Moskva: Izdatel'stvo Moskovskogo universiteta.
- Shapovalova, O.A. (Ed.). (2009). *Jetimologicheskij slovar' russkogo jazyka*. Rostov-na-Donu: Feniks.
- Shhurkova, N.E. (2010). *Programma vospitanija shkol'nika*. Moskva: Centr «Shhurkova N.E. Pedagogicheskij poisk».
- Slovar' po jetike*. (1989). Moskva: Politizdat.
- Slovar' russkogo jazyka* (t.2). (1983). Moskva: Russkij jazyk.
- Solovejchik, S. (2017). *Nepropisnye istiny vospitanija*. Moskva: Izdatel'stvo AST.
- Solovyova, T.A., & Guseva, V.A. (2014). Teoreticheskaja model' kategorii «miloserdie shkol'nika» kak sociokul'turnoj dominanty v processe duhovno-nravstvennogo razvitija sovremennyh shkol'nikov. *Vestnik Pskovskogo gosudarstvennogo universiteta*, 5, 342-349.
- Stepin, V.S. (2010). *Novaja filosofskaja jenciklopedija* (t.1). Moskva: Mysl'.
- Titarenko, I.N. (Ed.). (2002). *Filosofija Lucija Anneja Seneki i ee svjaz' s ucheniem Rannej Stoi*. Rostov-na-Donu: SKNC VSh.
- Vasil'eva, Z.I. (Ed.). (2001). *Istorija obrazovanija i pedagogicheskij mysli za rubezhom i v Rossii*. Moskva: Izdatel'skij centr "Akademija".
- Zen'kovskij, V.V. (2001). *Istorija russkoj filosofii* (t.1). Moskva: Akademicheskij Proekt, Raritet.

DEALING WITH STRESS IN TEACHER PROFESSION: INDIVIDUAL AND ORGANIZATIONAL STRESS MANAGEMENT MEASURES

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Abstract. *Teaching is considered to be one of the most stressful professions. Bad social status of teacher in society, low salary, abundance of work roles, the need to work overtime, education reforms, disrespectful behavior of learners, high demands - all these factors and many others cause teachers' stress in their professional activity.*

The study is aimed at identifying individual and organizational practices that are used to cope with teacher stress as well as finding out what are the main stress management gaps and areas which need to be improved at organization level and individually. A quantitative survey conducted in five European countries revealed that the most frequent stress management measures used at individual level relate to rational practices focused on managing thoughts and promoting rational and positive thinking. Also different organizational interventions are implemented at school level to promote teachers' motivation, participatory environment, open communication and support. However, these measures are insufficient. They need to be strengthened and expanded in order to promote more supportive work environment and trainings targeted to fill the gaps in school staff knowledge and skills on resolving conflicts and stress different management techniques.

Keywords: *individual stress management measures, organizational stress management measures, school leaders' perspective, teachers' perspective, teachers' stress.*

Introduction

Teaching is one of the professions in which a high level of emotional tension and stress is faced. High professional demands, unclear roles, increasing workloads, problematic relationships with students, parents and colleagues, noisy environment, abundance of paperwork are just few of the factors that lead to stressful situations in daily teachers' work. Therefore, anxiety, uneasiness and nervousness are common to many teaching professionals. This has a deleterious

effect and negative impact on teachers' psychosocial, emotional and physical health, job motivation, causes teachers' burnout, poor job performance, high turnover rates and other unfavorable consequences (Prilleltensky, Neff, & Bessell, 2016; Byers, 1987).

Stressful situations are unavoidable in teachers' work. The key things for maintaining proper emotional and physical health as well as job motivation are handling stress in a proper way, duly dealing with negative things, recognizing and managing them. For coping with stress certain interventions or measures may be applied.

The study aims to identify individual and organizational measures used to deal with teachers' stress. Also, the findings of the study allow revealing the main stress management gaps and areas which need to be improved at organization level and individually. For this a quantitative international research was performed.

The Concept of Occupational Stress and Stress Management Measures in Pedagogical Practice

Stress is linked to certain reactions when facing threatening or challenging situations. It is a consequence of all the pressures and demands occurring in the life (Karkockiene, 2011; Byers, 1987). Occupational stress may be understood as physiological, emotional, behavioral and cognitive responses to such factors as displeasing and pernicious work content, work organization, work environment, miscommunication. It is kind of imbalance between person's capabilities and the situation he or she finds himself or herself in. Because of this imbalance a person may feel frustration, tension or feeling of being over-demanded. Stress may result from heavy workload, high professional requirements, organizational expectations, conflict situations, psychological strain and other factors (Prilleltensky, Neff, & Bessell, 2016). A number of surveys show clear links between stress and changes in person's physical, mental and emotional health, motivational and cognitive processes, psychological and social well-being (Karkockiene, 2011; Mahan et al., 2010; Chen, Wong, Ran, & Gilson, 2009; McGregor, Antoni, Ceballos, & Blomberg, 2008).

Stress management refers to efforts to neutralize stress and minimize its negative consequences. A great variety of measures may be applied for coping with stress. Some of them are to focus on stress sources- stressors, and aimed at changing them, i.e., eliminating a threat, fighting, or running away from a threat. These measures may include increasing knowledge and self-awareness of stress, developing time management and problem solving skills. Researchers usually call these stress management measures as preventive (Greenberg, Baron, 2003; Byers, 1987) or problem solving strategy (Almonaitiene, Lekaviciene, &

Antiniene, 2010; Cowley, 2006; Keith & Wendy, 2014). When stressor is impossible to manage, i.e. a person is not able to have any impact on it, then measures to stabilize the emotional state and promote positive thinking are more appropriate. These measures are referred to as responsive strategy (Kompier, Cooper, & Geurts, 2000). These two types of stress management strategies may be applied individually or at organizational level. It is widely argued that workplace stress management should be a shared responsibility of employers and managers. Individual stress management measures are related to individual changes, i.e., what a person can change in himself to overcome or avoid stress, whereas organizational stress coping measures include management efforts aimed at organizational change. The latter concept covers measures to remove stressors from the work environment and those designed to match the needs, knowledge and skills of the workers to the professional environment (Matteson & Ivancevich, 1989; Byers, 1987). Organizational measures are interventions based on approach that focuses on changing the organization’s culture to prevent stress from occurring and ensuring assumptions and opportunities for organizational support in coping with stress. These measures can be categorized in terms of changing tasks, roles, patterns of communication, cultural norms, psychological, support, mediation, etc. The survey of the scientific literature and pedagogical practices shows that educational institutions focus mostly on individual stress management measures.

Methodology

To reach the study aim a quantitative research was conducted. The survey was carried out in spring, 2018. Data for the study was gathered using two different online questionnaires (one for teachers, another for school leaders) that were sent to teachers and school leaders in Portugal, Slovenia, Bosnia and Herzegovina, Lithuania and Turkey. The questionnaires were developed by the authors of this paper. A random selection method of survey participants was used. In all 308 teachers and 62 school leaders from the aforementioned countries participated in the survey. The number of survey participants by country is provided in Table 1. The survey was anonymous, ensuring the confidentiality of the participants. Participants took part in the study voluntarily. These principles helped to ensure the reliability and objectivity of the collected data.

Table 1 Numbers of survey participants by country

	Lithuania	Portugal	Slovenia	Bosnia & Herzegovina	Turkey
Teachers	73	76	51	57	51
School leaders	14	10	10	12	16

The questionnaire for teachers is composed of two parts. The first part of the questionnaire includes questions related to teachers' stress level, individual and organizational stress management measures aiming at finding out the most common choices of individual practices used to deal with stress as well as organizational interventions or activities available for teachers to reduce their stress in professional activity. Stress management measures listed in the questionnaire are grouped into four categories (Table 2).

Table 2 Categories of stress management techniques (questionnaire for teachers)

Category of stress management methods	Statement that describes stress management method in the questionnaire
Relaxation methods - soothing, relaxing techniques that help to regain well-being. These techniques include physical activities, massages, focus attention, body relaxation, breathing, imagination and emotional control exercises.	I practice relaxing with visual imagination techniques
	I try to pay attention to breathing and do breathing exercises
	I try to calm down and relax in a creative way (for example, drawing, writing, listening to music, etc.)
	I exercise body relaxation exercises
	I go to sport club after the classes
Rational methods - include deepening of self-perception and cognition ways to strengthen the ego, the establishment of clear and flexible limits for self-determination, learning to explore and manage thoughts, promote rational and positive thinking.	I think over the stressful situation and develop an action plan to cope with it
	I take some other work or activities to redirect my thoughts from the issue
	I make joke of the situation
	I try to find something positive in the situation
	I think over what I've learnt from the situation
	I try to find out more about the situation
	I recall my previous successful experience of resolving the problems
I am convincing myself that I am a professional and have the necessary skills to solve the problem	
Organizational methods – include social support methods provided at school for promoting proper organizational microclimate, relationships, open communication and support.	I turn to my colleagues for help and/or advice
	I share the problem with colleagues in the self-support group
	In communicating with my colleagues, I express the feelings and seek consolation and understanding
	I seek advice from a school psychologist
	I ask for help from the school management
Other	In conflict with students, parents, colleagues, I address a psychologist for mediation in conflict resolution
	I take medicaments

The second part of the teachers' questionnaire (5 questions) was designed to find out teachers' views on what kind of help could be offered and promoted at organization level in order to support teachers in coping with stress more successfully in their professional life. The same questions also were put to school leaders. These questions allowed to determine and compare the attitudes of teachers and management staff towards the availability, need and impact of stress

coping methods at organizational level (like supervision of school as an organization, trainings about conflicts, stress etc.) on teachers' stress level reduction.

Research results

Information about the survey participants. 62 school managers and 308 teachers participated in the study. The majority of school leaders (54%) were of middle age (43-50), 37% - between 26 and 42 years old, 29% - 51-60 years old. 56% of school leaders who participated in the study were women. 40% of the management staff worked in primary schools, 40%- in secondary schools, 20% - in vocational training institutions. The majority of teachers were women (86%). 45% of teachers worked in primary schools, 47% - in secondary school and 8% in VET. The age distribution of the study participants-teachers was as follows: 61% were aged between 24-45, 26% - between 46-55 and 13% - between 56-65.

Teachers' stress level. Majority (61%) of teachers reported their work as very stressful or stressful. View of school managers towards stress level in teacher work is even more worrying and decisive – almost 80% of school leaders consider teachers' job as very stressful or stressful (Figure 1).

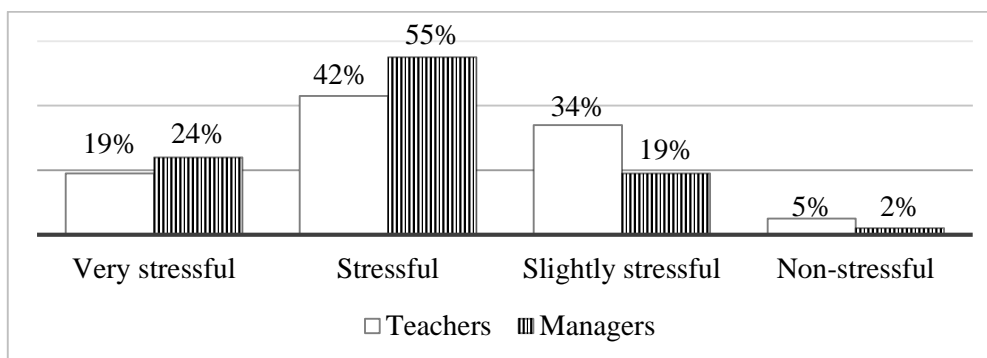


Figure 1 Teachers' work stress level – teachers and school managers' replies

According to research findings female teachers feel higher level of stress than man teachers. No significant difference in perceived stress level is found between teachers with different years of pedagogical experience. Number of students in class or education institution in which teachers work also do not have relevant impact on teachers' stress level.

Measures used by teachers to deal with stress. The results of the survey demonstrate that teachers are mostly focused on individual methods of coping with stress (Figure 2). Mostly, respondents employ cognitive or rational strategies for dealing with stress, such as reflecting on a stressful situation, recalling successful experiences in resolving a problem, reflecting on a problem-solving plan, redirecting thoughts from the problem situation to other activities, trying to

find something positive in a situation, thinking about what has been learnt from the situation.

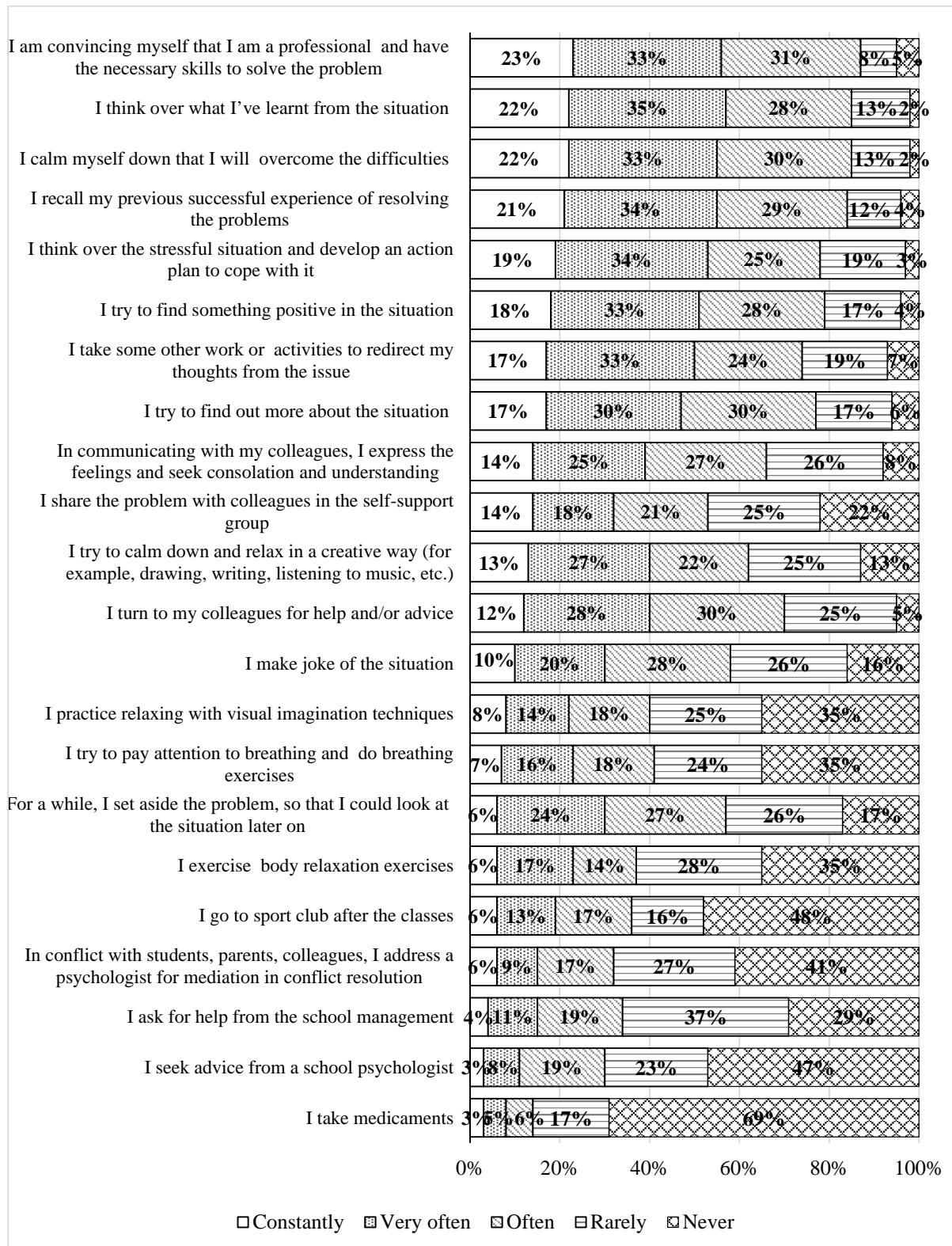


Figure 2 Measures used by teachers to manage stress

Less than half of the respondents use various relaxation stress management measures, such as breathing and relaxation exercises, visual imagination techniques, physical activity. Survey data revealed that only a small proportion of respondents use medication to cope with professional stress.

Concerning organizational stress management measures teachers prefer to use some of the social support methods like sharing problematic situations with colleagues in self-support groups, communicating with colleagues, expressing the feelings and seeking consolation and understanding, or turning to the colleagues for help or advice. It is interesting to notice that less than half of the survey participants-teachers turn for help to the school management staff. And only a very small minority of respondents mentioned that they seek help and advices from a school psychologist. Analysis of measures used by teachers to cope with stress by countries does not show significant differences. The rational stress management techniques are the most preferred in all the countries. The least frequently reported activities are going to sport club and taking medicaments. Seeking advice from a school psychologists and asking for help from the school managers are more often used techniques by teachers in Turkey, also in Bosnia and Herzegovina than in Lithuania, Portugal and Slovenia.

Measures applied at schools for teachers' stress management. Analysis of school leaders' responses on measures that are implemented at schools to reduce teachers' stress level shows that diverse organizational interventions and activities are applied at school level to promote teachers' motivation, participatory environment, open communication and support. Most school managers state that events for staff to develop organizational culture based on cooperation and trust are organized, teachers are provided opportunities to take part in qualification development events, administrative staff responds to teachers' questions in a precise and immediate manner, motivates teachers for performance results, mediates in conflict situations, puts efforts to improve teachers' work environment. As the least frequently applied measures at school level are found to be invitations of supervisors to lead the team or organization supervisions and analysis on teachers' well-being at work.

Support and measures that teachers need in order to successfully overcome stress in their professional life are reflected in Figure 3. The results for support preferences comparing those of teachers and school leaders are very similar. Despite the fact that many school leaders report that a number of measures are applied at school to contribute to teachers' stress reduction, majority of school managers find that educational and skill-building methods aimed at improving personal abilities to deal with stress, like trainings on stress management techniques and resolving conflicts, would be a relevant help for teachers to cope with stress. These trainings are among the preferences among the teachers as well. The third area prioritized to be improved is the need of management staff support

and efforts to promote better school climate. Supervision of the school as organization, according to teachers and school managers, is the least preferred measure to deal with stress. Almost half of the school managers find support of management and administration staff and regular professional activity reflection groups as relevant measures for promoting appropriate school's microclimate.

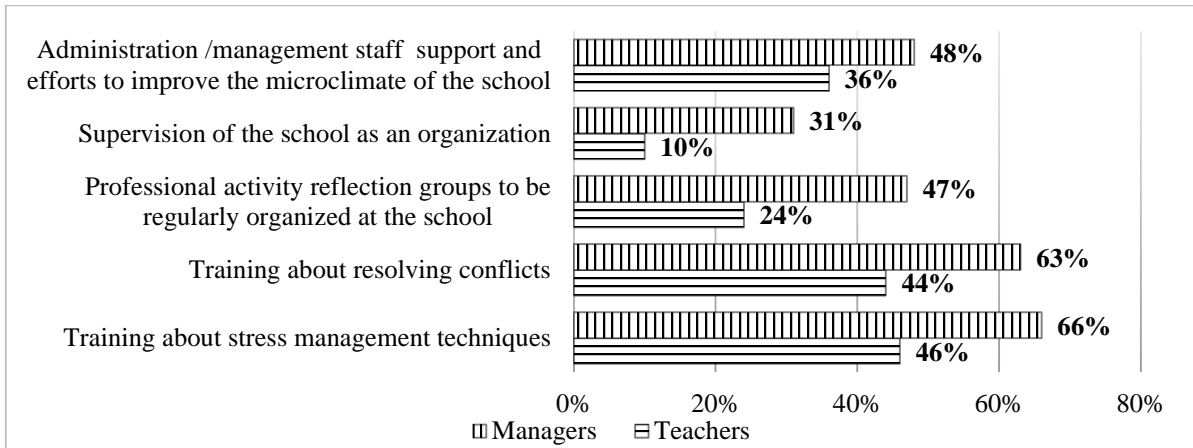


Figure 3 Measures for more successful teachers' stress management

Comparing the school leaders' preferences on the necessary stress management measures at school by countries (Figure 4), it is interesting to note that supervision of a school as an organization is the most preferred by Lithuanian school managers. Majority of the respondents from other countries do not think that this measure can play a significant role in reducing teacher professional stress.

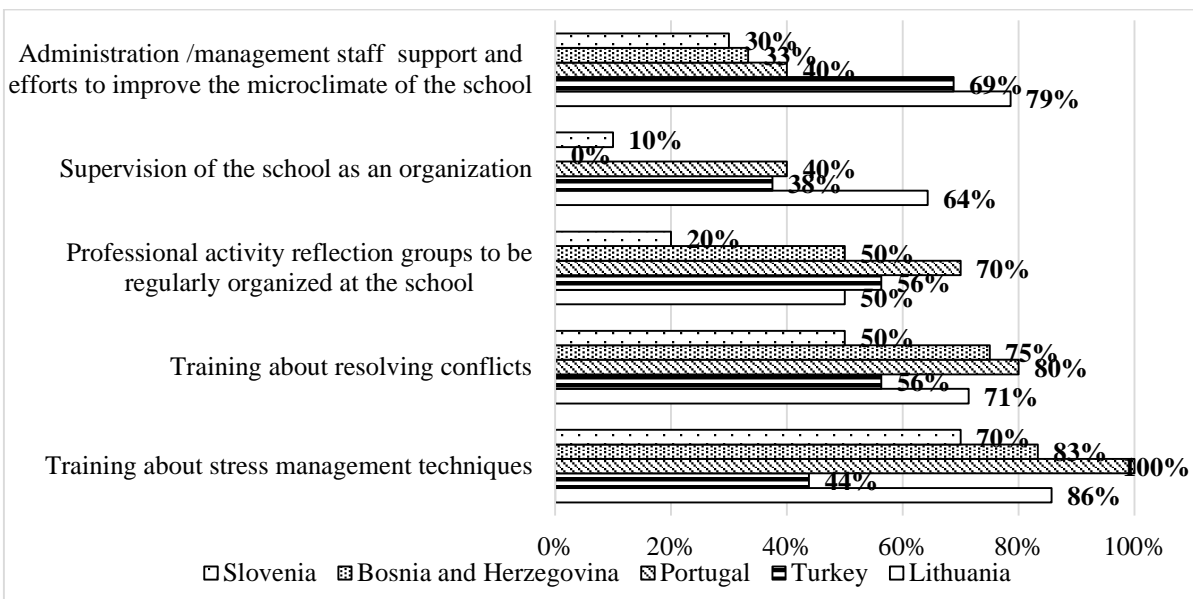


Figure 4 Measures for more successful teachers' stress management – data by countries (school leaders' approach)

School leaders from Portugal highlight the relevance of the regular organization of professional activity reflection groups as an effective stress management measure. Interestingly, training teachers stress management techniques for school managers from Turkey, unlike other countries, is the least preferred measure seeking teachers' stress decrease.

The research data allow to discover that majority of school leaders from Bosnia and Herzegovina, Portugal and Slovenia do not consider the role of the administration staff in improving the microclimate of the school as an important stress reducing measure for teachers.

Conclusions

1. Most measures for dealing with stress and applied by teachers are based on individual approach. Most commonly teachers use rational stress management methods focused on thoughts managements and positive thinking. Seeking advice from a school psychologists and asking for help from the school management are not much used measures by teachers, however teachers prefer to turn for help or advice to colleagues.
2. Basing on the survey of school leaders, a great variety of stress management measures are applied at schools to support teachers in dealing with professional stress. However, they need to be strengthened and expanded in order to promote more supportive work environment and enhance teachers' stress management skills.
3. School managers and teachers think that the most effective measures to deal with teachers' stress relate to educational and skill-building methods. Trainings about resolving conflicts and stress management techniques are treated as the most appropriate measures for teachers' stress management that should be promoted and applied at schools.
4. Not much importance is given to organizational stress management measures that are geared to organizational change. Management staff support and efforts to improve the microclimate of the school and organization of supervision of the school as an organization are considered as the least relevant measures for reducing teachers' occupational stress.

Acknowledgements

The research was conducted under the Erasmus plus project "Stress Free Teachers - Preventing Stress in the Teaching Profession" (2017-1-PT01-KA201-035812). The authors of the paper thank partners from Slovenia, Portugal, Bosnia and Herzegovina and Turkey for their contribution and support in collecting the survey data.

References

- Almonaitiene, J., Lekaviciene, R., & Antiniene, D. (2010). *Žmonių santykiai organizacijoje*. Kaunas: Technologija.
- Byers, S.K. (1987). Organizational stress: Implications for health promotion managers. *American Journal of Health Promotion*, 2(1), 21-27. DOI: <https://doi.org/10.4278/0890-1171-2.1.21>
- Chen, H., Wong, Y., Ran, M.S., & Gilson, Ch. (2009). Stress among Shanghai University Students. The Need for Social Work Support. *Journal of Social Work*, 9, 323-344. Retrieved from <http://jsw.sagepub.com/content/9/3/323.full.pdf+html>
- Cowley, S. (2006). *Mokymo klinika*. Vilnius: Tyto alba.
- Greenberg, J., & Baron, R.A. (2003). *Behavior in Organization: Understanding and Managing the Human Side of Work*. Upper Sadle River: Prentice Hall.
- Karkockiene, D. (2011). Medicinos ir sveikatos mokslų studentų patiriamo streso ypatumai ir jo įtaka miego kokybei. *Visuomenės sveikata*, 2(53), 83-92.
- Keith, C.H., & Wendy, M.R. (2014). *Stress Management for Teachers: A Proactive Guide*. New York: The Guilford Press.
- Kompier, A.J., Cooper, C.L., & Geurts, A.E. (2000). A multiple case study approach to work stress prevention in Europe. *Europe Journal of Work and Organizational Psychology*, 9(3), 85-112.
- Mahan, P.L., Mahan, M.P., Park, N.J., Shelton, C., Brown, K.C., & Weaver, M.T. (2010). Work Environment Stressors, Social Support, Anxiety, and Depression among Secondary School Teachers. *Workplace health and safety*, 58(5), 197-205. Retrieved from <https://journals.sagepub.com/doi/abs/10.1177/2165079910058005044>
- Matteson, M.T., & Ivancevich, J.M. (1989). *Controlling Work Stress: Effective Human Resource and Management Strategies*. San Francisco: Jossey-Bass Publishers.
- McGregor, B.A., Antoni, M.H., Ceballos, R., & Blomberg, B.B. (2008). Very low CD19+ B-lymphocyte percentage is associated with high levels of academic stress among healthy graduate students. *Stress and Health*, 24, 413-418. Retrieved from <http://web.ebscohost.com/ehost/pdf?vid=22&hid=105&sid=52c0e842-56dc-40e2-a0a3-37c4d7cdac43%40sessionmgr114>
- Prilleltensky, I., Neff, M., & Bessell, A. (2016). Teacher Stress: What It IS, Why It's Important, How It Can be Alleviated. *Theory into Practice*, 55, 104-111. Retrieved from <https://www.tandfonline.com/doi/abs>

STUDENTS WITH A MIGRANT BACKGROUND: POSSIBILITIES AND PROBLEMS OF THEIR INTEGRATION INTO EDUCATION SYSTEM

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***Abstract.** This paper examines the integration of students with a migrant background and the problems encountered by the teachers, who seek for their successful integration via the educational process. A qualitative approach has been chosen for the research. On the basis of a semi-structured interview (N=12), it is proposed that despite the existing migrant policy, there are still urgent demands from teachers to get specific methodology of working with students from migrant backgrounds. Moreover, the school administration and teachers often have to search for optimal and individual decisions to ensure the process of integration. The most frequently used means of ensuring children's integration into the educational process include individual education plans, non-formal activities, tutoring in the Lithuanian language, as well as application of the support model for individual student(s). Finally, parent involvement into the processes of children's education and integration could be more active, yet they themselves often need a lot of support.*

***Keywords:** migrant background, student, education system, Lithuania.*

Introduction

The large-scale migration is a recent phenomenon, not only in countries with a long history of immigration (e.g. United States, Australia), but also in European countries (Buchmann & Parrado, 2006). The new wave of migration causes the changes in country policies in economy, social system, education, etc. In the context of the occurring migration processes, the educational system plays a significant role. As Buchmann & Parrado (2006) note, “key adaptation outcomes and prospects for social mobility largely stem from their experiences in the educational system” (p. 345). Hence, educational achievement is an important predictor for integration into the host society. Scientific (Buchmann & Parrado, 2006; Jacobs, 2013) and international studies on students' achievements (e.g. OECD PISA, 2016) demonstrate that the achievements of students with

migrant backgrounds differ from the ones of students having status like this. According to OECD PISA 2015, the background of their integration is inclusive education (Faas, Sokolowska, & Darmody, 2015). Inclusive education tends to include a safe and supportive (academic and social) environment; shared leadership; family involvement; as well as a supportive network of professionals. Such a system of inclusive education facilitates academic and social integration, which is especially important when considering students with a migrant background (Faas, Sokolowska, & Darmody, 2015).

Although different countries encounter similar challenges and problems when integrating students with migrant backgrounds, there exist certain differences among them. For instance, the study of Buchmann & Parrado (2006) reveals that “the lower achievement of immigrant students can be largely explained by differences in family background and language proficiency in the United States, as well as in some other societies with a long history and tradition of immigration, these factors do not explain the sizable gap in performance between immigrant-origin and native born students in many Northern European societies” (p. 365). In other words, the experience, history and geographical position of a country determine the differences in the process of integration.

Hence, the research question of the study is: *How are students with a migrant background integrated into the education system in Lithuania? Moreover, what main possibilities and problems does the system face throughout their integration process?*

First, we will provide a review of the recent perspectives of integration in the education system of students with a migrant background. Next, we will focus on the current study methodology and its main results. Finally, we will highlight the future research directions concerning issues on the integration of students with a migrant background into the education system.

Literature review

Strategies for successful integration of students with a migrant background

There is no common definition of who a ‘migrant’ is (Katsarova, 2016), or a common agreement among different countries and/or organisations (Global Education Monitoring Report, 2019). In the present article, we follow the conception of Eurydice (2019) that ‘students with a migrant background’ or ‘a migrant student’ are the newly arrived/first generation, second generation or returning migrant children.

Recent migration processes and the increasing refugee issues in Europe have led to an increasing number of countries analysing the experiences of such children in the education system. Countries with experience in migration

processes better meet the needs of current migrants, including the educational needs of refugees (Koehler & Schneider, 2019). In the latest Eurydice report (2019) on integration of migrant students in education in 42 education systems (in 28 EU member states), it is emphasised that although these children have access to education, there are many disadvantages. For instance, too little attention is paid to students' social and emotional needs. In addition, countries mainly focus on the language of instruction. Meanwhile, little attention is paid to the individual progress of a child, as well as too little support is provided for teachers and school heads (e.g. providing teaching assistants).

Recent studies (Eurydice, 2019; Koehler & Schneider, 2019; Ismail, 2019) suggests that European countries (e.g. Germany, Austria, Finland, Sweden) have good strategies for integrating migrant students in education. For instance, Ireland supports migrant students by enabling them to sit the Leaving Certificate (the final exam, which gives access to higher education) in 15 EU languages and provides support programmes for underachieving students (including migrant students) (Faas, Sokolowska, & Darmody, 2015). In the UK, peer education and mentoring programmes (Manzoni & Rolfe, 2019) are widely applied as pedagogical techniques and teaching/learning strategies (e.g. The Buddy scheme) and serve their purpose well while integrating migrant students.

Ismail's (2019) study on the position of Somali immigrants in Finland demonstrates that "equal resources are not enough to solve the problem" (p. 731). The author notes that parent involvement in school life and their language skills improvement are the ways to help their children to successfully integrate in education. Another important aspect is that the Government of Finland approved a new integration programme in 2016, which combines social, educational and economic spheres. Top-level strategies for integrating migrant students into schools also exist in the afore-mentioned EU countries, such as Germany and Ireland (Eurydice, 2019).

Jacobs (2013) maintains that sending society actors in destination countries or diaspora schools can be employed to assure successful integration. Although the author recognises that the sending society actors seem to have only a limited impact on the educational integration of migrant children, he claims that country experiences prove the importance of transnational integration dimension (e.g. bilateral agreements on migrant education about the language and culture of the country of origin) for integration.

The practice of different countries regarding immigrant student immersion or separation processes (being taught in separated welcome or reception classes to acquire certain levels of the host country language) is ambiguous. As Koehler and Schneider (2019) note that the separation process would primarily occur in Germany, while immersion would be given preference in Sweden. The authors claim that the importance of preparing a child for immersion cannot be denied,

yet most importantly, the separation time should be reduced as much as possible taking into account the age of the children and other circumstances.

Despite the different practices prevalent in European countries regarding the integration of migrant students in education, the political dimension is recognised as significant. Among such important aspects, it would be important to focus on the social context and its influence on integration (Ismail, 2019); commonality and cooperation of governmental and school policies (Schachner et al., 2017), which must be combined with regular state funding for education, appropriate training of professionals working in a multicultural environment, as well as assistance for education staff and school heads.

The context

Exploring the integration process of students with a migrant background in the Lithuanian context is important for a number of reasons. Firstly, Lithuania as a state has no deep migration traditions. Since 2017, increased numbers of migrant students in Lithuanian schools makes Lithuania an interesting case study. Besides, in the case of Lithuania, the majority of students with a migrant background are children aged 15 and having Lithuanian citizenship (Švietimo paslaugų sugrįžusiems asmenims poreikio savivaldybėse tyrimas, 2018). Secondly, according to the Migrant Integration Policy Index (2014), Lithuania ranks 34 out of 38 among the countries, where migrant integration policy is viewed as *unfavourable*. Among other fields, the field of education is seen as *critically unfavourable*. Thirdly, Lithuania has no strategy for integrating migrants into education. So far, Lithuania has been developing its policy on the integration of migrants.

In the Republic of Lithuania, participation in full-time education is compulsory until the age of 16. That means that the vast majority of migrant students from the younger generation should attend school and the State must guarantee their right to education. Lithuania has taken a number of actions and initiatives in the field of education in recent years to ensure access to education. For example, the Ministry of Education, Science and Sports has developed and provided guidance in the areas of returnee admission, needs identification, education, assessment, additional funding, teacher qualification development, information and counselling since 2019. Simultaneously, the Ministry has initiated the establishment of a school network (including 21 schools) in 10 Lithuanian Municipalities. One of the purposes of this network is to advise other educational institutions on successful experiences and practices in integrating migrant students.

We would like to draw the readers' attention to a number of guidelines and recommendations for the integration of migrant children, which we consider to be

ambiguous. For instance, the Recommendation of the Ministry of Education, Science and Sports (2019) underlines that additional funding shall be granted for schools and teachers working with migrant students provided the returnee student is a citizen of the Republic of Lithuania. A possibility to have equalising classes/groups in the school is provided, yet such classes/groups are organised only when a group of at least 10 students is formed. According to our researchers, such and similar guidelines increase exclusion rather than facilitate the integration of all students with a migrant background. Despite that fact, it is commendable that the issue of the integration of students with a migrant background becomes a subject of educational policy and public discourse.

Methodology

A qualitative approach was selected to attain the aim of the research – to reveal the teachers' attitude of teachers towards the integration process of students with a migrant background, as well as the incurred problems and ways of their solution. The sample for the study was constructed by a *non-random sampling* method. The latter sample allowed the study to identify individuals who were easy to find and access (Best & Kahn, 2006). The sample size consisted of 12 informants. All the informants were teachers of Lithuanian progymnasiums. All the participants were women, with aged 41 on average and having 21.3 years of professional experience. The study participants had 1-3 students that could be assigned to a migrant group in their teaching practice. The method employed was a semi-structured interview.

The study was performed in August-December 2019. The interview process was conducted in accordance with the basic ethical principles. Participation in the interview was based on the volunteering principle, the teachers took part in the study without having been coerced and deceived. The interview was anonymous, ensuring the confidentiality of the participants. These principles helped to ensure the reliability and objectivity of the collected data.

The following themes were important for the analysis of the scientific problem:

- (1) what are the main problems (educational, social, psychological) that teachers face when dealing with the children of expatriates and foreigners;
- (2) what integration measures are applied at school;
- (3) what is the nature of the assistance provided by parents, colleagues and municipalities for returning expatriates or incoming children when it comes to integrating returning expatriates and expatriate children;

- (4) what political and administrative decisions (in the opinion of the study participants) would ensure the success of education and social integration of expatriate and incoming children.

Qualitative content analysis (Krippendorff, 2004) was used for data analysis. In researching the scientific problem, participants' authentic statements were collected, coded and analysed, distinguishing between categories and sub-categories, looking for authentic linguistic expressions and language fragments, as well as justifying the categories and sub-categories for relevance and meaningfulness.

Research results

The analysis of the research data revealed three groups of categories:

- (1) problems and difficulties in the successful integration of migrant children;
- (2) the necessary and essential means for this integration;
- (3) and political and administrative decisions necessary for successful integration. Below we present the results of the study for each category separately.

As far as the problems and difficulties were concerned, the participants of the study focused on language and knowledge gaps and their non-compliance with Lithuanian standards, cultural differences, and lack of teaching/learning resources (Table 1).

Table 1 Problems and difficulties in educating migrant students

Category	Sub-category	Fragments of the authentic statements of the research participants
Problems and difficulties in educating migrant students	Lack of knowledge of the curriculum, especially the Lithuanian language	<...> <i>The problems were mainly caused by the Lithuanian language because the programme was too difficult according to their skills, and the text interpretations were difficult (I 1);</i> <...> <i>English is excellent and Lithuanian is quite poor (I 9);</i>
	Knowledge gaps	<...> <i>such students learn according to an individual plan <...> the knowledge of the subjects of the incoming students is very different from that of our students, they feel the gaps in the subjects of history and geography (I 3);</i> <i>It was not easy for someone, who could not speak the language, to speak about history, I was looking for films (I 12);</i>

	The need for educational materials written in the language that has been used before	<i>There was a student from Sweden, we were looking for someone who could help get the learning materials (I 5); We use gestures and look for films in the language they understand (I 11);</i>
	Extra preparation for lessons	<i>More time is needed to prepare for lessons, and sometimes it is difficult to communicate (I 2); I gave more visual material, all kinds of activities, until he learned some Lithuanian (I 7); There's a lot of preparation to look for different sources and materials (I 12);</i>
	Cultural differences	<i><...> a different culture, completely different learning experience, rules, (I 5); <...> he felt very free in the classroom, sometimes the kids laughed, which was disturbing (to the student) (researcher's note) (I 8); It was not easy for the student, she was Lithuanian, but she did not speak Lithuanian, and yet she was not a British citizen (I 9).</i>

Highlighting the problems and difficulties, the participants noted that language skills made it difficult for peer adaptation and understanding of educational strategies. Not only linguistic, but also cultural differences were identified as significant. The teachers claimed they lacked methodological materials and textbooks to teach children, whose mother tongue was not Lithuanian, as well as missed opportunities to learn about other teachers' methods and exchange knowledge and experience. To overcome these difficulties and emerging problems, the teachers took various measures to ensure student integration (Table 2).

Table 2 Measures applied to ensure the integration of migrants in the educational process

Category	Sub-category	Fragments of the authentic statements of the research participants
Measures to ensure integration	Individual learning, planning of education	<i>I remember a case where we had a student who was only able to learn only when I worked individually with him, <...>, then we found a friend for him and taught them together (I 8); <...> teachers have adapted their tasks creatively, slowing down their learning pace so that they could adapt to the student (I 1); I would distinguish individual learning, but individual work of a teacher is still required (I 2);</i>

		<i>We try that they do their homework in the classroom and work with them individually longer (I 11);</i>
	Non-formal education	<i>We offer informal activities: there is a dance group, nature lovers' club, so we direct them to the activities that might be interesting (I 3); The best integration is through activities, tours, museums, and active tasks. They include traditions, culture and communication (I 12); We try to help them adapt to the school community, understand the rules, attend all events, and feel good (I 5);</i>
	Additional education	<i><...> we provide additional education, we discuss it with several teachers and set lower goals (...) (I 10); We provide counselling, not necessarily by the same teacher (I 11); We plan additional lessons and time to bridge the knowledge gaps (I 5).</i>

Thus, the results of the research revealed that additional consultations on the Lithuanian language and other subjects were provided in order to ensure purposeful integration into the educational process. Subject lessons were personalised, addressed specific challenges experienced by the child and reduced the learning gaps. In order to strengthen the integration processes, the students were involved in non-formal education activities. The benefit of non-formal education was emphasised in expanding the students' vocabulary and communication skills, as well as their knowledge of traditions. Another important component of integration considered by the informants was the involvement of students and their families in school activities: *"The children who came to us were very easily and quickly integrated into the school community"* (I 6); *"It depends on the child, one can feel great at school and the other needs extra support again and again <...>"* (I 12); *"We talk a lot with the students and their parents about how they are doing, what is difficult <...>"* (I 4). The research participants unequivocally appreciated the employed means and their effectiveness: *"we tried to appoint students-friends for them, the children do not want to communicate, there is a gap"* (I 4). While in other countries (as mentioned in the theoretical part of this article), the Buddy scheme is merely used as an effective means of integrating such students.

The most commonly used measures for successful integration of students fell on the shoulders of the teacher. The teachers devoted extra time for preparing assignments, preparing for consultations, as well as searching for and adapting methodological and educational materials. The data clearly identify the teachers' efforts to change the existing situation and involve students in the educational process, yet it is noteworthy that they needed external support in the process. The

vast majority of the informants pointed out that the successful integration of children required parents' involvement and collaboration with the school: *"this is how [the teacher and parents] work together for the child"* (I 9); *"Parents cooperate well, coordinate learning with teachers, help children with tasks, and work in addition to help learn Lithuanian"* (I 2). However, such a cooperation was not always established: *"parents did very little work with the child, full responsibility was given to the school, and such cooperation would be necessary"* (I 5). The teachers also pointed out that they needed support from other professionals: *"a teaching assistant would be good ..."* (I 12); *"the help of an assistant teacher is needed immediately, but it is necessary to obtain the decision from pedagogical-psychological service, which takes too long ..."* (I 4). In other words, according to the informants, they did not receive sufficient support and assistance from other professionals to ensure successful integration of the students. The informants pointed out that successful integration also required certain processes at school administration and/or national level (Table 3).

Table 3 Political and administrative decisions that support integration

Category	Sub-category	Fragments of the authentic statements of the research participants
The nature of political and administrative decisions	The need for solutions at the national level	<p><i>The pupil basket for such children could be larger (similar to that of children with special educational needs). These students could then be assigned teaching assistants or extra hours to compensate for the learning difficulties (I 2);</i></p> <p><i>I think there could be more methodological materials developed to work on specific topics with such students, and these methodological materials could be provided in a number of languages (I 4);</i></p> <p><i>The teachers would need materials, which could be in the electronic format, to work with non-Lithuanian speakers (I 3);</i></p> <p><i><...> we lack focused courses for teachers explaining how to work with migrant students (I 6);</i></p>
	Support from the staff of municipal education departments	<p><i>We have not asked for help from the municipality, we try to do our best, we discuss the issues with each other, I call my colleagues (I 5);</i></p> <p><i>The municipality will not be very helpful here, maybe it could spare some additional funding (I 3);</i></p> <p><i><...> we approached the education department when it came to solving a complex problem, there was a difficult situation with the whole family< ...>, unemployed parents, so a social pedagogue was involved (I 11);</i></p>

		<i>There is not much to help for we need to work with the student ourselves (I 8);</i>
	School administrative and collegiate decisions	<i>We always communicate with each other <...> looking for help, we had a case where we asked for help from VMU, the teachers gave me some materials (I 6); We solve problems collegially, we know the cases of our students (best I 4); When I had such a student, the principal took a keen interest in the situation, and we looked for methodological materials together (I 10).</i>

The educators, who participated in the research, expressed the need to receive more obvious and purposeful systematic assistance, both financial and methodological, in working with the incoming students. Targeted methodological materials, including methodological tools and electronic resources for non-native children, were considered to be an important support for successful integration. The need for targeted qualification development courses was expressed. The participants of the research did not express high expectations regarding the cooperation with municipal representatives in solving the problems of education and integration of incoming students. It was noted that more obvious municipal assistance was possible when the problem was complex and necessary for the whole family. In the opinion of the study participants, the most meaningful help could be obtained from the school community through collegial communication and cooperation, as well as sharing of experience and support from school heads.

Conclusions and discussion

The research presented in this paper focuses on successful integration of migrant students in education. The recently performed studies (Eurydice, 2019) reveal that European countries have developed good strategies for successful integration of students with a migrant background. This present study confirms that Lithuania does not have a long history in migration processes. In the light of this, it is interesting to analyse how Lithuania deals with migrant students' integration in education.

It has been found that the documents of Lithuanian education policy regulate and provide recommendations on strengthening the integration of migrant students. However, the existing practices raise considerable debates regarding their effectiveness and affordability. As has been proved by our study, various measures are applied to ensure the integration of migrant children: individual education plans, non-formal education activities, individual teaching of the Lithuanian language, and the Buddy support model. Most of the teachers involved in the study face a lack of methodological materials and tools to assess and meet

the individual educational needs of returning children of different ages. It also recognises the lack of adequately trained teachers who can work with children with diverse linguistic and cultural backgrounds. In order to compensate for the lack of methodological aids, the teachers organise education for children who have returned or come from abroad relying on their own experience and that of their colleagues, strengthening their relations with parents and social partners. School administrators and teachers are often in search of the most optimal and personalised solution for the integration process, and there is no obvious practice to contact municipal education departments. The participating teachers express their expectations for a more active and meaningful involvement of parents in their children's education and integration.

This research contributes to the existing body of knowledge in a variety of ways. Firstly, the history, traditions and other cultural and institutional aspects of the country are important in ensuring migrants' integration. The results of our study confirm the conclusion of Buchmann and Parrad, made in 2006, that institutional aspects of a host society matter for successful migrant adaptation. Moreover, we cannot expect that the countries having no previous experience of migration processes or are encountering them right now, will be able to deal with integration issues immediately (Koehler & Schneider, 2019). Secondly, the experience of advanced countries, such as Finland and Sweden (Ismail, 2019; Koehler & Schneider, 2019), shows that all areas of the society need to be brought together to ensure successful integration of migrants. In other words, the issue of migration will be successful when social, educational, economic and other sectors consider this as a priority for their area. Thirdly, while teachers in different countries face similar challenges, different countries have different strategies for student integration.

There are some limitations and future directions of this study. The main limitation of this study is that the research sample includes only one educational sector, i.e. the teachers of progymnasiums. We understand that the issue of migrant student integration is multifaceted, so this study reveals only a part of the research phenomenon. The fruitful line of the research in the Lithuanian context could be a mixed method longitudinal research. Further studies could include a case study of a school.

References

- Best, J.W., & Kahn, J.V. (2006). *Research in Education*. 10th Edition. USA: Pearson Education.
- Buchmann, C., & Parrado, E. (2006). Educational achievement of immigrant-origin and native students: A comparative analysis informed by institutional theory. *International Perspectives on Education and Society*, 7, 345-377. DOI: [http://dx.doi.org/10.1016/S1479-3679\(06\)07014-9](http://dx.doi.org/10.1016/S1479-3679(06)07014-9)

- ŠMSM rekomendacijos *Dėl sugrįžtančių į lietuvių asmenų švietimo ir integracijos*. (2019).
- Faas, D., Sokolowska, B., & Darmody, M. (2015). Everybody is Available to Them': Support Measures for Migrant Students in Irish Secondary Schools. *British Journal of Educational Studies*, 63(4), 447-466. DOI: <http://dx.doi.org/10.1080/00071005.2015.1049974>
- Integrating Students from Migrant background into Schools in Europe: National policies and Measures. (2019). *Eurydice Report*. Brussels.
- Ismail, A.A. (2019). Immigrant Children, Educational Performance and Public Policy: a Capability Approach. *Journal of International Migration and Integration*, 20, 717–734.
- Jacobs, D. (2013). *The Educational Integration of Migrants. What is the Role of Sending Society Actors and is there a Transnational Educational Field? INTERACT Research Report*. Italy: European university Institute.
- Katsarova, I. (2016). Integration of migrants: The education dimension. *Briefing*. European Parliament: European Parliamentary Research Service.
- Koehler, C., & Schneider, J. (2019). Young refugees in education: the particular challenges of school systems in Europe. *Comparative Migration Studies*, 7(28), 1-20.
- Krippendorff, K. (2004). *Content Analysis: an Introduction to Its Methodology*. 2nd Edition. London: Sage Publications.
- Manzoni, C., & Rolfe, H. (2019). *How schools are integrating new migrant pupils and their families*. London: National Institute of Economic and Social Research.
- Migrant integration policy index. (2014). Retrieved from <http://www.mipex.eu/>
- OECD. (2016). *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris. DOI: <http://dx.doi.org/10.1787/9789264266490-en>
- Schachner, M.K., He, J., Heizmann, B., & Van de Vijver, F.J.R. (2017). Acculturation and School Adjustment of Immigrant Youth in Six European Countries: Findings from the Programme for International Student Assessment (PISA). *Frontiers in Psychology*, 8, 649. DOI: <https://doi.org/10.3389/fpsyg.2017.00649>
- Švietimo paslaugų sugrįžusiems asmenims poreikio savivaldybėse tyrimas*. (2018). Vilnius: PPMI.
- Williams, F.C., & Butler, S.K. (2003). Concerns of Newly Arrived Immigrant Students: Implications for School Counselors. *Professional School Counseling*, 7(1), 9-14.

TROKŠŅA UN KLUSUMA JĒDZIENU IZPRATNE SĀKUMSKOLAS SKOLĒNIEM

The Comprehension of the Concepts of Noise and Silence in Primary School Children

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Abstract. *Acoustically ergonomic classrooms prevent teachers' voice disorders and improve comprehension of learning instructions by pupils. High activity noise in the classroom, which increases voice loudness, is one of the most common complaints by teachers. The aim of the study was to find out how primary school children comprehend the concepts of noise and silence. Two hundred eighty five children representing Grade 1 to four were included in the study. Children were asked to draw how they imagine the silence and noise. Drawings were categorised in the following groups: sources of noise and silence, effects of noise and silence, noisy and silent places. Drawings imagining school environment were analysed separately. We found that primary school pupils can identify noise sources in the classroom, at home, and in environment. They can detect the impact of noise on the psycho-emotional state of the person. Children reflected a much more extensive range of noise generating activities than activities related to silence. The silence was mostly associated with sleeping and learning while noise with positive (singing, playing) and negative (screaming, fighting) actions. Not only teachers but also pupils should know about classroom acoustic ergonomics. Teachers' education programs should provide education in ergonomics, and teachers should forward this knowledge to children.*

Keywords: *classroom ergonomics, noise, silence, voice, teachers, primary school children.*

Ievads

Introduction

Klases telpa ir kopīga darba vieta skolēniem un skolotājiem. Pirmajiem klases telpa ir vieta, kurā tiek apgūta mācību viela, otrajiem - vieta, kurā strādājot balss tiek izmantota kā galvenais darba instruments. Skolotājs, skolēni un telpa atrodas pastāvīgā, dinamiskā mijiedarbībā. Klases telpu akustika, skolotāja balss skanējums un skolēnu uzvedība stundās ir klases komunikācijas efektivitāti nosakošie faktori.

Mācību telpām ir jābūt akustiski ergonomiskām, t.i., mācību videi ir jābūt piemērotai verbālai komunikācijai un jāsekmē kognitīvā darbība. Telpu akustiku ietekmē troksnis un reverberācija. Sala & Rantala labu darba vidi raksturo

vienkārši – tā ir klusa (Sala & Rantala, 2019). Mūsdienu skolā klusums mācību stundās un starpbrīžos ir liels izaicinājums. Vai skolēni un skolotāji apzinās trokšņa negatīvo ietekmi uz mācību procesu, uz psihisko un fizisko veselību?

Troksnis ir jebkura nepatīkama vai nevēlama skaņa, kas izraisa fizioloģiskas vai psiholoģiskas reakcijas cilvēkiem, kas atrodas tās ietekmē. Trokšņa ietekmē skolotājs runā skaļākā balsī (Calosso et al., 2017; Mendes et al., 2016) un darba dienas beigās sūdzas par trauksmi un stresu (Simberg, Sala, Vehmas, & Laine, 2005). Troksnis apgrūtina informācijas uztveri un saprotamību (Sato, Morimoto, & Wada, 2012). Troksnis ietekmē uzmanības, atmiņas un mācīšanās funkcijas (Bhang et al., 2018; Dockrell & Shield, 2012).

Klases telpās var būt vērojams fona troksnis un aktivitātes troksnis (Sala & Rantala, 2019). Fona troksni rada skaņas avoti telpā vai ārpus tās. Piemēram, ieslēgtas apgaismes ierīces vai datu projektori ir iekšējie trokšņa avoti, bet satiksmes troksnis, skaņas no blakus telpām vai gaitenā ir uzskatāmi par ārējiem trokšņa avotiem. Aktivitātes troksni rada telpā atrodošies cilvēki vai to lietotas ierīces. Aktivitātes troksnis klasē visbiežāk ir saistīts ar skolēnu sarunāšanos, pārvietošanos, krēslu kustināšanu, sīkā inventāra (zīmuļi, penāli, šķēres) lietošanu.

Tikai 32% Latvijas skolu skolotāji ir atzinuši, ka klasē mācību stundu laikā ir vērojams klusums, 67% trokšņa līmeni klasē raksturo kā vidēji skaļu un skaļu. Skolēnu nedisciplinētība un sarunāšanās kā trokšņa avots tika norādīta 53% skolotāju atbildēs (Trinite, 2017).

Paaugstināta fona un aktivitātes trokšņa apstākļos klašu telpās skolotāja balss var piedzīvot Lombarda efektu, kas nozīmē balss skaļuma neapzinātu palielināšanu, pieaugot trokšņa intensitātei.

Savas balss skaļumu mācību stundu laikā kā paaugstinātu un skaļu novērtējuši 51-71% Latvijas skolu skolotāji (Trinite, 2019; Trinite, 2017). Divdesmit pieci procenti skolotāju atzīmēja, ka runā troksnī, nesagaidot klusuma iestāšanos klasē (Trinite, 2017).

Skaļas balss lietošana un intensīvs aktivitātes troksnis var ietekmēt skolotāju balss veselību. Pētījumi atklāj, ka skolotāji ar balss traucējumiem mācību stundu laikā runā skaļākā balsī nekā skolotāji bez balss traucējumiem (Calosso et al., 2017; Jonsdottir, Boyle, Martin, & Sigurdardottir, 2002; Rantala, Hakala, Holmqvist, & Sala, 2012; Trinite, 2019). Aktivitātes troksnis klasē un skolotāju balss skaļums ir saistīti lielumi. Skolotāji ar balss traucējumiem atzīmē augstāku aktivitātes troksni klasē mācību stundu laikā nekā skolotāji bez balss traucējumiem (Bermúdez de Alvear, Barón, & Martínez-Arquero, 2011; Radosz, 2012; Rantala et al., 2012; Trinite, 2019).

Klases telpa ir vieta, kurā skolotājs un skolēni aktīvi mijiedarbojas, tāpēc ne tikai skolotāji, bet arī skolēni ir jāizvērtē par balss ergonomiku. Aktivitātes troksni klasē nosaka skolēnu skaits un uzvedība, kā arī izmantotās mācību metodes.

Elementāras skolēnu zināšanas par klases telpas akustiku un balss ergonomiku ietekmējošiem faktoriem varētu būtiski ietekmēt aktivitātes trokšņa līmeni klasē un radīt labvēlīgākus apstākļus klases komunikācijai. Skolēnu uzvedību ir iespējams mainīt tikai tad, ja tiek identificēti un apzināti nepareizas uzvedības modeļi, kas rada pastāvošās problēmas, t.i., skolēni varētu kļūt klusāki mācību telpās, ja viņi apzinātos trokšņu avotus un to izraisītās sekas. Priekšstata veidošana par komunikācijai labvēlīgu klases akustisko vidi, kur labi jūtas skolēni un skolotājs, varētu sekmēt darbības, kas ļauj šādu atmosfēru radīt realitātē.

Priekšstatu aktualizēšana par ‘troksni’ un tam pretēju parādību – ‘klusumu’ varētu būt pirmais solis ceļā uz akustiski labvēlīgas klases vides radīšanu, tāpēc pētījuma mērķis bija noskaidrot, kā sākumskolas skolēni izprot trokšņa un klusuma jēdzienus.

Metodes un materiāli *Methods and materials*

Pētījums tika veikts divu vispārizglītojošo skolu 1.-4.klašu grupā. Katrā klašu grupā tika izvēlētas trīs klases, pavisam pētījumā tika iekļauti divpadsmit klašu skolēni. Pētījumā piedalījās 285 skolēni, no kuriem 148 (52%) bija zēni.

Pētījuma metode tika balstīta asociāciju stratēģijā. Skolēniem tika dots uzdevums sadalīt A4 lapu divās daļās, un vienā no tām uzzīmēt klusumu, bet otrā daļā uzzīmēt troksni. Pirms uzdevuma veikšanas skolēniem tika lūgts ieklausīties klusumā – “kā tas ir, kad visi sēž mierīgi un nerunā”, tika organizēta īsa diskusija, kuras laikā skolēni tika mudināti aprakstīt kā viņi izprot “klusuma” un “trokšņa” jēdzienus. Zīmēšanas uzdevumu skolēni veica, izmantojot melnbaltos vai krāsu zīmuļus. Uzdevuma izpildes laiks 15-20 minūtes.

Rezultāti *Results*

Skolēnu zīmējumos atsevišķi tika analizēti priekšstati par troksni un klusumu, kas tika iedalīti atbilstoši sekojošām kategorijām: trokšņa avoti, trokšņa sekas, trokšņainas vietas, ar klusumu asociējamas darbības, klusuma sekas, klusas vietas.

Trokšņa avoti. Troksni izraisošas darbības, ko veic cilvēki: klieudz, skaļi runā, sit pa stieni, dzied, lec baseinā, spēlējas, rājas, skrien, kaujas, smejas, atskaņo

mūziku, runā skaļrunī, jokojas, brauc ar velosipēdu, brauc ar skrituļdēli, naglo, raud, runā lielā attālumā viens no otra.

Troksni izraisoši priekšmeti: skaļrunis, zāģis, radio, mūzikas iekārtas, televizors, mašīnas, mūzikas instrumenti, kuģis, telefons, zvans, policijas un ātrās palīdzības mašīna, dinamīts, pistole, tenisa rakete.

Citi trokšņa avoti: mazi bērni, daudz cilvēku, lietus, negaiss, klasē krīt mēbeles, briesmonis, caur durvīm nākošas skaņas, salūts, suns, dzimšanas diena, kaķis ņaud.

Trokšņa sekas: cilvēks raud; nobijies cilvēks; cilvēks taisa ciet ausis; dusmīgs; kaimiņi klauvē pie durvīm; aizrāda: “*Ei, Jūs tur, klusāk!*”; priecājas.

Trokšņainas vietas: klase, iela, skola, daba, pilsēta, lielpilsēta, radio studija, starpbrīdis, ballīte, elle, vulkāns, rotaļu laukums, diskotēka, roka mūzikas koncerts.

Ar klusumu saistītas darbības: lasa grāmatu, domā, bērni mācās, meitene sēž solā, cilvēks nerunā, muša lido, skolēni sēž solos un smaida, sauļojas pie baseina, pamudina: “*Esi kluss!*”, cilvēks pie datora, sasiets cilvēks, kaķis guļ gultā, cilvēks guļ, cilvēki pastaigājas, skolotāja smaida, saka: “*Kušš!*”, izslēdz skaļruni, zīmē, bēdājas, pastaigāties pļavā, skolēni raksta, saule spīd un puķes zied, cilvēks glezno dabā, guļ šūpuļtīklā.

Ar klusumu saistīti priekšmeti: durvis, pulkstenis, māja ar biezām sienām, drēbes, puķes, tāfele, avarējusi lidmašīna, sirds.

Klusuma sekas: cilvēks smaida, priecīgs cilvēks, mamma ir priecīga, jo bērns guļ, laimīgā diena, mīlestība, klusuma brīdis.

Vietas, kurās ir klusums: nakts, māja (līst lietus), rotaļlaukums, tukša telpa (klase), skola, ģimene, teātris, stundas, kalni, daba, ziemā uz kalna, klusais okeāns, pļava, kapi, autobuss.

Samērā bieži, attēlojot troksni un klusumu, skolēni izmantoja pretnostatījumu (1 .tabula).

1. tabula. *Trokšņa un klusuma pretnostatījums skolēnu zīmējumos*
Table 1 A noise – silence opposition in children drawings

Troksnis	Klusums
Puika kliegz	Meitene smaida
Troksnis ir slikti	Klusums ir labi
Troksnis rada skaņu	Klusums savāc skaņu
Skola	Mājas
Cilvēki stāv	Cilvēki sēž
Runā skaļi	Runā klusu
Starpbrīdis	Stunda
Daudz skolēnu	Divi skolēni
Daudz un liels	Mazs un maz

Haoss visapkārt	Strukturēts
Pasākumos skaļi	Mācoties klusu
Mamma dusmojas	Mamma smaida
Krāsains, daudz krāsu	Viena krāsa
Lauztas, asas līnijas	Plūstošas līnijas
Dusmīgs	Smaidīgs
Nepieklājīgi runā: “Pats ej! Hahaha! Kooo?”	Pieklājīgi runā: “Čau! Ko dari? Iesim uzspēlēt bumbu! Ok!”
Klausās ar skandām	Klausās ar austiņām
Priecājas, ka skan mūzika	Bēdājas, ja nekas neskan
Pilsēta	Daba
Troksnis pie datora	Klusums, jo datora nav

Sešdesmit sešos zīmējumos (23%) bija attēlota skolas vide. Piecdesmit deviņos zīmējumos skolēni skolas vidi asociēja ar troksni, bet 53 gadījumos ar klusumu.

Skolās, kurās tika veikts pētījums starpbrīžos skolēni galvenokārt uzturas klases telpās. Klases telpās skolēni troksni asociē ar skaļu runāšanu: “ĒĒĒ; olē, olē, olē; LĀLĀLĀ; ĀĀĀ; BLA-BLA-BLA”. Galvenokārt cilvēki skaļi runā, kājās stāvot (n = 27), taču atsevišķi zīmējumi attēlo skolēnus, kuri sēž solos un runā vai smejas (n = 9), skolēni no vietas sauc skolotāju (n = 1). Ja matemātikas stunda skolēnu zīmējumos tiek saistīta ar klusumu (n = 7), tad trokšņainākās stundas gods ir mūzikas stundai, kurā bērni dzied un skolotāja spēlē mūzikas instrumentu (n = 4). Troksnis tiek saistīts ar fiziskām aktivitātēm klases telpā vai gaitenī, piem., zēni mētā bumbu vai spēlē futbolu (n = 3). Troksnis tiek attēlots kā skolas vidē novērota agresija – meitenes strīdas par lelli (n = 1), bērns tur gaisā paceltu krēslu, krēsli krīt un lido (n = 6), zēni kaujas un kāds sauc pēc palīdzības (n = 4). Skolniece, papildinot savu zīmējumu, izveido dialogu starp divām meitenēm. Pirmā: “... neteikšu! Un ko tu man izdarīsi? Ko iesitīsi? Ne, ne, ne!” Otra meitene atbild: “Kāpēc Tu tā domā? Es gribu zināt, saki tūliņ pat! Ak, Tu, nu Tu man dabūsi tūliņ! Ja, ja, ja!”. Kāda trešās klases skolniece raksta: “Daudzi pēc stundām kliedz”, bet ceturtais klases skolnieks – “Meitenes bļauj ļoti skaļi”.

Skolēni savos zīmējumos norāda troksni, kas ir dzirdams no ārpusē, piem., uzzīmēts kuģis un mašīnas, jo pie skolas atrodas intensīvas satiksmes iela un aiz tās osta (n = 4). Kā trokšņu avotus skolēni atzīmēja mēbeles un skolas zvanu (n = 4).

Tikai astoņi skolēni, attēlojot troksni, nepārprotami bija uzzīmējuši skolotājas, kuras saka: “Klusumu!”, “Beidzat!” “ĀĀĀRRĀ!”. Skolēni ir norādījuši, ka arī skolotājas mēdz skaļi runāt (n = 7).

Skolēnu priekšstati par klusumu skolā ir saistīti ar mācīšanos, skatīšanos, sēdēšanu solos, rakstīšanu un klusu lasīšanu (n = 20). Skolēni attēloja situācijas, kurās redzami smaidīgi bērni, kuri sēž solos un mācās, bet skolotājs stāv pie

tāfeles (n = 21). Attēlojot klusumu, skolēnu zīmējumos pārsvarā redzami smaidīgi skolotāji. Vairākos zīmējumos bija attēlotas situācijas, kurās pie sola sēž tikai skolotājs un bērns (n = 4). Kādai skolniecei klusums saistās ar gaiteni, kurā skolotāja ved rokās sadevušos bērnus. Otrās klases skolniece uzzīmējusi smaidīgu meiteni un paskaidrojusi zīmējumu – “*viens klasē no rīta*”. Vairākiem skolēniem klusums skolā asociējās ar tukšu klasi – “*te neviens*” (n = 6).

Diskusija **Discussion**

Norvēģu sociālantropoloģe Marianne Gullestāda uzskata, ka miers un klusums ir nozīmīgas norvēģu kultūras vērtības, pretstatā troksnim, kas norāda uz nevēlamu konfliktu. Tajā pašā laikā viņa norāda, ka citās kultūrās troksnis ir pozitīvas socializācijas pazīme pretēji klusumam kā izolācijas un vientulības rādītājam (Gullestad, 1990). Vai klusums ir vērtība arī Latvijas kultūrā? Gribētos ticēt, ka jā, jo ne velti latviešiem ir sakāmvārds, ka klusēšana zelts, bet runāšana sudrabs. Vai vecāki saviem bērniem ieaudzina ne tikai tādas tradicionālās vērtības kā runāt patiesību, palīdzēt citiem, dalīties, bet arī klausīties un tikt uzklusītiem. Klausīšanās un klusums ir cieši saistīti jēdzieni. Klusa vide sekmē informācijas uztveri, tās sapratni un atcerēšanos, kas ir ļoti svarīgs priekšnoteikums bērna kognitīvai attīstībai jau no dzīvības pirmā gada, kā arī pamats zināšanu ieguvei skolā.

Skola ir vide, kurā satiekas bērni no dažādiem sabiedrības slāņiem, dažādām kultūrām un valodas vidēm. Ikviens bērns ir savas ģimenes kultūras nesējs un, atnākot uz skolu, bērns reprezentē savas ģimenes komunikācijas kultūru. Skolai ir ne tikai izglītojošā, bet arī audzinošā funkcija un skolotāja uzdevums ir harmonizēt skolēnu tik dažādo pieredzi par savstarpējo attiecību kultūru. Skolotājam ir jābūt vīzijai par ergonomisku klases vidi, kurā patīkami ir uzturēties ne tikai viņam, bet arī skolēniem, kurā strādājot netiek nodarīts kaitējums veselībai un kurā tiek radīti priekšnoteikumi, lai maksimāli attīstītu skolēnu spējas.

Iepriekšējo pētījumu rezultāti norāda, ka klasēs stundu laikā ir vērojams troksnis, kas liek skolotājiem runāt skaļākā balsī (Calosso et al., 2017; Mendes et al., 2016; Trinite, 2017). Skolotājam ir ļoti ierobežotas iespējas ietekmēt fona trokšņa klātbūtni telpā, jo visbiežāk tas ir saistīts ar skolas ēkas atrašanos tuvu pie intensīvas satiksmes ielām, klases novietojumu skolas sporta laukuma pusē, sliktu telpu atdalošo sienu skaņas izolāciju vai novecojušiem mācību tehniskajiem līdzekļiem. Taču skolotāja spēkos ir samazināt aktivitātes trokšņa līmeni klasē. Skolēnu izglītošana par klases akustikas ergonomiku, par

trokšņa un klusuma jēdzieniem un to ietekmi uz cilvēku psiho-emocionālo un fizisko stāvokli ir pirmais solis ceļā uz “klusu skolēnu” un “klusu klasi”.

Pētījuma rezultāti apliecināja, ka bērni prot identificēt trokšņa avotus skolā, mājās un apkārtējā vidē. Jāatzīmē, ka skolēnu zīmējumos atspoguļojās daudz plašāks troksni izraisošo darbību spektrs no pozitīvām (dziedāšana, spēlēšanās, braukšana ar velosipēdu, dzimšanas dienas svinēšana) līdz negatīvām (kliegšana, rāšanās, kaušanās, raudāšana) darbībām. Klusums lielākoties tiek asociēts ar gulēšanu un mācīšanos, kaut gan ir atsevišķi gadījumi, kas paplašina arī šo darbību spektru, piem., pastaigas, atrašanās dabā, atpūtā. Zīmējumos skolēni atspoguļo emocijas, ko rada troksnis un klusums, kas ļauj izdarīt netiešu secinājumu par to, ko šie bērni labāk gribētu izvēlēties. Tā piemēram, troksnis rada bailes, dusmas un konfliktu, bet klusums ir saistīts ar smaidu, prieku un labsajūtu. Šī dažādā, ģimenē akceptētā, komunikācijas kultūras pieredze tiek atnesta uz skolu, kur visi šie bērni veido vienu klases kolektīvu. Skolai vajadzētu apzināties, ka tagadnes skolēns ir topošais vecāks un rūpīgi strādāt pie tā, lai akcentētu klusu un mierīgu darbību veikšanas nozīmi. Piemēram, dziedāšana nav asociējama ar troksni, spēlēšanās var būt aktīva un zinātkāra, bet tajā pašā laikā troksni neradoša, sarunāties var neklieidot.

Iespējams, ka skolotāja uzvedība un komunikācijas stils ir vislabākais piemērs, kas koriģē destruktīvu komunikācijas kultūru katram indivīdam atsevišķi un klases kolektīvam kopumā. Vairākos skolēnu zīmējumos bija attēloti skolotāji, kuri kliegz. Kliegšana ir skaļas un augstas balss lietošana, t.i., palielinoties balss intensitātei (dB), pieaug tās frekvence (Hz). Balss ir skolotāju darba instruments, kuru ir nepieciešams lietot arī disciplinējošiem mērķiem. Skolotājiem būtu nepieciešams apgūt dažādas balss lietošanas tehnikas, kuras, variējot balss augstumu, intensitāti un toni, var izmantot mācību procesā (Hendy & Parke, 2010). Mācību vielas izklāstam ir jāizmanto pārlicinošs, noteikts balss tonis. Turpretī jautājot, balsij ir jābūt modulētai nedaudz augstākā tonī, tajā pašā laikā saglabājot silto un draudzīgo nokrāsu. Lai bērnu iedrošinātu un pamudinātu, skolotājs izmanto zemāku un klusāku balss toni. Balss, kas tiek izmantota, lai disciplinētu klasi, ir noteikta, paaugstināta skaļuma, bet zema. Troksnis rada troksni. Reizēm uzstājīgas prasības pēc klusuma rada troksni (Gullestad, 1990).

No visa plašā zīmējumu klāsta tika atlasīti tie, kuros skolēni trokšņa un klusuma jēdzienus asociēja ar skolas vidi. Šie zīmējumi atspoguļoja mūsdienu skolas realitāti attiecībā uz klases telpas akustikas ergonomiku bērnu acīm. Jāatzīmē, ka līdzīga aina tika iegūta arī no skolotājiem, apkopojot anketēšanas laikā iegūtās atbildes iepriekšējos pētījumos (Trinite, 2019; Trinite, 2017). Zīmējumos skolēni attēlo dažādas situācijas stundās un starpbrīžos. Lai arī stunda vairāk tiek saistīta ar klusumu, kurā smaidīgi bērni sēž solos un smaidīgs skolotājs ir attēlots klases priekšā pie tāfeles vai galda, tomēr 14% gadījumu skolēni norāda, ka arī mācību stundu laikā skolēni var sarunāties. Skolēni aktivitātes troksni

nesaista ar mācību līdzekļu izmantošanu. Tātad, bērni apzinās runāšanas izraisītu troksni stundā un nākošais solis būtu nepieciešamība izskaidrot tā ietekmi uz skolotājas balss veselību un uz viņu potenciālām iespējām labāk mācīties, kā arī patīkamas darba vides radīšanu klasē.

Gandrīz visos bērnu zīmējumos starpbrīdis ir saistīts ar troksni. Tas ir nerakstīts skolas likums, ka pēc 40 minūtēm saspringta darba un sēdēšanas solā ir nepieciešams izkustēties. Vai fiziskā aktivitāte būtu saistāma ar kliegšanu, citu aizskaršanu un konfliktēšanu, mēbeļu grūstīšanu? Ir liela atšķirība, vai starpbrīdī telpā, kurā atrodas vairāk kā divdesmit bērnu, ir dzirdamas priecīgas čalas vai haotisks troksnis. Laba klases akustiskā ergonomika jānodrošina arī starpbrīžos, lai bērni un skolotāja varētu tajos atpūsties.

Skolēni savos zīmējumos pauž uzskatu, ka troksnis ir saistāms ar bērnu skaitu klasē. Attēlojot klusumu, bērni zīmē solus, kuros sēž viens vai divi skolēni vai skolotājs un bērns (individuāla konsultācija) pretstatā troksnim, kur ir zīmēti daudz bērnu. Vai tā ir utopija nodrošināt klusumu pilnā klasē, kurā ir vairāk kā 20 skolēnu? Pētījumi liecina, ka aktivitātes trokšņa līmeni klases telpā var kontrolēt, izglītojot skolēnus par klases ergonomiku, instalējot trokšņa detektorus (ierīces, kas mēra skaņas spiediena līmeni telpā un, sasniedzot noteiktu trokšņa intensitāti, iedegas LED gaisma) vai izveidojot noteikumus un vienojoties par to izpildi visas darba dienas laikā (*“classroom etiquette”*) (Sala, 2019). Pētījuma laikā tika novērots, ka atsevišķās telpās pie tāfeles ir norādes, kas veicina pozitīvu komunikācijas uzvedību.

Secinājumi **Conclusions**

Aktivitātes un fona troksnis ir būtisks klases akustiskās ergonomikas ietekmējošs faktors, kas rada balss traucējumu riskus skolotājiem un kavē pilnvērtīgu mācību vielas apguvi skolēniem.

Skolotājiem un skolēniem ir jābūt zināšanām par klases akustisko ergonomiku. Skolotāju sagatavošanas programmām šīs zināšanas ir jāintegre studijuursos, lai topošie skolotāji būtu sagatavoti reālajai darba videi un izvairītos no profesijas nosacītiem balss traucējumiem. Skolotājiem ir jāizglīto audzēkņi par ergonomikas jautājumiem un jāveicina veselīgas komunikācijas paradumu attīstība.

Sākumskolas skolēni labi prot identificēt trokšņa avotus un to ietekmi uz psiho-emocionālo stāvokli, kas norāda, ka ir nepieciešams šos priekšstatus attīstīt izpratnes un pielietojuma līmenī.

Summary

Classroom is a place where pupils and teacher work together. Acoustically ergonomic classrooms prevent teachers' voice disorders and improve comprehension of learning instructions by pupils. High activity noise in the classroom, which increases voice loudness, is one of the most common complaints by teachers.

The aim of the study was to find out how primary school children comprehend the concepts of noise and silence.

Two hundred eighty five children representing Grade 1 to four were included in the study. Children were asked to draw how they imagine the silence and noise.

Drawings were categorised in following groups: sources of noise and silence, effects of noise and silence, noisy and silent places. Drawings imagining school environment were analysed separately. We found that primary school pupils can identify noise sources in the classroom, at home, and in environment. Children reflected a much more extensive range of noise generating activities than activities related to silence. The silence was mostly associated with sleeping and learning while noise with positive (singing, playing) and negative (screaming, fighting) actions.

Children can detect the impact of noise on the psycho-emotional state of the person. The analysis of drawings showed that noise causes fear, anger and conflict, but silence is related to smiling, pleasure and well-being.

Not only teachers but also pupils should know about classroom acoustic ergonomics. Teachers' education programs should provide education in ergonomics, and teachers should forward this knowledge to children.

Pētījums veikts projektā "Atbalsts pēcdoktorantūras pētniecības īstenošanai", vienošanās nr. 1.1.1.2/16/I/001. Pētniecības pieteikums "Skaņu pastiprinošo sistēmu ilgtermiņa ietekme uz skolotāju balss slodzes samazināšanu un verbālo instrukciju izpratnes uzlabošanu skolēniem" (1.1.1.2/VIAA/1/16/001).

Literatūra References

- Bhang, S.-Y., Yoon, J., Sung, J., Yoo, C., Sim, C., Lee, C., ... Lee, J. (2018). Comparing Attention and Cognitive Function in School Children across Noise Conditions: A Quasi-Experimental Study. *Psychiatry Investigation*, 15(6), 620–627.
- Bermúdez de Alvear, R.M., Barón, F.J., & Martínez-Arquero, A.G. (2011). School Teachers' Vocal Use, Risk Factors, and Voice Disorder Prevalence: Guidelines to Detect Teachers with Current Voice Problems. *Folia Phoniatica et Logopaedica*, 63(4), 209–215.
- Calosso, G., Puglisi, G.E., Astolfi, A., Castellana, A., Carullo, A., & Pellerey, F. (2017). A one-school year longitudinal study of secondary school teachers' voice parameters and the influence of classroom acoustics. *Journal of the Acoustical Society of America*, 142(2), 1055–1066.
- Dockrell, J.E., & Shield, B. (2012). The Impact of Sound-Field Systems on Learning and Attention in Elementary School Classrooms. *Journal of Speech, Language & Hearing Research*, 55(4), 1163–1176.
- Gullestad, M. (1990). Doing interpretive analysis in a modern large-scale society: the meaning of peace and quiet in Norway. *Social Analysis: The International Journal of Anthropology*, 29, 38–61.

- Hendy, L., & Parke, S. (2010). *Five main voices for effective teaching*. The Ludo Press.
- Jónsdóttir, V.I., Boyle, B.E., Martin, P.J. & Sigurdardóttir, G. (2002). A comparison of the occurrence and nature of vocal symptoms in two groups of Icelandic teachers. *Logopedics Phoniatics Vocology*, 27, 98-105.
- Mendes, A.L.F., Lucena, B.T.L. de, De Araújo, A.M.G.D., Melo, L.P.F. de, Lopes, L.W., & Silva, M.F.B. de L. (2016). Teacher's voice: vocal tract discomfort symptoms, vocal intensity and noise in the classroom. *Codas*, 28(2), 168–175.
- Radosz, J. (2012). Influence of classrooms acoustics on the teachers' voice sound pressure level. *Medycyna Pracy*, 63(4), 409–417.
- Rantala, L.M., Hakala, S., Holmqvist, S., & Sala, E. (2012a). Connections between voice ergonomic risk factors in classrooms and teachers' voice production. *Folia Phoniatica Et Logopaedica*, 64(6), 278–282.
- Sala, E., & Rantala, L.M. (2019). Speaking environment – background and activity noise and room acoustics. In L. Rantala & E. Sala (Eds.), *Voice Ergonomics: Occupational and Professional Voice Care* (pp. 30-49).
- Sala, E., & Rantala, L.M. (2019). Noise and Room Acoustics. In L. Rantala & E. Sala (Eds.), *Voice Ergonomics: Occupational and Professional Voice Care* (pp. 172-178).
- Sala, E. (2019). Working Practices. In L. Rantala & E. Sala (Eds.), *Voice Ergonomics: Occupational and Professional Voice Care* (pp. 30-49).
- Sato, H., Morimoto, M., & Wada, M. (2012). Relationship between listening difficulty rating and objective measures in reverberant and noisy sound fields for young adults and elderly persons. *The Journal of the Acoustical Society of America*, 131(6), 4596–4605.
- Simberg, S., Sala, E., Vehmas, K., & Laine, A. (2005). Changes in the prevalence of vocal symptoms among teachers during a twelve-year period. *Journal of Voice*, 19(1), 95–102.
- Trinite, B. (2017). Epidemiology of voice disorders in Latvian school teachers. *Journal of Voice*, 31(4), 508.e1–508.e9.
- Trinite, B. (2019). Rumore, abitudini lavorative e disturbi vocali autovalutati negli insegnanti [Noise, Working Practice and Self-reported Voice Disorders in Teachers]. *Logopedia e Comunicazione*, 15(3), 321–336.

PIRMSSKOLAS PEDAGOĖIJA
Preschool Pedagogy

**ИССЛЕДОВАНИЕ УДОВЛЕТВОРЕННОСТИ
НАСЕЛЕНИЯ СОСТОЯНИЕМ РЫНКОВ
ДОШКОЛЬНОГО ОБРАЗОВАНИЯ И
ДОПОЛНИТЕЛЬНОГО ОБРАЗОВАНИЯ ДЕТЕЙ**

*The Study of Population Satisfaction with the State of the Markets
of Preschool Education, Additional Education of Children*

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Abstract. *The article discusses the problems of implementing state policy in the field of school education and preschool sphere. The article analyzes the results of a sociological study on the example of the educational services market Leningrad region. The results of a sociological study allow us to identify certain shortcomings in the organization of public services at the municipal level of government. The article discusses such aspects of organizing a competitive environment in the field of education as the number of organizations in the market, the representation of organizations in the market, the quality of services, price and the choice of organization. The results of the study allow us to note that more than a third of respondents are satisfied with the quality of services, and the choice of organization, and pricing policy. At the same time, the majority of respondents express certain doubts about these indicators, which is expressed in a small amount of differences between negative and positive values. The results of the study allow us to state the relevance of research on the quality of the organization of the provision of services in the field of preschool education, additional education of children, the market of psychological and pedagogical support services for children with disabilities. Studies show the high importance that households in the Leningrad Region attach to the education sector. This study allows us to identify areas of managerial impact to local authorities regulating these services.*

Monitoring the state of the market for services in the field of school and preschool education makes it possible to identify problem organizations and directions for solving social and economic problems in the field of educational organization. The education sector for all modern states is an important political component, the accessibility and universality of education is a constitutional indicator of the status - “social”, “rule of law”.

Keywords: *public administration, service, education, social policy, quality of education.*

Введение *Introduction*

Значительное внимание органов государственного управления и органов муниципальной власти к системе дошкольного и школьного образования связано с необходимостью постоянно поддерживать и развивать инфраструктуру системы образования, создавать активную среду для полноценного развития этой сферы. Дошкольные учреждения и центры дополнительного образования детей традиционного являются точками социальной, общественной, гражданской активности населения. В сложных демографических условиях сокращения количества детей, важно сохранить не только инфраструктуру сферы образования, но и создать условия для реализации основных положений социальной политики государства, обеспечить соблюдение гарантий социального правового государства в отношении детей.

Многие исследователи рассматривают образование как один из важнейших факторов развития нации, как с глобальной, так и с индивидуальной точки зрения (Lovell & Wirtz, 2011). В исследовании (Pang & Kubacki, 2015) констатируется, что образование представляет основной источник инвестиций в людей, что способствует развитию государства. Информационно-технологическое развитие современного общества предъявляет новые требования к процессу организации предоставления образовательных услуг. Основными целями предоставления образовательных услуг видятся следующие: оценка и совершенствование образовательных программ; совершенствование учебного процесса и повышение компетенций учителей; преобразование преподавательского опыта в значимые для обучающихся компетенции; продвижение образовательных инноваций. Образовательный процесс представляет собой систему саморазвития, отвечающей на внешние вызовы, структурированный процесс способствующий успеху обучающихся (Orlatka & Hemsley-Brown, 2004). Сфера образования традиционно является социально-значимой, органы государственного и муниципального управления традиционно уделяют значительное внимание организации процесса дошкольного и дополнительного образования детей, стимулированию качества образовательного процесса. В условиях развития конкурентного рынка актуальным становится вопрос о привлечении бизнеса в систему дошкольного и дополнительного образования, формирования в этой сфере конкурентного рынка услуг (Manea & Pircaru, 2017). Российские исследователи (Осипов & Стриханов, 2018) проводят анализ системы образования, на основе концепта образования как социального института констатируется существенность структурных

сдвигов в системе социальных запросов на рынках социальных услуг. Некоторые исследования посвящены особенностям анализа маркетинговых условий реализации услуг дошкольными организациями, (Zaharchenya, 2018, Kolesnikova, 2013), некоторые исследователи проводят оценку маркетинговых стратегий развития рынка услуг общего образования, специфики функционирования данного рынка социальных услуг (Alfirevic, Pavićić, & Čačića, 2018).

Основная цель исследования оценить состояние конкурентной среды на рынке услуг школьного и дополнительного образования детей, выявить влияние факторов оказывающих воздействие на состояние конкуренции рынка услуг. Основные задачи исследования: проанализировать состояние рынков услуг дошкольного образования, дополнительного образования детей и психолого-педагогического сопровождения детей с ограниченными возможностями здоровья, выявить факторы оказывающие влияние на состояния данных рынков, оценить удовлетворенность потребителей факторами «цена», «качество», «возможность выбора» на рынках данных услуг.

Методология *Methodology*

Важнейшим направлением исследования социальных процессов является социологические инструменты изучения социальных явлений и процессов. Применение социологических инструментов позволяет выявить и замерить обратную связь с целевыми аудиториями, структурировать проблемное пространство для последующего принятия управленческих решений.

Для выявления основных факторов оказывающих влияние на состояние конкурентной среды рынков: услуг дошкольного образования, дополнительного образования детей и рынка услуг психолого-педагогического сопровождения детей с ограниченными возможностями здоровья, были инициированы и проведены с участием авторов социологические опросы: предпринимателей Ленинградской области, в форме онлайн-опроса с целью выявления административных барьеров для ведения бизнеса (N=801) и анкетирования населения с целью определения удовлетворенность потребителей качеством товаров, работ и услуг на рынках Ленинградской области (N=1515чел.).

Анкета разработана авторами в рамках проведения мониторинга состояния и развития конкурентной среды на рынках товаров и услуг Ленинградской области. Анкета включала в себя целый спектр исследовательских позиций, в т.ч. следующие вопросы: какое количество

организаций предоставляют следующие товары, услуги на рынках вашего города/района; насколько вы удовлетворены характеристиками товаров и услуг на следующих рынках вашего города/района по критериям: цена, качество, возможность выбора (в рамках инструмента измерения была выбрана шкала Лайкерта: «1. Удовлетворен. 2. Скорее удовлетворен. 3. Скорее не удовлетворен. 4. Не удовлетворен. 5. Затрудняюсь ответить»); как изменилось количество организаций предоставляющих следующие товары и услуги на рынках региона в течение последних 3 лет и др. вопросы.

В качестве основного метода исследования был применен репрезентативный (статистическая погрешность не более 3%) социологический опрос жителей Ленинградской области, получавших соответствующие услуги в течение 2019 года в количестве 1515 респондентов.

В рамках исследования проведенного авторами, объем выборки составил 1515 респондентов проживающих в регионе Ленинградской области, что является достаточной базой для эмпирического подтверждения гипотезы, обрабатываемый полученный массив информации их 1515 анкет даст вероятность 5% ошибки, что является величиной среднестатистической погрешности результата измерения.

Результаты исследования *Research results*

Респондентам предлагалось оценить удовлетворенность качеством товаров и услуг и ценовой конкуренцией на рынках Ленинградской области. Географически выборка представлена следующими наиболее активными респондентами: Бокситогорский муниципальный район - 17,6%, г. Пикалево - 10,2%, Тихвинский муниципальный район – 9,9%, Госненский муниципальный район - 7,9%, Волховский муниципальный район - 8,8%, Выборгский муниципальный район - 5,9%, Лодейнопольский муниципальный район - 8,4%, Кингисеппский муниципальный район - 13,8%, Выборгский муниципальный район – 6,6%, г. Выборг - 5,3%, Приозерский муниципальный район - 6,6%, Госненский муниципальный район - 7,3%, г. Луга - 7,7%, и т.д.

Половозрастные характеристики целевой аудитории следующие: две трети респондентов - представители женского пола - 41,9%, респондентов - представителей мужского пола - 58,1% соответственно. Выборка респондентов достаточно репрезентативна по возрасту, так 35,5% - респонденты в возрасте от 21 до 35 лет, 30,8% респондентов - в возрасте от 36 до 50 лет, более пятой части опрошенных (22,4%) - в возрасте старше 51 года, и каждый десятый (11,3%) - в возрасте до 20 лет.

Реконструкция социального статуса целевой аудитории Ленинградской области представлена характеристиками занятости респондентов, большинство опрошенных являются работающими - 69,1%, 13,4% респондентов являются студентами или учатся, доля пенсионеров составляет 10,1%, безработных среди опрошенных 6,7% респондентов, домохозяйки составили 3,7%.

Семейный статус и наличие детей характеризуется следующими показателями: один ребенок в семье (27,2%), семьи с наличием двух детей 31,1%, отсутствие детей наблюдается у трети респондентов (34,3%), и 7,4% респондентов отметили позицию «наличие 3 и более детей».

Выбранная аудитория обладает значительным образовательным багажом, так 43% опрошенных с высшим образованием, со средним специальным образованием 29,1%, с неполным высшим образованием 9,6%, с общим средним образованием 16,6%, и 1,8% респондентов характеризуется наличием ученой степени.

Исследуемая аудитория не обладает значительными финансовыми ресурсами, это подтверждается тем, что при ответе на вопрос о среднемесячном доходе в расчете на одного члена семьи преобладают ответы с уровнем дохода от 10 до 20 тыс. рублей (39,9%), с уровнем дохода на одного члена семьи от 20 до 30 тыс. рублей - 27,9% респондентов, показатель «доход до 10 тыс. рублей» отметил каждый десятый респондент - 14,3%, доход от 45 до 60 тыс. рублей отметили 4,6% опрошенных, высокий уровень доходов (более 60 тыс. рублей) показывают только 1,2% респондентов.

В Ленинградской области на рынке услуг дошкольного образования осуществляют деятельность 352 организаций, из них только 10 находятся в частной собственности, остальные в государственной и муниципальной собственности. 60% опрошенных предпринимателей ведут свою деятельность на рынке услуг дошкольного образования Ленинградской области более 5 лет, 40 % осуществляют свою деятельность на рынке от 2 до 3 лет. 40% опрошенных считают, что конкуренция в сфере оказания услуг дошкольного образования высокая (из них 20% респондентов оценивают конкуренцию как очень высокую). По мнению 40% хозяйствующих субъектов, конкуренция на рынке умеренная. Только для 20% участников рынка конкуренция на рынке слабая (см. рис. 1).

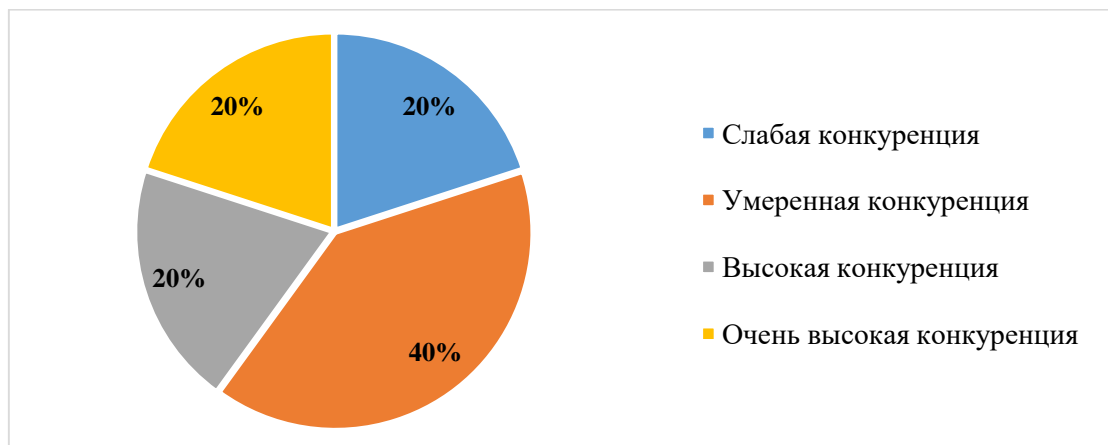


Рисунок 1. Результаты опроса на вопрос: «Как бы Вы оценили уровень конкуренции на рынке услуг дошкольного образования» (результаты исследования, полученные авторами лично) N=1515,2019

Figure 1 The results of a survey on the question: “How would you rate the level of competition in the market for preschool education services” (research results personally received by the authors) N=1515, 2019

20% опрошенных считают, что у них нет конкурентов, 80% утверждают, что их конкурентами являются от 1 до 3 организаций.

Большее половины респондентов считает, что состав участников рынка не менялся за последние 3 года, что подтверждается данными о продолжительности осуществления деятельности на рынке услуг дошкольного образования: 60 % опрошенных являются участниками рынка на протяжении 5 и более лет (см. рис.2.)



Рисунок 2. «Как ВЫ считаете, как изменилось количество конкурентов на рынке услуг дошкольного образования» (результаты исследования, полученные авторами лично) N=1515,2019

Figure 2 “How do you think how the number of competitors in the market for preschool education services has changed” (the results of the study personally received by the authors), N=1515, 2019

20 % респондентов считают, что конкуренция на рынке за последние 3 года увеличилась, что также подтверждается фактом появления на рынке организаций, осуществляющих свою деятельность от 3 до 5 лет.

Каждый пятый из опрошенных (20%) считает, что существующие меры поддержки предпринимателей достаточны.

Меры по улучшению конкурентной среды на рынке Ленинградской области хозяйствующими субъектами-респондентами предложены не были. Оценка удовлетворенности качеством услуг на рынке образовательных услуг Ленинградской области представлена достаточно дифференцированными оценками респондентов. Анализ ответов респондентов позволяет констатировать, что в основном на данных рынках социальных услуг работают бюджетные организации, объем, и количество предоставляемых услуг финансируется из бюджета региона и муниципалитета на основе стандартов социальных услуг. Респонденты в процессе анализа уровня конкуренции на рынке дошкольного образования подчеркивали отсутствие бизнеса на данном рынке, низкий уровень конкуренции вызван строгими институциональными и регламентирующими актами органов власти лицензирующих данный вид деятельности.

Анализ удовлетворенности товаров и услуг потребителями Ленинградской области по критерию «качество» (см. рис.3) представлен репрезентативными оценками по ряду рынков, так удовлетворительные оценки получили рынки услуг дополнительного образования детей - 38%, услуг дошкольного образования - 43%.

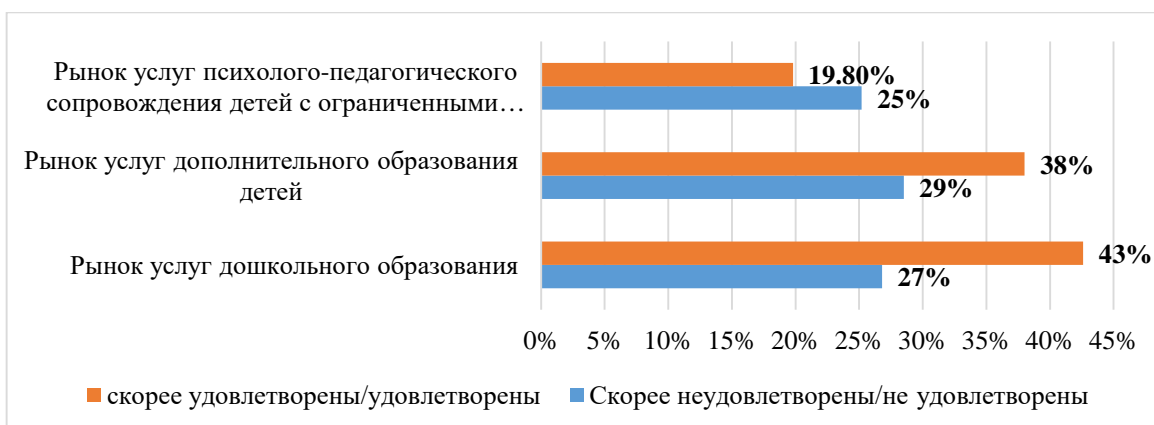


Рисунок 3. Результаты опроса на вопрос: «Насколько Вы удовлетворены характеристиками товаров и услуг на следующих рынках вашего района (города) по критерию – качество (результаты исследования, полученные авторами лично) N=1515, 2019

Figure 3 The results of a survey on the question: “How satisfied are you with the characteristics of goods and services in the following markets your district (city)” by the criterion - quality (the results study received by the authors personally) N=1515, 2019

Для оценки средней степени согласованности мнений респондентов был использован коэффициент конкордации, значение которого составило 0,707, что показало высокую степень согласованности мнений респондентов.

Очевидны затруднения респондентов при оценке ряда рынков тех, с которыми нет активного взаимодействия, респонденты сомневаются при интерпретации собственного социального опыта соприкосновения с данными рынками. Возникли сложности при оценке услуг на рынке психолого-педагогического сопровождения детей с ограниченными возможностями здоровья, 55% респондентов не смогли дать ни положительный, ни отрицательный ответ.

В целом необходимо отметить высокий уровень удовлетворенности населения региона состоянием конкурентной среды на рынке дошкольного и дополнительного образования детей. Налицо рост удовлетворенности населения, что означает наличие положительных результатов реализации национального проекта «Образование» нацеленного на создание условий для развития потенциала каждого обучающегося. Большая часть респондентов, как положительные факторы выделяла: значительный рост материально-технической базы образовательных организаций (закупку оборудования, игрушек – «мягкого инвентаря»), ежегодный косметической ремонт помещений образовательных организаций. Положительный тренд в оценке удовлетворенностью услугами отмечается по отношению к рынкам дошкольного образования и дополнительного образования детей.

В Ленинградской области в 18 муниципальных образованиях функционирует более 50 центров дополнительного образования детей, различной направленности (художественно-эстетической, спортивно-физкультурной, историко-краеведческой и пр.), ежегодно только центрами дополнительного образования детей реализуется более 500 программ художественной и искусствоведческой направленности.

Анализ полученных данных позволяет говорить о положительных трендах в сфере удовлетворенности населения Ленинградской области, положительные суждения относительно уровня цен на рынках: услуг детского отдыха и оздоровления (41%), услуг дошкольного образования 39%, услуг психолого-педагогического сопровождения детей с ограниченными возможностями 27% (рис.4).

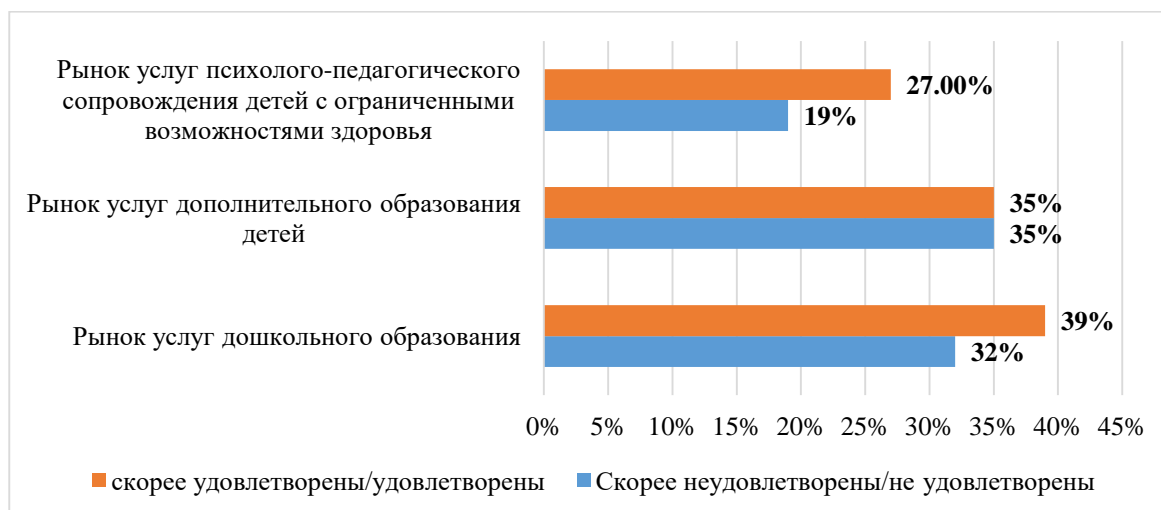


Рисунок 4. «Насколько Вы удовлетворены характеристиками товаров и услуг на следующих рынках вашего района (города)» критерий (уровень цен) (результаты исследования, полученные авторами лично) N=1515, 2019

Figure 4 “How satisfied are you with the characteristics goods and services in the following markets your area (city)” criterion (price level) (the results study received by the authors personally) N=1515, 2019

Положительные мнения респондентов представляются важным фактором на фоне роста бедности среди населения, особенно сельских территорий, снижения уровня жизни и роста цен на ведущие группы социальных товаров. Респонденты отмечают, что расходы на дополнительные услуги в сфере образования не выросли, большая часть опрошенных предпочла воспользоваться иными бесплатными услугами предлагающимися центрами дополнительного образования.

Важнейшим показателем оценки конкурентной среды является оценка возможности выбора потребителями услуг на тех или иных рынках услуг.

Данный показатель является важным, так как возможность выбора потребителями и домохозяйствами той или иной организации характеризует уровень конкуренции на рынке, говорит о широком представительстве организаций на потребительских рынках, что позволяет домохозяйствам делать выбор по объективным показателям (цена, качество, ассортимент, узнаваемость бренда, локализация производства и др.) и субъективному социальному опыту.

Результаты оценки показателя «возможность выбора» рыночного субъекта в части анализируемых рынков, позволяет говорить о балансе положительных и отрицательных оценок. Респонденты, оценивая рынок услуг дополнительного образования детей в основном дают отрицательные оценки, треть опрошенных (32%) неудовлетворены возможностью выбора среди организаций, оказывающих данные услуги, что позволяет говорить о

сокращении присутствия хозяйствующих субъектов и организаций на данном рынке, 29% демонстрируют положительную удовлетворенность по данной позиции (см. рис.5).

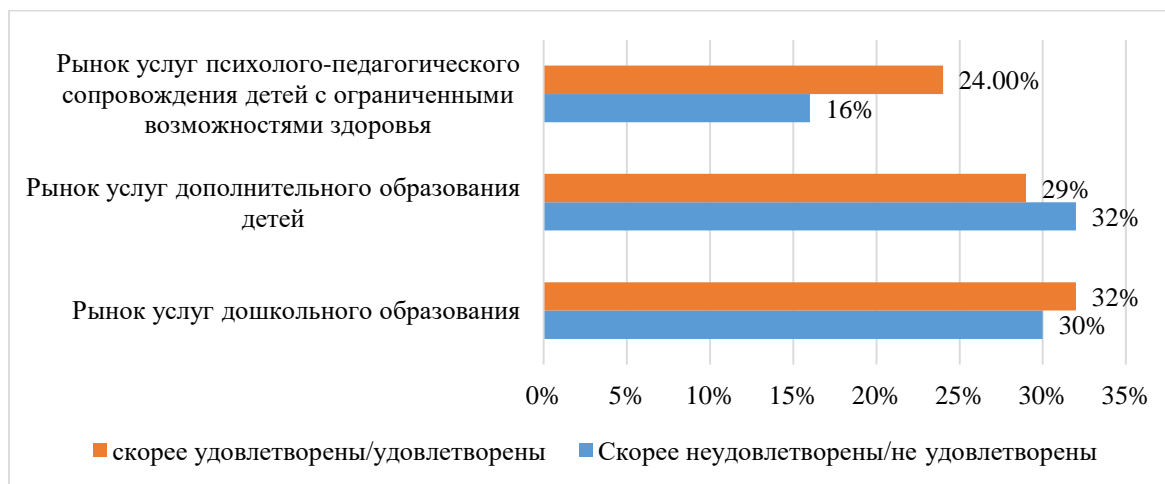


Рисунок 5. Результаты опроса на вопрос: «Насколько Вы удовлетворены характеристиками товаров и услуг на следующих рынках вашего района (города) по критерию «возможность выбора» (результаты исследования, полученные авторами лично) N=1515, 2019

Figure 5 The results the survey on the question: “How satisfied are you with the characteristics of goods and services the following markets of your district (city) according to the criterion of “choice” (the results of the study personally obtained by the authors) N=1515, 2019

Положительной позиции респонденты придерживаются относительно возможности выбора рыночного субъекта в части сферы услуг дошкольного образования, она подтверждается незначительной разницей в 2 п.п. между положительными и отрицательными оценками.

Интерпретация результатов исследования в контексте «возможности выбора» позволяет акцентировать на проблемах которые выделили респонденты. Реализуемый Правительством РФ последние 10 лет проект «Демография» привел в ряде лет к положительной динамике рождаемости, но в тоже время и показал неготовность муниципалитетов к обеспечению мест в детских садах/яслях, респонденты отмечали в своих ответах: дефицит мест в дошкольных организациях, небольшой выбор (чаще «отсутствие») организаций малого бизнеса и предпринимателей на данных рынках, неготовность социальных организаций, детских ясель и садов дневного пребывания к расширению зоны обслуживания, увеличению интенсивности графика работы.

Заключение *Conclusions*

В целом подводя итоги, следует отметить наличие неудовлетворенности общественного мнения состоянием конкуренции на анализируемых рынках услуг. Респондентам видится тормозом социальных реформ регламентация, стандартизация, лицензирование услуг государством. Возможности органов государственной власти и местного самоуправления в части создания институциональных условий развития сферы образования значительны, и проведенная социологическая оценка позволяет акцентировать внимание органов управления на необходимых направлениях совершенствования организации предоставления рыночных услуг в сфере дошкольного и дополнительного образования детей и детей с ограниченными возможностями здоровья.

Результаты исследования показывают, что на рынке услуг общего образования респонденты раскрывая проблемы административного регулирования, указывают, что только четверть участников рынка не сталкивалась с административными барьерами. Остальные участники исследования среди административных барьеров отметили: нестабильность российского законодательства, регулирующего предпринимательскую деятельность (25% опрошенных), сложность процедуры государственной регистрации/ лицензирования (25%), высокие стандарты и предъявляемые к качеству требования (24,5%), высокие налоги (13%), коррупция (12%).

В целом респонденты отмечают активность муниципальных органов управления по поддержанию высокого уровня системы дошкольного образования детей. В регионе наблюдается повышенное общественное внимание проблемам организации досуга детей, необходимости дополнительного образования детей школьного и дошкольного возраста.

Перспективами дальнейшего исследования специфики рынков социальных услуг видится социологический анализ эффективности процессов социального обслуживания. Он будет базироваться на методиках качественного характера (в первую очередь глубинные интервью, фокус-группы, экспертные опросы) которые позволят выявить не только количественные аспекты удовлетворенности потребителей на рынках услуг дошкольного, дополнительного образования детей и рынке психолого-педагогического сопровождения ребенка. Это позволит выявить глубоко запятанные в сознании индивидов когнитивные конструкции, отражающие сложные аспекты восприятия клиентами системы социальных отношений, складывающихся в процессе потребления услуг.

Благодарность ***Acknowledgments***

Статья выполнена в рамках НИР «Формирование эффективных моделей и технологий коррекции девиантного поведения подростков в различных учреждениях с использованием художественного образования и культурологии» Федерального государственного бюджетного научного учреждения «Институт художественного образования и культурологии Российской академии образования» (ФГБНУ «ИХОиК РАО»)

Summary

In order to increase the effectiveness of state policy the field of education of state bodies, sociological tools for measuring social processes are increasingly used. School, preschool and additional education of children is a constant concern of the state. The education sector in all developed democracies is one of the most important areas state social policy. Sociological measurements of the state services market the field of school and preschool education allows us to identify problems and directions for solving social and economic problems in the field of educational organization.

The article discusses the problems of implementing state policy the field of additional education and preschool education. The article analyzes the results a sociological study the example of the educational services market Leningrad Region in such areas as: pre-school education services, psychological and pedagogical support services for children with disabilities, additional education services.

A sociological study conducted by the authors allows us to talk about average indicators of population satisfaction with the services provided in these markets. The education sector traditionally refers to the service sector of the economy, a market economy has allowed to actively realizing the potential of business in improving the quality of services provided to the population.

The business is an active participant the market of educational services, including additional support for children.

Sociological tools for studying social processes make it possible to identify shortcomings the organization of public services at the municipal level of government. The article discusses such aspects of organizing a competitive environment in the field of education as the number of organizations in the market, the quality of services, price and the ability of consumers to choose the organization's services. The results of the study allow us to note that more than a third of respondents are satisfied with the quality of services, and the choice of organization, and pricing policy. A third of the positive assessments for given market indicators do not allow us to speak of a stable and developing situation in the regional education market, most of the respondents preferred to give either negative assessments or neutral ones. It is this target audience that is the most important for organizing the work of authorities in the long term. The results of the study allow us to state the relevance of research on the quality of the organization the provision of services in the field of preschool education, additional education of children, and the market for psychological and pedagogical support of children with disabilities. Studies show the high importance that households in the Leningrad Region attach to the education sector.

The study allows us to talk about the need for a detailed and detailed analysis of the quality of the services provided both in the preschool education market and in the market of psychological and pedagogical support for children with disabilities.

This study allows us to identify areas of managerial impact to local authorities regulating these services.

Литература References

- Alfirevic, N., Pavicic J., & Čačija L. (2018). Inicijalna empirijska verifikacija modela interne marketinške orijentacije za vrednovanje i unapređenje rada školskih odbora u Republici Hrvatskoj. *Ekonomski pregled*, 11(69), 475-511. DOI:10.1108/09578230410534685
- Artiles, A. (1994). Assessing the link - between teacher cognitions, teacher's behaviors and pupil response lessons. *Teaching Teacher & Education Journal*, 10, 405-810
- Kolesnikova, E. (2013). Pedagogi doskol'nogo obrazovaniya: specializaciya professional'nyh grupp i rynka uslug. *Vestnik Instituta sociologii*. 7, 129-152.
- Lovelock, C., & Wirtz, J. (2011). *Services marketing: people, technology, strategy*. 7th ed. London: Pearson.
- Manea, N., & Purcaru, M. (2017). The evolution of education marketing. *Annals of Spiru Haret University Economic Series*, 4, 37-45. DOI: 10.26458/1744
- Oplatka, I., & Hemsley-Brown, J. (2004). The Research on School Marketing: Current Issues and Future Directions - An Updated Version. *Journal of Educational Administration*, 42, 375-400. DOI: 10.1108/09578230410534685
- Osipov, A.A. (2018). Ob institucionalizaciji sociologii obrazovaniya. *Sociologicheskie issledovaniya*, 7(411), 41-49ю
- Osipov, G., & Strihanov, M. (2018). Sociologiya nauki i obrazovaniya. Ekonomicheskie stimuly universitetskoj nauki. *Uchebnoe posobie*. Seriya 64, Moskva.
- Pang, B., & Kubacki, K. (2015). The Four Es of Social Marketing: Ethicality, Expensiveness, Exaggeration and Effectiveness. *Journal of Social Marketing*, 1, 83-99.
- Sudarkina, E., & Suhanova, Y. (2017). Marketingovyje issledovaniya na rynke doskol'nogo obrazovaniya. *Social'nye nauki*, 2(17), 28-32
- Zaharchenya, N. (2018). Specifika marketinga v uchrezhdenii doskol'nogo obrazovaniya. In *Pedagogicheskoe obrazovanie: tradicii, innovacii, poiski, perspektivy. Materialy VIII mezhdunarodnyh nauchno-prakticheskikh konferencij* (pp. 274-278). SHadrinsk: SHadrinskij gosudarstvennyj pedagogicheskij universitet
- Yastrebov, G., & Kosyakova, Y. (2016). Doshkol'noe obrazovanie i uslugi po uhodu za det'mi v postsovetskoj Rossii: social'naya politika i social'noe neravenstvo. *ZHurnal sociologii i social'noj antropologii*, 19(5), 39-53.

АНАЛИЗ ГОТОВНОСТИ БУДУЩИХ ПЕДАГОГОВ К ФОРМИРОВАНИЮ ЭКОЛОГИЧЕСКИХ ПРЕДСТАВЛЕНИЙ У ДЕТЕЙ ДОШКОЛЬНОГО ВОЗРАСТА

Analysis of Readiness of Future Teachers to form Environmental Picture of Preschoolers

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Abstract. *The article deals with the problem of readiness of future teachers to form environmental picture of preschoolers. The authors define the notions «environmental culture», «environmental education»; draw conclusions about forming of notion «environmental culture» at the stage of preschool childhood and necessity of preparation of future teachers to forming of environmental picture of preschoolers.*

The analysis of empirical investigation of students' readiness to form environmental picture of preschoolers showed that the students understand the essence of environmental categories, navigate the content and forms of environmental work with the children, mark the necessity of practice in environmental education of preschoolers.

The article is intended for public reading and for those who are interested in pedagogical research.

Keywords: *readiness, environmental picture, preschool age.*

Введение

Introduction

В настоящее время вопросы становления экологического сознания личности занимают одно из центральных мест в широком спектре наук о человеке. Данной проблеме посвящены фундаментальные и прикладные исследования зарубежных (Lucas, 1972; Tilikidou & Zotos, 1999; Kollmuss & Agyeman, 2002; Sánchez & Lafuente, 2010) и российских (Derjabo, 1999; Verbickij, 2011; Nikolaeva, 2012; Demen'shin, 2017) ученых. Актуальность исследуемой проблемы связана с тем, что результатами недостаточно развитого экологического сознания личности как способности понимать неразрывную связь человеческого сообщества с природой являются

потребительское отношение к природе, непринятие ее в качестве объекта постоянной заботы, экологический кризис, возникший во многих странах мира. Отсюда следует, что экологическое образование подрастающего поколения должно быть объектом пристального внимания представителей государственной власти, науки и образовательной практики.

Педагогика как гуманитарная наука не может оставить в стороне вопросы экологического образования, экологического воспитания личности. Процесс воспитания сознательного отношения к природе длителен и должен охватывать все возрастные категории. Особую роль в экологическом образовании занимает дошкольное детство (3-7 лет), так как именно в этом возрасте закладываются основы мировоззрения, формируется отношение к окружающему миру. Этот факт подтверждают работы А.М. Лукаса (Lucas, 1972), Р.А. Уилсона (Wilson, 1993), Н.А. Гуняги (Gunjaga, 2001), С.Н. Николаевой (Nikolaeva, 2012), А.В. Миронова (Mironov, 2019) и др.

Экологическое образование дошкольников - процесс многоплановый. В рамках этого процесса происходит, в частности, накопление детьми экологических представлений. Именно таким образом у ребенка начинает складываться первоначальная экологическая картина мира, в которой он учится действовать. Отметим, что среди целевых ориентиров на этапе завершения дошкольного образования (Federal'nyj gosudarstvennyj obrazovatel'nyj standart doskol'nogo obrazovanija, 2013) обозначается следующий: ребенок обладает начальными знаниями о природном мире, элементарными представлениями из области живой природы, естествознания.

Принимая во внимание сказанное, считаем, что обучение будущих педагогов дошкольного, начального общего образования должно включать в себя развитие у студентов готовности к формированию у детей экологических представлений, изучение которой и стало целью данной статьи. Достижение цели осуществлялось с помощью теоретического (анализ литературы), эмпирического (анкетирование) и количественного (контент-анализ) методов исследования.

Теоретический анализ основных понятий *The theoretical analysis of basic concepts*

В Федеральном законе (Federal'nyj zakon Rossijskoj Federacii «Ob ohrane okruzhajushhej sredy», 2002) отмечается, что в государстве устанавливается система всеобщего и комплексного экологического образования, одной из целей которого является формирование экологической культуры личности (статья 71 «Всеобщность и комплексность экологического образования»),

что обуславливает необходимость экологического просвещения граждан посредством распространения экологических знаний, информирования о состоянии окружающей среды (статья 74 «Экологическое просвещение»).

Дошкольное образование, являясь первым уровнем общего образования в Российской Федерации, предполагает становление основ экологического сознания личности, под которым Э.В. Гирусов (Girusov, 1983) понимает совокупность взглядов, отражающих проблемы соотношения природы и общества в контексте их оптимального решения в соответствии с конкретным социальным и природным возможностям. Подобным образом трактует данное понятие С.Д. Дерябо (Derjabo, 1999), который определяет экологическое сознание как совокупность экологических представлений, субъективное отношение человека к природе, а также соответствующие технологии и стратегии взаимодействия с ней. Многие авторы рассматривают экологическое сознание как сумму нескольких компонентов. Например, А. Коллмус и Дж. Агуеман (Kollmuss & Agueman, 2002) в качестве таких компонентов выделяют знания, ценности и отношения к окружающей среде, называя данный комплекс «про-экологическим сознанием». М. Санчес (Sánchez, 2010), характеризуя экологическое сознание, указывает на четыре аспекта: аффективный (общие убеждения, ценности), диспозициональный (личное отношение, установки), активный (про-экологическое поведение), когнитивный (информация, знания).

Становление экологического сознания личности происходит в условиях экологического образования. Согласно А.М. Лукасу (Lucas, 1972), экологическое образование – это изучение окружающей среды посредством окружающей среды и для окружающей среды.

Идея экологического образования дошкольников появились в педагогике на рубеже XIX-XX веков и стала предметом серьезных научных исследований с 70-х гг. XX в. Каковы его задачи? Автор исследований в области экологического образования Р.А. Уилсон (Wilson, 1993) выделяет следующие задачи экологического образования детей: развитие чувства уважения к целостности природы, понимания красоты окружающего мира, необходимости заботы об окружающем мире, понимания того, что человек является частью природы, а не находится вне ее; становление представлений о цикличности, разнообразии и взаимосвязи в природе.

Сегодня проблема экологического образования дошкольников в России рассматривается как один из ракурсов проблемы воспитания экологической культуры подрастающего поколения. Н.А. Гуняга (Gunjaga, 2001) определяет понятие «экологическая культура дошкольников» как качественное новообразование личности, которое предполагает единство эмоционально-чувственного отношения и

осознанной практической деятельности, базирующихся на его экологических представлениях.

Экологические представления, как отмечает Г.Г. Гарипова (Garipova, 2016), — это представления о взаимосвязях, существующих в системе «человек — природа», о самой природе и природных явлениях. На основе экологических представлений формируется субъективное отношение дошкольника к природе.

Вопросы формирования экологических представлений у дошкольников отражены в трудах Н.А. Рыжовой (Ryzhova, 2000), Т.А. Серебряковой (Serebrjakova, 2006), С.А. Суркиной (Surkina, 2011), С.Н. Николаевой (Nikolaeva, 2012), Г.Г. Гариповой (Garipova, 2016) и др. Авторами систематизированы экологические представления, рассмотрено их содержание и возможности усвоения детьми дошкольного возраста. Однако А.В. Миронов (Mironov, 2019) считает, что знаниевый компонент содержания дошкольного образования в большей мере представлен не экологическими представлениями как таковыми, а представлениями из области естествознания. Соответственно, сегодня существует противоречие между потребностью в формировании экологических представлений в дошкольном возрасте и недостаточной разработанностью содержания, форм, методов, технологий экологического образования дошкольников. Наличие данного противоречия обуславливает необходимость совершенствования подготовки будущих педагогов к организации экологического образования дошкольников.

Содержание готовности к деятельности обусловлено требованиями, которые предъявляет эта деятельность к личности. Изменение функций, выполняемых человеком в деятельности, ведет к изменению содержания готовности к ней. Быть готовым, в том числе психологически, к какой-либо деятельности — значит соответствовать требованиям этой деятельности.

О.М. Газина (Gazina, 2001) разработала модель профессиональной готовности педагога к ведению работы по экологическому образованию дошкольников, выделив в ней три взаимосвязанных компонента: мотивационный, теоретический, практический. Опираясь на данное исследование, предположим, что для формирования готовности студентов к деятельности по формированию у дошкольников экологических представлений необходимо:

- дать сведения о характере предстоящей деятельности и ее требованиях к педагогу, сформировать положительную мотивацию деятельности по формированию у детей экологических представлений;

- помочь овладеть полными, системными научными знаниями в области теории и методики экологического образования дошкольников, а также в области экологии;
- вооружить будущего педагога умениями и навыками, необходимыми для успешного ведения работы по экологическому образованию дошкольников.

Организация эмпирического исследования и его результаты *Organization of empirical research and its results*

С целью изучения готовности будущих педагогов к работе по формированию у детей дошкольного возраста экологических представлений нами было организовано эмпирическое исследование. Оно включало в себя разработку диагностических материалов; определение способов первичного анализа и обобщения данных; анализ и обобщение результатов; формулировку выводов.

В исследовании приняли участие 45 студентов-старшекурсников, обучающихся по направлениям подготовки 44.03.01 Педагогическое образование, профиль «Начальное образование», и 44.03.05 Педагогическое образование (с двумя профилями подготовки), профили «Дошкольное образование и социальная педагогика». Метод исследования – анкетирование. Методика исследования – анкета на выявление готовности будущего педагога к формированию экологических представлений у дошкольников. Разработанная авторами статьи анкета состояла из вопросов открытого типа. Вопросы составлены с учетом компонентов профессиональной готовности педагога к ведению работы по экологическому образованию дошкольников. Результаты анкетирования студентов обрабатывались с помощью контент-анализа, который используется для обработки инвариантных по содержанию, несистематизированных текстов. Развернутые ответы студентов на вопросы открытого типа систематизировались и подвергались количественной обработке.

Первая серия вопросов касалась теоретической подготовки студентов к работе по формированию у дошкольников экологических представлений. Респондентам было предложено определить понятия «экологическая культура личности», «экологические представления детей дошкольного возраста», «готовность педагога к формированию экологических представлений у дошкольников», «психологическая готовность к формированию экологических представлений у детей дошкольного возраста». Ответы были сгруппированы по принципу достаточности. Достаточные определения отражали существенные признаки понятия. К

недостаточным, например, были отнесены определения типа «экологическая культура - это представление о современной экологической ситуации в стране», так как экологическая культура кроме экологических представлений включает в себя и другие составляющие (установки, ценности, отношение и др.). Процентное соотношение ответов студентов на первую серию вопросов представлено в таблице 1.

Таблица 1. Процентное распределение ответов студентов на первую серию вопросов

Table 1 The percentage distribution of the student answers to the first series of questions

Понятие	Количество респондентов, определивших понятие	
	достаточно	недостаточно
Экологическая культура личности	68,8	31,2
Экологические представления детей дошкольного возраста	86,6	13,4
Готовность педагога к формированию экологических представлений у дошкольников	55,6	44,4
Психологическая готовность к формированию экологических представлений у детей дошкольного возраста	62,2	37,8

Ответы испытуемых на первую серию вопросов показали, что большинство будущих педагогов понимают сущность базовых понятий.

Понятие «экологическая культура личности» определяется студентами разнопланово: через родовые понятия «система /отношений, норм, взглядов, ценностных ориентаций, факторов, знаний, умений и навыков/» (46,7% респондентов), «грамотность /в вопросах природоохраны/» (15,5%), «понимание /целостности природы и человека, ответственности/» (13,3%), «компетентность /в понимании важности экологии/» (8,9%) и др. Содержание понятия «экологические представления детей дошкольного возраста» трактуется большинством студентов как «знания, понимание /законов природы, взаимосвязи человека и природы, экологических проблем, своего места в системе взаимоотношений человека и природы/» (73,3%). Достаточное понимание категории «готовность педагога к формированию экологических представлений у дошкольников», к сожалению, обнаруживают далеко не все респонденты (55,6%). Эта группа студентов определяет данное понятие как совокупность качеств (знаний, умений, опыта, способностей, мотивов и др.), позволяющих успешно осуществлять эколого-педагогическую деятельность. Остальные респонденты сводили понятие к отдельным качествам, например, методической грамотности (26,6%), наличию опыта (11,1%), экологической

воспитанности (4,4%), моральной готовности (4,4%) и т.п. Наконец, определяя суть «психологической готовности к формированию экологических представлений у детей дошкольного возраста», 62,2% студентов правомерно исключали из совокупности указанных в предыдущем определении качеств «инструментальные» (знания, умения, навыки) и останавливались на комплексе собственно психологических свойств: эмоциональных, интеллектуальных, мотивационных, коммуникативных.

Вторая серия вопросов была направлена на выявление готовности будущих педагогов к практическим действиям по формированию экологических представлений у дошкольников. Респонденты дали ответы на вопросы практического характера:

- Какие формы работы с детьми дошкольного возраста по формированию у них элементарных экологических представлений можно использовать в дошкольной образовательной организации (ДОО)?
- Какие требования к формированию экологических представлений у детей дошкольного возраста будут предъявлены в ДОО?
- С какими трудностями в формировании экологических представлений у детей дошкольного возраста можно столкнуться в ДОО?

На каждый вопрос респондент мог дать несколько вариантов ответов.

Количественный анализ ответов на данные вопросы представлен в таблицах 2, 3, 4.

Таблица 2. Процентное распределение мнений студентов о формах экологического образования дошкольников

Table 2 The percentage distribution of student opinions about forms of environmental education for preschool children

Источник информации - вопрос «Какие формы работы с детьми дошкольного возраста по формированию у них элементарных экологических представлений можно использовать в ДОО?»	Категории анализа		
	Традиционные формы	Инновационные формы	Оригинальные формы
Количество ответов	57,1	39,5	3,4

Как видно из таблицы 2, из всего количества названных форм наиболее популярными являются традиционные: сюжетно-ролевая игра, постановка опытов, экскурсия, работа с наглядными пособиями, организация живого уголка, беседа, викторина, семейный конкурс, оформление стенгазеты.

Однако студенты готовы широко использовать и инновационные формы экологической работы с дошкольниками (экологическая тропинка, зеленый патруль, квест, экологическая библиотека, экологический музей). Были названы и оригинальные формы работы: экологическая комната, прослушивание аудиозаписей, моделирование ситуаций общения с природой и др.

Таблица 3. Процентное распределение мнений студентов о требованиях к формированию экологических представлений у дошкольников
Table 3 The percentage distribution of student opinions about requirements to formation of ecological representations at preschool children

Источник информации - вопрос «Какие требования к формированию экологических представлений у детей дошкольного возраста будут предъявлены в ДОО»	Категории анализа			
	Требования к практическим умениям и навыкам	Требования к личностным качествам	Требования к знанию теории и методики	Формальные требования
Количество ответов	47,9	29,8	15,9	6,4

Данные таблицы 3 показывают, что центральное место среди требований к эколого-педагогической работе занимают требования к практической деятельности (опыт эколого-педагогической работы, умения учитывать возрастные особенности детей, развивать личностные качества обучающихся, объяснять, использовать и сочетать различные методы, приемы, формы работы, общаться с детьми, организовывать детей и себя. работать в команде и др.). Среди требований к личностным качествам студенты называют желание работать, коммуникабельность, увлеченность темой, тактичность, патриотизм, гражданскую позицию, творческое воображение и т.п. Наконец, формальные требования - это соответствие деятельности по экологическому образованию детей требованиям профессиональных и образовательных стандартов.

Как видно из таблицы 4, трудности объективного и субъективного характера в ответах респондентов представлены примерно одинаково. Студентов волнуют как отсутствие дидактического оборудования, противоречия теории и практики, несоответствие формальных требований индивидуальным особенностям некоторых детей, неподготовленность детей к усвоению экологических представлений, восприятию серьезной информации, негативное влияние родителей, недостаток литературы (объективные трудности), так и боязнь совершить педагогическую ошибку,

неготовность ответить на вопросы детей, наличие экологических стереотипов, нехватка знаний, опыта, отсутствие интереса к эколого-педагогической работе (субъективно-переживаемые трудности).

Таблица 4. Процентное распределение мнений студентов о трудностях формирования экологических представлений у дошкольников
Table 4 The percentage of student opinions about the difficulties of forming environmental representations among preschool children

Источник информации - вопрос «С какими трудностями в формировании экологических представлений у детей дошкольного возраста можно столкнуться в ДОО»	Категории анализа	
	Объективные трудности	Субъективно-переживаемые трудности
Количество ответов	51,2	48,8

Третья серия вопросов была направлена на выявление мотивационной составляющей готовности к работе по формированию экологических представлений у дошкольников. Чтобы исключить социально одобряемые ответы, мы сформулировали косвенные вопросы. Принимая во внимание взаимосвязь мотивов и целей, предлагали студентам поставить перед собой задачи формирования элементарных экологических представлений у детей дошкольного возраста в ДОО и аргументировать их постановку. Анализ результатов показал, что у 100% респондентов имеются мотивы долга и ответственности: будущие педагоги осознают свою ответственность в воспитании у детей любви и бережного отношения к природе, в привлечении дошкольников к участию в природоохранных акциях, в приобщении родителей к процессу экологического воспитания детей и т.п. Часть респондентов (26,7%) отметили, что задачи экологического воспитания обозначены в образовательных стандартах дошкольного образования и начального общего образования, соответственно их деятельность по экологическому образованию детей обусловлена, в том числе, и требованиями стандартов. У 11,1% участников анкетирования обнаруживаются мотивы личностного характера («хочу быть лично причастным к сохранению природы», «хочу, чтобы мои дети жили в гармонии с природой», «понимаю, что эта проблема касается меня лично и моих родных» и др.)

В заключение респондентам было предложено оценить свою подготовку в вузе к формированию экологических представлений у детей дошкольного возраста. 55,6% респондентов высоко оценили свою подготовку: «дается большая база теоретических знаний, которые

подкрепляются решением практических задач и проблемных ситуаций (кейсов)», «на лекциях дается развернутая и понятная теория», «большая вариация практических занятий, форм работы», «большое количество материала», «много практических заданий, самостоятельной деятельности на занятиях», «нас учат всему, что может пригодиться на практике». 26,6% оценили свою подготовку как среднюю или ниже средней: «средне, так как мало практики», «психологически не готова работать с детьми», «не совсем готова, нужно подтянуть знания», «плохо, так как нет желания развиваться» и т.п. Некоторые студенты (17,8%) затруднились оценить свою подготовку к формированию экологических представлений у детей дошкольного возраста в ДОО («не могу оценить свои знания», «еще не все изучили», «затрудняюсь в оценке, так как было мало практики» и т.п.).

Заключение *Conclusions*

Проведенное нами исследование позволило выявить достаточную готовность студентов к целенаправленной работе по формированию у дошкольников экологических представлений. Анализ результатов исследования показал, что основными причинами, не позволяющими достичь максимальной готовности к формированию экологических представлений у дошкольников, студенты считают отсутствие практического опыта, а также недостаток методических знаний в области экологического образования детей.

Принимая во внимание результаты исследования можно определить перспективы дальнейшей работы по подготовке студентов к формированию экологических представлений у детей. Во-первых, следует увеличить объем практической подготовки студентов к эколого-педагогической работе с дошкольниками. Во-вторых, необходимо интегрировать содержание учебных курсов экологической направленности, что будет способствовать постоянной актуализации и разноаспектному осмыслению вопросов экологического характера. В-третьих, важно помочь студентам осознать личностную значимость экологических проблем, так как это является основным условием формирования мотивационной готовности будущего педагога к эколого-педагогической работе с детьми.

Summary

In the context of the environmental crisis, the problem of environmental education of an individual is becoming increasingly important. Preschool childhood is the initial stage in the formation of the environmental consciousness of the person, which causes the need to expand the content, to improve the traditional and search for new methods, forms of environmental

education of preschool children. Environmental representations, being a component of environmental awareness, are formed in preschool children, subject to the competent organization of environmental and pedagogical work in a preschool educational organization.

In the process of preparing students for work on the formation of environmental representations among preschool children, it is necessary to take into account the theoretical, practical and motivational components of a teacher's readiness for environmental and pedagogical work with preschool children.

The study allows us to conclude that future teachers are quite competent in the field of environmental education of children. Students competently formulate the terms such as «ecological culture», «ecological ideas», «readiness for the formation of environmental representations in preschoolers», «psychological readiness for the formation of environmental representations in preschool children», highlight the essential features of these concepts. Future teachers are well versed in a variety of traditional and innovative forms of environmental education of children, clearly formulate the tasks of the work on the formation of ecological ideas in preschool children, the requirements for it, analyze the difficulties of this work.

Improving the preparation of students for environmental-pedagogical work with preschool children is seen in the development of positive motivation and the acquisition by future teachers of relevant practical experience.

Литература References

- Demen'shin, V.N. (2017). Obzor zarubezhnyh issledovaniy jekologicheskogo soznaniya. *Internet-zhurnal «Mir nauki»*, 5, 5, 1-11. Retrieved from <https://mir-nauki.com/PDF/18PSMN517.pdf>.
- Derjabo, S.D. (1999). *Jekologicheskaja psihologija: diagnostika jekologicheskogo soznaniya*. Moskva: MPSI.
- Federal'nyj gosudarstvennyj obrazovatel'nyj standart doshkol'nogo obrazovaniya. (2013). Retrieved from http://www.consultant.ru/document/cons_doc_LAW_154637/
- Federal'nyj zakon Rossijskoj Federacii «Ob ohrane okruzhajushhej sredy». (2002). Retrieved from http://www.consultant.ru/document/cons_doc_LAW_34823/
- Garipova, G.G. (2016). Narodnaja skazka kak sredstvo formirovaniya jekologicheskogo predstavljenija u doshkol'nikov. *Biojekonomika i jekobiopolitika. 1*, 124-128. Retrieved from <https://moluch.ru/th/7/archive/26/1172/>.
- Gazina, O.M. (2001). Professional'naja gotovnost' k jekologo-pedagogicheskoj rabote s doshkol'nikami. *Doshkol'noe vospitanie*, 7, 86-90.
- Girusov, J.V. (1983). Jekologicheskoe soznanie kak uslovie optimizacii vzaimodejstvija obshhestva i prirody. Iz E. T. Fadeev (otv. red.), *Filosofskie problemy global'noj jekologii* (105-120). Moskva: Nauka.
- Gunjaga, N.A. (2001). *Vospitanie osnov jekologicheskij kul'tury u detej starshhego doshkol'nogo vozrasta (na materiale prirody rodnogo kraja)*. Rostov-na-Donu: Izdatel'stvo Rostovskogo gosudarstvennogo pedagogicheskogo instituta.
- Kollmuss, A., & Agyeman, J. (2002). Mind the Gap: why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239-260.
- Lucas, A.M. (1972). *Environment and environmental education: Conceptual issues and curriculum implications*. Columbus: Ohio State University.

- Mironov, A.V. (2019). Preemstvennost' v jekologicheskom obrazovanii doshkol'nikov i mladshih shkol'nikov. *Nachal'naja shkola*, 3, 3-9.
- Nikolaeva, S.N. (2012). *Teorija i metodika jekologicheskogo obrazovanija detej*. Moskva: Izdatel'skij centr «Akademija».
- Ryzhova, N.A. (2000). *Jekologicheskoe obrazovanie v detskom sadu*. Moskva: Karapuz.
- Sánchez, M.J., & LAFuente, R. (2010). Defining and measuring environmental consciousness. *Revista Internacional de Sociología (RIS)*, 68(3), 731-755.
- Serebrjakova, T.A. (2006). *Jekologicheskoe obrazovanie v doshkol'nom vozraste*. Moskva: Akademija.
- Surkina, S.A. (2011). *Jekologicheskoe obrazovanie doshkol'nikov*. Saratov: Izdatel'stvo «Saratovskij istochnik».
- Tilikidou, I., & Zotos, Y. (1999). Ecological consumer behaviour: review and suggestions for future research. *Medit*, 10(1), 14-21.
- Verbickij, A.A. (2011). Osnovy koncepcii razvitija nepreryvnogo jekologicheskogo obrazovanija. *Pedagogika*, 6, 31-36.
- Wilson, R.A. (1993). *Fostering a sense of wonder during the early childhood years*. Columbus, OH: Greyden Press.

PARENTS' IMPACT ON STUDENTS' READING ACHIEVEMENT

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Abstract. *Scientific studies have proved that a family has a high impact on the students' academic achievement, including their reading literacy. This paper focuses on the parents' undertaken activities for promoting the development of child's reading literacy at the preschool age (reading together, singing, discussing the read text with a child, playing together, etc.) to explore the impact of these activities upon the reading literacy achievement of students in Grade 4. The research problem addresses the following questions: whether and to what extent the parents' undertaken activities for promoting the development of child's reading literacy at the preschool age have an impact on students' reading skills at the end of their fourth school year. The analysis is based on the research results from students' tests, students' and parents' questionnaires of the Progress in International Reading Literacy Study (PIRLS) 2016, organised by the International Association for Evaluation of Educational Achievement (IEA). The impact of parents' activities carried out together with their preschool aged children was studied performing a linear regression analysis along with a frequency and correlation analysis.*

A higher reading achievement was demonstrated by those fourth graders whose parents were actively involved in reading promotion activities. Although one determining activity could not be stated, reading together and storytelling were found to be significant. Parents' education correlated positively with the frequency of their undertaken reading promotion activities; thus, the parents' education was approved to have a multifaceted impact on a child's reading achievement.

Keywords: *children's reading literacy, parents, PIRLS.*

Introduction

Students' reading literacy achievement is related to the total academic achievement and success in the education process. Families and their undertaken activities, schools and libraries, when closely collaborating, have a fundamental role for the improvement of students' reading literacy. The paper explores what parents' undertaken activities, done together with a child at the preschool age, have an impact on the development and further improvement of reading literacy in the child's fourth year of schooling.

The study analyses students' tests, students' and parents' questionnaires of the Progress in International Reading Literacy Study (PIRLS) 2016, organised by the International Association for Evaluation of Educational Achievement (IEA). The IEA's PIRLS is a large scale international comparative study of reading literacy achievement of fourth grade students. Since 2000 PIRLS is conducted every five years.

The aim of the research is to examine whether and to what extent the parents' undertaken activities for promoting the development of child's reading literacy at the preschool age have an impact on students' reading skills at the end of their fourth school year. A linear regression analysis has been performed along with a frequency and correlation analysis. The research unit is a country.

Literature Review

A family is considered as the most determining factor affecting a child's reading literacy and education in general (European Union, 2012). Besides, parents' education is one of the key factors contributing to the students' reading literacy and academic achievement. Myrberg and Rosen (2009) state that children have lower results for reading if their parents have low level of education. Yet, according to Araujo and Costa (2011), reading literacy results are significantly increased when parents read aloud to their children at the preschool age, despite the level of parents' education. However, there is an obvious correlation between the parents' education and their desire to read aloud: the higher level of education parents have, more often they would read to their children.

Family socioeconomic status is mainly determined by the level of parents' education. Students from low-socioeconomic status families are not capable to achieve standard requirements for reading already in primary school (Scottish Government, 2010). It can be related to the lack of parents' knowledge and skills to work with their children and develop cognitive skills; due to that there are many children who start attending school with rather poor skills (European Union, 2012).

Insufficient financial resources affect the family expense priorities, too; new books will not be goods of prime necessity. Several countries solve this situation by developing support programmes. For example, in Portugal a specific digital platform is designed where children's books are available electronically. Araujo and Costa (2011) indicate that an increased emphasis worldwide is placed upon the reading acquisition and practice as early as possible. To comprehend a text is a complex task that requires different cognitive skills and processes (Cain, Bryant, & Oakhill, 2004). Therefore, this task should be performed since an early childhood in order to address acquisitive processes and build the foundation for further acquisition activities.

Gove and Cvelich (2011) claim that a lack of books at school and at home as a critical component affects the acquisition of reading skills. Other key components are reading habits of family members as, for example, those parents and grandparents who read serve as positive role models; meanwhile, children have opportunities to discuss what they have read with individuals whose opinion they respect or to accept constructive suggestions (Latvijas Kultūras akadēmija, 2018). With reference to Human Resource Development Centre (2017), children highly value such activities where parents introduce them to books, showing pictures, reading aloud, counting etc. because they associate these activities with a mother's love.

The parents' role for enhancing reading literacy is fundamental; this impact determines whether a child will become a reader for life or not. Wildova and Kropackova (2015) point out that initially parents have to think about their intonation, speed etc. when they read aloud because children will perceive it as a model and will try to imitate; it refers to teachers, too. When parents read aloud to children, they stimulate their interest in a written word, which is essential in the early stages of reading literacy development. Unfortunately, the studies carried out in Latvia show that 46.4% of fathers and 29.8% of mothers read aloud to their children insufficiently often; 19,6% of fathers and 7.9% of mothers do not read to their children at all; 26.8% of fathers and 21.9% of mothers read aloud just several times a month (Vanags, 2019). Vanags (2019) observes a significant correlation: indicators for low level of reading aloud are closely related to the parents' own childhood experience as 47.5% of parents admitted that their own parents insufficiently or rarely read aloud to them in childhood.

The parents' role model is crucial for a child to be interested in reading and exploring why there are newspapers, magazines and books in the family on a daily basis. Human Resource Development Centre (2017) declares that children will practise reading as a daily ritual and feel motivated to read naturally when they will observe their parents as regular readers.

Methodology

The paper analyses the IEA's PIRLS 2016 data from students' tests, students' and parents' questionnaires. The impact of parents' undertaken activities at the preschool age of their children was studied in each cycle of the study, performing a linear regression, frequency and correlation analysis.

The responses of fourth grade students' parents were analysed to the question "Before your child began primary/elementary school, how often did you or someone else in your home do the following activities with him or her?", meanwhile, searching for the correlation between the undertaken activities and students' reading literacy achievement. The parents could indicate how often

(often, sometimes, never or almost never) they did each of the following activities together with their preschool aged children:

- a) Read books;
- b) Tell stories;
- c) Sing songs;
- d) Play with alphabet toys (e.g. blocks with letters of the alphabet);
- e) Talk about things you had done;
- f) Talk about what you had read;
- g) Play word games;
- h) Write letters or words;
- i) Read aloud signs and labels;
- j) Say counting rhymes or sing counting songs;
- k) Play with number toys (e.g. blocks with numbers);
- l) Count different things;
- m) Play games involving shapes (e.g. shape sorting toys, puzzles);
- n) Play with building blocks or construction toys;
- o) Play board or card games;
- p) Write numbers.

On the basis of the collected responses, a parental activity index was created, calculating an average value for each response.

The dependent variable of the linear regression equation was the student reading literacy achievement in the PIRLS test. The parental activities undertaken at the child's preschool age were the independent variable (see Table 2). Besides, additional variables were included in the equations that characterised students and their family; they were parents' education, student's gender, the use of the test language at home, preschool learning experience (see Table 3). A country was chosen as a research unit.

In the PIRLS questionnaire the parents were asked to indicate their highest level of the formal education. They could choose one of the following responses: did not attend school, an incomplete basic school, a completed basic school, a completed secondary school, a completed education after the secondary school (vocational education, which is not a higher education), a completed first-level professional higher education (college), a bachelor degree or a completed second-level professional higher education, a master's degree, a doctor's degree. The study focused on those parents who had a higher level of education.

To include the chosen category as a variable in the regression equation, the total number of years spent at school and higher education institutions was calculated. The methodology and relevant data of the Organisation for Economic Co-operation and Development (OECD) Programme for International Student Assessment (PISA) were used (Organisation for Economic Co-operation and Development, 2017).

Research Results

Despite the statistically significant correlation between the frequency of parents' undertaken activities for the development of children's reading literacy and the level of parents' education, these variables were not substitutable. Parents who had a higher level of education typically carried out such reading activities for increasing their children's literacy that were not included in the questionnaire and could not be displayed separately, for instance, parents demonstrated a wide range of vocabulary when speaking, spoke about different topics, motivated children to read skilfully, as well as did many other possible activities.

The PIRLS 2016 data showed that the lowest average level of education for fourth grade parents was in Morocco (a bit less than 8 years) and in Iran (11.1 years). Parents from Canada, Norway, Denmark, Australia, Dubai and Moscow had the longest period of formal education, i.e. more than 15 years. The remarkable length of formal education (15.7 years) for parents in Moscow should be highlighted as it correlated with the very high reading literacy achievement of students in Moscow, which was the highest in the PIRLS 2016. In Latvia, the average length of education was 14.6 years, which was a shorter period in comparison with the neighbouring countries Finland, Sweden, Lithuania and Russia.

The education of parents was a statistically considerable factor in the multifactor regression equations, which affected the reading literacy achievement in all the participant countries, except in Hong Kong. The correlation between the level of parents' education and the students' reading achievement in Latvia and its nearest countries is shown in Table 1. When comparing the length of parents' education in 2016 and 2006, it can be concluded that for those countries which participated in both cycles of the PIRLS the length of education had increased for an average of 0.8 years, i.e. from 13.0 to 13.8 years. The only country where the length of education for parents had slightly decreased (for 0.2 years) was Georgia; however, it had increased in other participant countries. The most significant increase was observed in Iran (from 9.2 to 11.1 years), Germany (from 11.8 to 13.7 years) and Singapore (from 12.8 to 14.6 years). The increase in Latvia was below the average, i.e. for nearly half a year.

Table 1 The Correlation Between the Level of Parents' Education and the Students' Reading Achievement (RA) in Latvia and Its Nearest Countries

Education of Parents	Lithuania		Latvia		Finland		Russia	
	Children's RA	Parents %	Children's RA	Parents %	Children's RA	Parents %	Children's RA	Parents %
Bachelor's or higher degree	576	45.4%	578	47.3%	585	53.9%	601	50.6%
Higher than secondary school, but no bachelor's degree	533	39.8%	549	33.4%	559	20.1%	566	37.2%
Secondary school	512	8.5%	535	12.3%	547	23.6%	552	6.8%
Basic school	501	3.8%	521	5.8%	519	1.6%	528	4.5%
Primary school or lower	482	0.6%	509	0.7%	441	0.3%	505	0.3%
No response	551	1.9%	549	0.5%	509	0.4%	585	0.7%

Analysing the data, the following key factors affecting the further development and achievement of reading literacy were determined: parents' education, the frequency of the test language used at home, and the length of time a child has attended a preschool education institution. As the stated factors were related to the child's preschool period, they were included in the regression equations as control variables in this study. Due to differences of the reading literacy achievement between girls and boys, the gender of students was included as a control variable in the linear regression models, too.

To make a valid comparison between the impact of parents' undertaken distinct activities at the preschool age on the child's reading literacy achievement in Grade 4, nine coefficients of regression equations were derived representing the parents' response "Often" to the relevant activity, i.e. the relationship between a categorical variable and a response "Never or almost never" (see Table 2). For example, parents often read books aloud together with their child or often told stories. The most positive impact on the students' reading achievement was achieved when parents frequently read books together with a child. Only in five participant countries the relevant regression coefficients for this activity were statistically insignificant, including the results of Latvia. Storytelling was the next most effective parental activity. Definitely, this activity involves the traditional bedtime stories in Latvia. The linear regression model, however, did not show the statistical significance of this activity for the students' reading achievement in Latvia. Cross-examining all the results of the PIRLS 2016 participant countries, it was identified that a minimal impact occurred from playing with alphabet toys,

singing songs and talking about things one had done. Besides, it was hard to explain the gained finding that, in the case of Latvia, the word and letter writing activity done together with parents at the preschool age had a negative statistically significant impact on the students' reading achievement. Possibly, these activities were carried out far too early or late. A similar situation was identified only in Georgia.

The data analysis showed that there is no such one and the most effective activity that enhances the reading literacy of preschool aged children. The high correlation between undertaken activities should be observed, for example, those parents who frequently read together with their child, often told stories and fairy tales, too.

Table 2 Regression Coefficients of Nine Regression Equations Representing the Parents' Response "Often" for the Undertaken Activities to Enhance the Development of Reading Literacy Together with a Child at the Preschool Age

PIRLS 2016 participants	Read books	Told stories	Sang songs	Played with alphabet toys	Talked about things what had been done	Talked about what had been read	Played word games	Wrote letters or words	Read aloud signs and labels
Buenos Aires, Argentina	37*	47*	19*	27*	44*	18*	22*	13*	24*
Australia	28	12*	-2	6	22*	12	9	21*	26*
Austria	24*	14*	12*	-2	9*	6	19*	-7	6
Azerbaijan	31*	34*	1	5	-1	18*	13*	25*	14*
Bahrain	52*	37*	15*	7	26*	15*	23*	23*	14*
Belgium (Flemish)	26*	28*	11*	1	18*	14*	13*	1	11*
Belgium (French)	35*	20*	10*	6	24*	11*	12*	2	0
Bulgaria	31*	29*	14*	20*	33*	22*	15*	29*	16*
Canada	34*	15*	9*	21*	13	17*	18*	19*	17*
Ontario, Canada	43*	10	9*	14	9	21*	25*	24*	9
Quebec, Canada	23*	24*	5	8	7	11*	13*	17*	10
Chile	29*	29*	-2	15*	27*	8	18*	18*	17*
Taiwan	40*	32*	1	18*	3	6*	23*	16*	17*
Czech Republic	57*	21*	5	-2	21	16*	13*	3	8
Denmark	34*	5*	11*	9*	17	18*	16*	21*	27*
Finland	42*	13*	20*	11*	11	13*	1	22*	17*
France	39*	27*	7	11*	5	5*	14*	2	4
Georgia	-19	-9	3	-5	-1	4	-10	-16*	-13
Germany	33*	25*	16*	-3	13	13*	8	-1	6
Hong Kong SAR	31*	20*	-2	6	-7	-3	9	6	11*

Hungary	29*	39*	3	8	42	0	11	4	13*
Iran	42*	36*	5	4	23	11	11	10	14
Ireland	55*	30*	14	18*	67*	25*	20*	37*	30*
Israel	35*	29*	17*	-1	-1	-3	18*	-3	-1
Italy	28*	19*	-3	6	16	15*	10*	1	1
Kazakhstan	18	-9	3	9	11	13	5	2	-5
Latvia	13	3	-4	0	15	1	11*	-19*	2
Lithuania	32*	5	3	0	5	11	9*	8	5
Macau	34*	25*	3	12*	4	7*	16*	12*	8
Malta	42*	34*	21*	17	20	32*	19*	22*	30*
Morocco	9	21*	-5	6	27*	16*	22*	29*	20*
Netherlands	39*	12*	22*	0	-5	11	8	3	10*
New Zealand	81*	47*	26*	34*	16	35*	27*	23*	24*
Northern Ireland	34*	12*	17*	9*	-8	20*	18*	18*	11*
Norway	40*	6*	15*	17*	-2	19*	23*	15*	15*
Norway (4)	41*	49*	7*	23*	32*	30*	26*	41*	37*
Oman	27	-1	-7	1	-15	15	10	6	2
Poland	45*	34*	1	11*	22*	14*	16*	3	11*
Portugal	56*	56*	13*	21*	15*	16*	13*	19*	28*
Qatar	23*	7	7	2	9	10*	17*	6	21*
Russia	35*	28*	9*	1	28*	20*	15*	1	-1
Moscow, Russia	20*	20*	6	4	9	13*	13*	18*	6
Saudi Arabia	43*	30*	1	3	9*	11*	17*	12*	10*
Singapore	87*	39*	2	28*	73*	42*	38*	6	18*
Slovak Republic	52*	5	17*	10*	52*	14*	19*	7	18*
Slovenia	23*	19	-6	22*	10	-18	5	13	20
South Africa	32*	22*	7*	16*	33*	18*	15*	12*	13
Spain	27*	28*	4	8*	37*	19*	16*	9	11
Andalusia, Spain	29*	25*	7	7	16	8	5	6	7
Madrid, Spain	40*	8*	8	5	29	10*	6	19*	13*
Sweden	66*	51*	28*	37*	40*	31*	26*	25*	40*
Trinidad and Tobago	99*	79*	21*	25*	11*	13*	23*	19*	15*
United Arab Emirates	89*	72*	18*	34*	10	5	22*	20*	16*
Abu Dhabi, UAE	92*	69*	14*	22*	6	19*	25*	18*	19*
MIN	-19*	-9*	-7*	-5*	-15*	-18*	-10*	-19*	-13*
MAX	99*	79*	28*	37*	73*	42*	38*	41*	40*
AVERAGE	39*	26*	8*	11*	18*	14*	15*	12*	13*

* Coefficients statistically significant for confidence interval of 95%.

Within the study an index of parental activity was used; the index was calculated as the average value from all of the parents' undertaken activities. The index average value was 2.4; it was the lowest in Morocco (1.9) and the highest

in Moscow (2.6). The reliability (Cronbach’s alpha) of the index ranged from 0.69 in Germany to 0.82 in New Zealand, 0.76 on average. Table 3 shows the coefficients of the linear regression model where the index of parental activity was included as an independent variable. As it can be seen, it was statistically significant in all countries, except in Georgia and South Africa. In Latvia, the value of this coefficient was comparatively low, it means that the parental activities, which were undertaken at the preschool age, made a comparatively lower impact on the students’ reading literacy achievement subsequently. Also, it could be identified when examining the relatively low regression coefficients for particular activities. The coefficient values were even lower, still statistically significant in Poland, Kazakhstan and Hong Kong.

Table 3 Coefficients of the Regression Equation Including an Index of Parental Activity

PIRLS 2016 participants	Constant	Parents’ education in years	Child’s gender - girl	The test language spoken at home	Preschool attended for 3 or more than 3 years	Index of parental activity (average)
Buenos Aires, Argentina	261	7*	10*	13	22*	42*
Australia	298	12*	19*	21	-4	22*
Austria	323	10*	4	35*	9*	20*
Azerbaijan	316	7*	14*	16	7	18*
Bahrain	175	11*	38*	2	-7	43*
Belgium (Flemish)	360	6*	8*	20*	18*	22*
Belgium (French)	311	7*	10*	19*	12*	23*
Bulgaria	328	10*	13*	22*	1	28*
Canada	326	10*	13*	3	7*	29*
Ontario, Canada	322	10*	15*	-1	8	30*
Quebec, Canada	372	7*	9*	10	5	21*
Chile	275	9*	13*	29*	-1	30*
Taiwan	400	7*	6*	16*	5*	23*
Czech Republic	316	10*	9*	30*	11*	22*
Denmark	313	7*	11*	28*	33*	31*
Finland	340	8*	18*	43*	-4	27*
France	335	8*	9*	14*	12*	21*
Georgia	316	10*	21*	35*	1	-3
Germany	304	10*	6*	31*	11*	29*
Hong Kong SAR	542	1*	9*	-14*	-3	11*
Hungary	348	14*	11*	-29	10*	17*
Iran	245	8*	35*	52*	11	20*
Ireland	333	7*	10*	22*	3	41*
Israel	241	12*	13*	26*	52*	20*
Italy	379	7*	5*	29*	17*	17*
Kazakhstan	431	3*	10*	19*	17*	11*
Latvia	366	7*	17*	29*	13*	15*
Lithuania	324	10*	19*	15*	14*	16*

Macau	465	2*	8*	13*	3	19*
Malta	255	5*	19*	64*	1	34*
Morocco	249	7*	22*	4	19*	20*
Netherlands	379	7*	6*	8	13*	20*
New Zealand	264	9*	21*	45*	2	41*
Northern Ireland	363	7*	19*	11	13*	26*
Norway	305	8*	15*	8	7*	32*
Norway (4)	173	9*	39*	3	11*	49*
Oman	413	8*	18*	5	3	13*
Poland	367	5*	1	41*	1	26*
Portugal	143	14*	28*	-3	1	42*
Qatar	337	10*	14*	39*	8*	18*
Russia	322	11*	15*	52*	-2	23*
Moscow, Russia	310	3*	63*	2	20*	21*
Saudi Arabia	351	9*	15*	16*	28*	22*
Singapore	220	11*	6*	68*	26*	32*
Slovak Republic	286	10*	15*	20*	12*	33*
Slovenia	210	12*	27*	33*	20*	11
South Africa	389	4*	5*	12*	8*	30*
Spain	390	5*	0	15*	8*	25*
Andalusia, Spain	425	4*	4	11*	8*	21*
Madrid, Spain	353	8*	13*	22*	12*	21*
Sweden	235	8*	18*	11	-12*	53*
Trinidad and Tobago	134	12*	23*	5	24*	53*
United Arab Emirates	120	12*	30*	-9	36*	49*

* *Coefficients statistically significant for confidence interval of 95%.*

Conclusions

A family has a considerable impact upon the students' academic achievement, including their reading skills. The role of parents is fundamental for enhancing reading literacy.

Parents' education is one of the key factors affecting students' reading literacy and academic achievement.

Parents' education correlates with the frequency of their undertaken reading promotion activities.

The parents' undertaken reading promotion activities at the preschool age have a profound impact upon the students' reading literacy in Grade 4. However, this impact differs across countries, possibly due to other factors that are not included in the study. The impact of Latvian parents' activities upon their children's reading achievement is not high in comparison with other countries; most likely, parents lack the relevant skills.

There is no one particular activity that would resolve the development of children's reading literacy. Parents who undertake their chosen activity are more likely to engage in other activities. Nonetheless, the most direct activities are

reading together and storytelling at the preschool age, which can greatly increase the students' reading achievement.

References

- Araujo, L., & Costa, P. (2011). *Home Book Reading and Reading Achievement in EU Countries: The Progress in International Reading Literacy Study 2011 (PIRLS)*. Retrieved from <https://doi.org/10.1080/13803611.2015.1111803>
- Cain, K., Bryant, P., & Oakhill, J. (2004). Children's Reading Comprehension Ability: Concurrent Prediction by Working Memory, Verbal Ability, and Component Skills. *Journal of Educational Psychology*, 96(1), 31–42. Retrieved from <https://pdfs.semanticscholar.org/143f/4cde21935e86bc21176e7e16c54e35c02559.pdf>
- European Union. (2012). *EU High Level Group of Experts on Literacy*. Retrieved from https://ec.europa.eu/assets/eac/education/policy/school/doc/literacy-report_en.pdf
- Gove, A., & Cvelich, P. (2011). *Early Reading: Igniting Education for All. A Report by the Early Grade Learning Community of Practice*. Retrieved from <https://www.rti.org/sites/default/files/resources/early-reading-report-revised.pdf>
- Human Resource Development Centre. (2017). *Lasītmācīšana viegli un ar prieku. Rokasgrāmata skolotājiem*. Retrieved from http://easereading.org/wp-content/uploads/2015/12/Handbook_LV.pdf
- Latvijas Kultūras akadēmija. (2018). *Pētījums par Latvijas iedzīvotāju lasīšanas paradumiem*. Pieejams http://www.gramatizdeveji.lv/_files/Petijums_gramatu_lasisanas_paradumi_fe_b_2018.pdf
- Myrberg, E., & Rosen, M. (2009). Direct and Indirect Effects of Parents' Education on Reading Achievement among Third Graders in Sweden. *British Journal of Educational Psychology*, 79, 695–711. Retrieved from <https://onlinelibrary.wiley.com/doi/pdf/10.1348/000709909X453031>
- Organisation for Economic Co-operation and Development. (2017). *PISA 2015 Technical Report*. OECD Publishing: Paris. Retrieved from <https://www.oecd.org/pisa/sitedocument/PISA-2015-technical-report-final.pdf>
- Scottish Government. (2010). *Literacy Action Plan. An Action Plan to Improve Literacy in Scotland*. Retrieved from <http://www.gov.scot/Resource/Doc/328493/0106197.pdf>
- Vanags, E. (2019). *Pētījums: regulāra priekšā lasīšana bērnam ietekmē viņa karjeras iespējas nākotnē*. Pieejams <http://www.mammamuntetiem.lv/articles/30836/petijums-regulara-prieksa-lasisana-bernam-ietekme-vina-karjeras-iespejas-nakotne/>
- Wildova, R., & Kropackova, J. (2015). Early Childhood Pre-reading Literacy Development. *Procedia - Social and Behavioral Sciences*, 191, 878–883. Retrieved from https://www.researchgate.net/publication/282536477_Early_Childhood_Pre-reading_Literacy_Development/fulltext/5611d90508ae6b29b49e37ef/282536477_Early_Childhood_Pre-reading_Literacy_Development.pdf

PSYCHOLINGUISTIC PECULIARITIES OF UNDERSTANDING THE GRAMMATICAL MEANING OF PHRASES AND ITS USE IN SPEECH OF THE SENIOR PRESCHOOL CHILDREN

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Abstract. *Aim: to investigate the state of development of the operations to understand the grammatical meaning of phrases and its use in the speech of senior preschool children.*

Research procedure. The technique of “Comprehension of phrases” (Luria, 1998) was used to study the state of understanding by children of the grammatical meaning of different kinds of phrases. The state of the development in children of intra-speech operations related to semantic syntax and choice of linguistic meanings was investigated. The method of “Making up stories, descriptions, and reflections” was used to study the ability of children to use phrases in the process of constructing texts.

Results. The multilevelled state of the development in children of the operations of understanding the meanings of phrases and its use in speech, which is conditionally fixed in the form of 4 levels: high, sufficient, medium, low was revealed. It is established that both the operations of understanding the grammatical meaning of phrases and the operations of the use of phrases in a verbal speech in senior preschoolers are at the stage of its development. It has been revealed that children understand much more grammatical meanings of phrases than they use in oral speech. The expression in a speech of the relationships existing in the real (surrounding) reality through phrases is a much more complicated speech operation for children than an understanding of the grammatical meanings of these phrases.

Keywords: *children of the pre-school age, speech, understanding of phrases, utterance of phrases.*

Introduction

L.S. Vygotskyi (2011) noted that the speech meanings include both acts of generalization as a result of the psychic reflection of the reality, and acts of

communication as fragments of human interaction with society. In this regard, the extremely important condition for the development of a linguistic personality is “the acquisition by a child of the ability to understand oral utterance through the formation not only of a personal meaning but also mastery of the system of *linguistic values* that “stand” behind the units of the language” (Kharchenko, 2016). At the same time, an equally important condition for becoming a linguistic personality is the development in children of the ability to express themselves clearly to others, to sound their thoughts, desires, intentions and feelings in the oral speech. In the implementation of these conditions, an important role plays the mastery by children of such a small syntactic unit as a phrase, the building material with a help of which develop both the understanding of speech (the connections and relationships between objects and phenomena of the real reality) and speaking (verbal expression of connections and relationships between the objects and phenomena of the real reality in various statements) (Kalmykova, 2016).

A phrase is a nominative unit, one of the important means of a lexico-grammatical combination of words in speech. They have grammatical meaning, express logical connections and relationships that exist between objects and phenomena of the real reality, and specify the meaning of words (Kalmykova, 2003, 2008). It is known that a child assimilates grammatical meaning twice in his life. For the first time, when inadvertently, involuntarily he correlates the heard and spoken images of the language signs with reality, its objects, phenomena, connections and relationships between them. Therefore, to associate a phrase with the objectively existed logical links and relationships that take place in the surrounding world means to understand the grammatical meaning. But such understanding of the grammatical meaning of phrases is intuitive and subconscious. It is mastering by a child at the level of intuition (that is to understand the content of information encoded in the phrase) is possible because the child has sensed, perceived, experienced phenomena or relationships between them that correspond to the designated units of language. Only in the process of active reflection of reality and active communication in child arise the understanding of language and the ability to express in the individual speech the own intentions, desires, aspirations, emotions, dreams, creative fantasies and plans (Fedorenko et al., 1984). Secondly, the child learns the grammatical meaning of phrases at school, when the initial awareness of such correlation begins and the necessity for abstraction and objectification of the awareness arises; the perception of a linguistic sign (unit), the selection of a linguistic sign and its grammatical meaning as a linguistic phenomenon, as a linguistic reality, as a metamorphic language (Kalmykova, 2017, 104–105).

Therefore, the understanding by children of the grammatical meaning of phrases is:

- 1) an indicator of the development of child's speech and thinking (speech and thinking operations on the unintentional, involuntary, unconscious correlation of this unit of language with certain connections or relationships between objects and phenomena of the real reality that prove the comprehension of the content and perfection of transformations of the grammatical meaning of a phrase into the individual sense);
- 2) an indicator of the child's ability to use this language unit while speaking.

The purpose of the article is to present the results of an experimental study aimed at identifying of psycholinguistic peculiarities of understanding the grammatical meaning of phrases and its use in a speech by senior preschoolers.

Methods and Techniques of the Research

In the experimental study, the following methods were used, such as: interviewing of children, recording of their statements on a voice recorder, conversations with children; ascertaining experiment – for carrying out the procedure of interrogation and recording of qualitative characteristics of the state of development in children of the operations of understanding the grammatical meaning of phrases of different types and its use in oral speech; discourse analysis of children's utterances to obtain authentic information about children's ability to use certain types of phrases; content analysis; quantification and linguistic methods – for quantitative expression of qualitative signs of understanding the meaning of phrases in senior preschoolers.

Participants. In the experiment took part 378 preschoolers (5.0-5.5 years) attending pre-school educational establishments of Ukraine. Before the study, permission was obtained from the parents of children who participated in the experiment. All parents were introduced to the purpose of the study, its procedure and program.

Experiment procedure. To study the psycholinguistic peculiarities of understanding the grammatical meaning of phrases in the experiment, the technique "Understanding of phrases" was used (Luria, 1998). It aimed to identify the state of the development of intra-speech operations of semantic syntax and the choice of linguistic meanings in senior preschool children. Detection of the levels of understanding by children of phrases grammatical meaning was determined by such a major criterion as *meaningfulness*. Comprehension in the formulation of T.M. Ushakova is "the thought, reasonableness, ... presence in the subjective sphere of some kind of experience, <...> that captures the "correctness",

“normality” of the course of events and being of phenomena, or their deviation from this norm” (Ushakova, 2004, 66–67). The levels of comprehension of the grammatical meaning of phrases with corresponding qualitative characteristics were determined.

The introduction of the method was in the form of a game “Explain to the Stranger what the statement means”. The psychologist suggested the children listen to the expressions and explain how they understand them. The child’s explanations were recorded in the minutes and evaluated with the appropriate scores.

Syntax constructions with different types of grammatical relationships were used, namely:

- 1) Substantive without prepositions in genitive case which express attributive relationships – adjuncts (*lyst druha, promin sontsia, krylo litaka, hilka buzku, kryshka hlechyka*).
- 2) Substantive with prepositions “iz” (“zi”) in genitive case, which express the origin relationships (*vaza zi skla, hlechyk iz hlyny, koshyk iz lozy, med iz hrechky, chainyk iz farforu*).
- 3) Substantive with preposition “z”, which express the relationships of separation (*zirka z neba, sik z berezy, knyzhka z biblioteky, riadky z virshiv*).
- 4) Substantive in genitive case, combined by the prepositions “vid” to express the relationships of separation (*ruchka vid dverei, lystochok vid kvitky, rul vid velosypeda, kryshka vid chainyka, skorynka vid khliba*).
- 5) Adjective without prepositions, which express the relationships of characteristics (*farforova tarilka, opale lystia, chainyi serviz, berezovyi hai, derev’iany stil*).
- 6) Verbal with prepositions “vid”, “cherez”, which express the relationships of reason (*padaie vid utomy, ne chytav cherez brak chasu, radiie vid nahorody, khvyliuietsia cherez nespodivanku, ne pryishov cherez khvorobu*).
- 7) Verbal without prepositions in the accusative case, which express the relationships of location (*bihty dorohoiu, khodyty lisom, yty polem, plysty richkoiu, strybaty stezhkoiu*). 35 phrases were suggested to listen (5 phrases of each type).

Responses were rated on a three-point scale from 0 to 2 points:

- 2 points – the child correctly interpreted the phrase meaning («*Lyst druha*» – «*Lyst vid druha*»; «*Lyst vidmoho druha*»; «*Vaza zi skla*» – «*Skliana vaza*»).
- 1 point – the child misinterpreted the phrase meaning («*Lyst druha*» – «*Tse lyst druha*»; «*Hilka buzku*» – «*Vona roste i yii mozhna zlamaty*»).

0 points – the child did not communicate with the experimenter and did not explain the content of phrase.

The maximum number of points according to the method “Understanding of phrases” – 70 points.

State of the operations development on understanding the meaning of phrases:

60-70 points – fully developed of the operations.

49-59 points – partially developed of the operations.

28-48 points – minimally developed of the operations.

0-27 points – undeveloped of the operations.

To investigate the ability of children to use the phrases, the following speech tasks were offered to them:

- 1) Make up a story on “How I spent the day off”;
- 2) Build the reasoning “Why the fox is called cunning?”
- 3) Describe the picture “Kids’ Winter Fun”. Children’s statements were analyzed in terms of what phrases children use to express the connections and real-life relationships that are reflected in speech. For each type of relationship correlated with a particular phrase, 1 point was awarded. There were recorded the phrases in which children made mistakes in their use or experienced difficulties in the process of their construction. The sum of the points scored indicated a certain level of the development of children’s syntactic structure of speech.

Results

While analyzing the children’s interpretation according to the method “Understanding of phrases”, it was found that the vast majority of children have underdeveloped operations on understanding the meaning of all kinds’ phrases. None of the preschoolers could correctly decode the grammatical forms offered for interpretation, in particular deciphering of the meaning of substantive phrases in the genitive case with the preposition “vid”, which express the relationship of separation.

The phrase was considered correctly decoded when the child revealed its substantive content (i.e. a fragment of the situation encoded in grammatical form) in a way of its transforming into another grammatical form while preserving the content of the information contained in the listened expression.

Here are the examples of correctly “decrypted” phrases.

1. Substantive phrases expressing attributive relationship (affiliations):
«Lyst druha» («Tse lyst moho druha», «Druh napysav lyst», «Lyst napysav druh», «Lyst, shcho yoho napysav druh»).

2. Substantive phrases with prepositions in genitive case expressing the relationship of origin:
 1. «Vaza zi skla» («Tse vaza, shcho yii zrobyly iz stikla»).
 2. «Hlechyk iz hlyny» («Hlynianyi hlechyk»).
 3. «Sik z berezy» («Berezovyi sik»).
4. Adjective phrases without prepositions expressing the relationship of sign:
 1. «Berezovyi hai» («Tse hai z berezamy»).
 2. «Derev'iany stil» («Tse stil iz dereva»).
 3. «Opale lystia» («Lystia vpalo na zemliu», «Lystia opalo z dereva»).
 4. «Dubovyi lis» («Tse lis, de v nomu rostut duby»).
 4. «Derev'iany stil» («Tse takyi stil, shcho vin zdielanyi z dereva»).
 5. «Kvituchy sad» («Tse sad, i v nomu rostut kvity»).
 6. «Osinnii doshch» («Tse doshch ide osinniu»).
5. Verbal phrases with prepositions “vid”, “cherez” expressing the relationship of reason:
 1. «Padaie vid utomy» («Vtomyvsia», «Sylno vtomyvsia i toho padaie», «Koly liudyna vtomylasia»).
 2. «Ne pryishov cherez khvorobu» («Bo vin khvoryi», «Zakhvoriv i ne pryishov», «Zakhvoriv i ne zmih nikudy ity», «Zakhvoriv»).
 3. «Ne prochytav cherez brak chasu» («Buv zainiatyi»).
 4. «Radiie vid nahorody» («Radyi, shcho yoho nahorodyly»).
 5. «Mokryi vid rosy» («Bo zranku khodyv po travi, a na nii bula rosa i namochyv nohy»).
 6. «Khvyliuietsia cherez nespodivanku» («Ne chekav chohos, ale tse stalosia»).

We considered to be false the interpretations in which children revealed the meaning of phrases in such ways.

1. Repeated either stimulating phrase, or a word that is a part of the perceived grammatical construction. For example:
 1. «Lyst druha» – «Tse lyst druha», «Tse lyst».
 2. «Zirka z neba» – «Tse koly zirka z neba», «Zirka».

Decoded the meaning of phrases based on the formation of associative syntagmatic relationships through:

- a) isolation of the sign of denotatus action. For example:
 1. «Promin sontsia» – «Hriie ditei».
 2. «Hilka buzku» – «Vona roste i yii mozhna zlamaty, a todi posadyty», «Roztsvitaie vesnoiu».
 3. «Hlechyk iz hlyny» – «Vypaliuiut».
 4. «Koshyk iz lozy» – «Pletut», «Koshyk iz lozy zaplitaiut».

5. «Sik z berezy» – «Zbyraiut vesnoiu», «Mozhna pyty», «Vylyvaietsia».
 6. «Zirka z neba» – «Padaie», «Padaie na zemliu».
 7. «Kvity z pivnochi» – «Zav'ianuly».
 8. «Ruchka vid dverei» – «Oblamalasia».
 9. «Lystochok vid kvitky» – «Roste», «Odpav», «Upav na zemliu»;
- b) through predicting intentions, goals. For example:
1. «Ruchka vid dverei» – «Shchob mozhna prycheptyty», «Shchob vidkryvaty», «Shchob vidkryvaty i zakryvaty dveri».
 2. «Lystochok vid kvitky» – «Mozhna zirvaty».
 3. «Rul vid velosypeda» – «Shchob velosyped mih poikhaty», «Shchob mozhna todi yikhaty na velosopedi».
 4. «Skorynka vid khliba» – «Shchob mozhna yii z'isty».
 5. «Farforova tarilka» – «Mozhna rozbyty», «Shchob mozhna bulo yisty z nei»;
- c) through association with the appointment of denotatus. For example:
1. «Vaza zi skla» – «Shchob kvity ne padaly».
 3. «Hlechyk iz hlyny» – «Shchob vin buv tverdyi».
 4. «Derev'iany stil» – «Shchob na nomu chytaty»;
- d) through association with the signs of quality, color, length, size, taste. For example:
1. «Vaza zi skla» – «Prozrachna».
 2. «Hilka buzku» – «Dovha».
 3. «Zirka z neba» – «Zirky buvaiut hariachi i kholodni».
 5. «Lyst druha» – «Bilyi lystok».
 6. «Promin sontsia» – «Zhovtyi».
 7. «Med iz hrechky» – «Lypka hrechka», «Med solodkyi»;
- e) through association with place (location). For example:
1. «Farforova tarilka» – «Stoit u mikrovolnovtsi».
 2. «Kryshka vid chainyka» – «Kryshka zverkhu»;
- f) through making comparisons. For example:
1. «Krylo litaka» – «Iak u ptashky».
 2. «Zirka z neba» – «Iak sontse».
 3. «Sik z berezy» – «Iak voda».
 4. «Hlechyk iz hlyny» – «Hlyna, yak plastilin»;
- g) explained the meaning of phrases through random association with other concepts based on phonetic similarity. For example:
1. «Kvity z pivnochi» – «Tse kvity, shcho tsvitut, no tilky polovynu nochi», «Kvity, shcho tsvitut vnochi», «Kvity rostut nochchiu», «Tse koly nich», «Nichni kvity».

2. «Opale lystia» – «Lystia paliat», «Lystia na kostor padaie i palyt», «Bo yoho zapalyly», «Tse vono zghorile»;
- h) through association with life situations (experience). For example:
1. «Podarunok vid mamy» – «Radist ditiam», «Vona potsiluie nas», «Siurpryz», «Shchastia u tebe».
 2. «Knyzhka z biblioteki» – «Dolzhna buty v bibliotetsi bez hroshei», «Daietsia na odyn chy dva dnia», «Ia iz mamoiu brala chytaty».
 3. «Knyha tovarysha» – «Dav meni pochytyty».

According to the results of diagnostics, 4 levels of the development of children's ability to understand the grammatical meaning of phrases were recorded: high, sufficient, medium, low. Quantitative characteristics of the state of development in children of the operations of understanding the meaning of phrases are reproduced in the comparative table (see Table 1).

To a *high level of the development of operations of understanding the meaning of phrases* (60–70 points) was not attributed any child. It was assumed that children of this level would have fully developed operations to select language values and semantic syntax; they will be able to understand the substantive content of grammatical constructions (a fragment of objective reality encrypted in a perceived grammatical structure).

To a *sufficient level of the development* (49–59 points) was attributed 9.5% (n=36) of children who had partially developed operations appropriate for selection of the language values and semantic syntax; they are capable of deciphering the substantive content of phrases of the various kinds but have difficulties in decoding the meaning of substantive phrases expressing the relationship of separation.

To an *average level of the development* (28–48 points) was attributed 33.9% (n=128) of children with minimal development of understanding the meaning of phrases; they decipher the substantive content of only certain types of phrases (mainly substantive in the genitive case, which express the relationship of occurrence and adjective without prepositions that express the relationship of characteristics); other types of phrases are mistakenly decoded by children (through the formation of various associative relationships).

To a *low level of the development* (0–27 points) was attributed to 56.6% (n=214) of children who have underdeveloped operations of understanding the meaning of phrases; they cannot decipher the substantive content of the perceived constructions. In trying to decode the meaning of a phrase, children usually either repeated the stimulus phrase completely, or the word of the phrase, or interpret its meaning through the formation of various connections. To this level were also included the children who did not interact with the experimenter.

Observations on children's utterances (narratives, descriptions, reflections) and its analysis have shown that without organized language training, the real

possibilities of a five- or six-year-old child to use phrases are very limited. The arsenal of phrases available in the language experience of a senior preschooler is still very poor. His speaking skills are deficient. It impairs the cognitive activity, limits, narrows the boundaries of communication, and inhibits the timely growth of the individual. In order to express the relationship of cause, purpose, method of action, children willingly use complex sentences, but they do not know how to use certain phrases. The girl says, "I got a bruise because I was hit", though she might say more simply, "I have a bruise from a blow".

The means of expression of the defining relationships that are not acquired by children without special training include phrases based on the grammatical relationship of management. These are, for example, those that mean: a sign (*a friend's book, a hare's footprints*); the subject of action (*singing of the nightingale*); the carrier of the sign (*kindness of the mother, the whiteness of the snow*); defining relationships (*marble walls; fish under the marinade*) and so on. To convey the additional relationships, the children are more likely to use a direct object, expressed by the accusative case (*took a pencil*), or indirect (*to help mom*), and also use an instrumental case (*wiped with a towel, went with the dog*) with or without the pronoun.

Diagnosis of the state of development of the syntactic operations for constructing stories, considerations and descriptions made it possible to distinguish four levels of the development of operations for constructing phrases (see Table 1).

To a *high level* of the development of operations to use the phrases (15–20 points) was not attributed any child.

To a *sufficient level* of the development of these operations (11–15 points), the children were not attributed also.

To the *average level* of the development of operations to use in speech phrases (6–10 points) was attributed 43.6% (n=165) of children who can use verbal phrases such as "bought a ticket", "went on a train". Very seldom they build substantive phrases such as: "blue ball", "little fungus". These children have difficulties in expressing attributive, causal, temporal, behavioral, and other relationships through phrases.

To a *low level* of the development of operations to use phrases (0–5 points) was attributed 56.4% (n=213) of preschoolers who use in their speech mostly verbal phrases of place (location) and direction ("went to the woods", "walked around the house").

Quantitative characteristics of the state of development in children of the operations of understanding the meaning of phrases is reproduced in the comparative table (see Table 1).

Table 1 Levels of the development in children the ability to understand the grammatical meaning of phrases and to use them in oral language

Levels of understanding the meaning of phrases and their use in speech	Understanding of the grammatical meaning of phrases		Use of phrases	
	%	N	%	N
High	–	–	–	–
Sufficient	9,5	6	–	–
Medium	33,9	128	43,6	165
Low	56,6	214	56,4	213

In figure 1 is presented the comparison of data according to the levels of development of the operations of phrases comprehension and their use in speech of the senior preschoolers (Fig. 1).

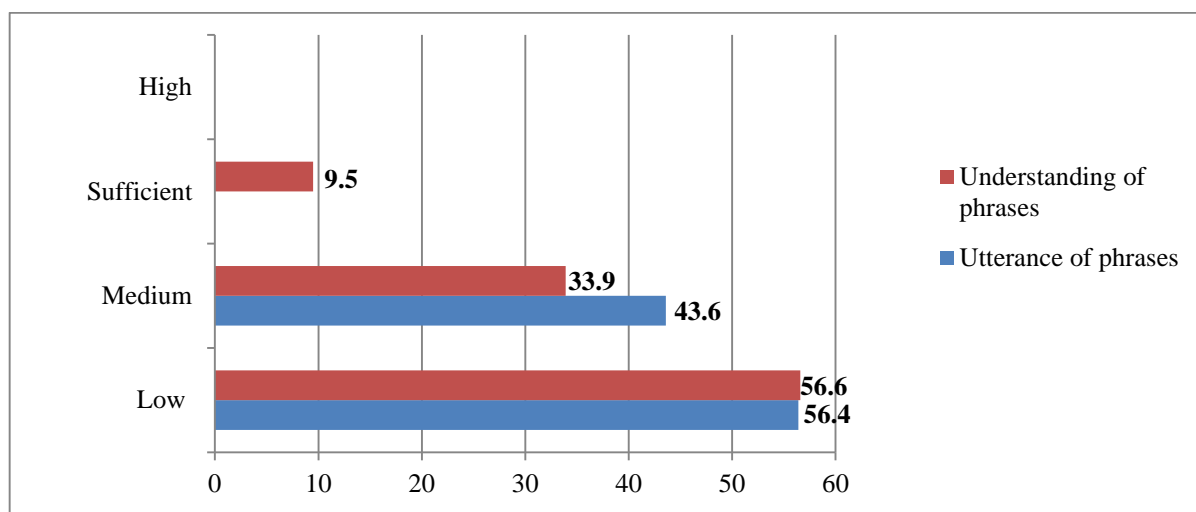


Figure 1 Levels of the development of operations of understanding the phrases and its use in speech of children of the senior preschool age

The experiment made it possible to establish that both the operations of understanding the grammatical meaning of phrases and the operations of the use of phrases in oral speech of the senior preschool children are at the stage of development.

Conclusions

The experiment made it possible to establish that the operations of understanding the grammatical meaning of phrases in children of the senior preschool age require further development. The reasons for non-formation of the

operations of understanding the meaning of phrases in children, as we see are related to underdevelopment of following operations:

- 1) semantic syntax and choice of linguistic values;
- 2) separation of connections and relationships between objects and phenomena of the real reality;
- 3) correlation and comprehension of the heard phrase with the system of connections and relationships of extralinguistic (real) reality reproduced in the nuclear grammatical construction;
- 4) simultaneous analysis and synthesis.

The analysis of the children's utterances who participated in the experiment shows that purely childish, monotonous means of expressing syntactic relations dominated in them; the utterances have many syntax errors in the management and coherence of words. Significant difficulties arise in constructing sentences that contain more than 4 words; children have not mastered the rules for constructing substantive and other kinds of phrases, etc.

Our research has shown that the ability to use phrases in constructing utterances does not form self-sufficiently. Communication alone does not yet create the necessary linguistic environment that is capable of assimilating by a child with sufficient linguistic material and encouraging it to master the language. Most of the preschoolers require skilled psycholinguistic help from the educator and systematic training, purposeful formation in them of the syntactic structure of speech, since its formation is a prerequisite for mastery by children of coherent speech, and skills for communication. Among them are the following skills: to choose the appropriate phrases when they express their thoughts, reproduce what they saw, heard, experienced, wished, etc.; to choose the syntax options from the number of synonyms according to a particular communication situation; to find appropriate syntax constructions for expressing different relationships (target, causal, attributive, circumstantial, temporal, spatial, etc.) in the process of creating stories, descriptions, considerations, etc.

It has been experimentally found that children understand a much greater number of grammatical meanings of phrases than they use in oral speech. Therefore, expressing in the speech of the relationships existing in the real (surrounding) reality employing phrases is a much more complicated speech operation for children than understanding the grammatical meanings of these phrases.

References

- Fedorenko, L.P., Fomicheva, G.A., Lotarev, V.K., & Nikolaicheva, A.P. (1984). *Metodika razvitiya rechi detej doshkolnogo vozrasta [Methods of speech development in preschool children]*. Moscow: Prosveshenie [in Russian].

- Kalmykova, L.O. (2003). *Formuvannja movlennevih umin i navichok u ditej: psiholingvistichnij ta lingvometodichnij aspekti [Formation of speech skills in children: psycholinguistic and linguomechanical aspects]*. Kyiv: NMCVO [in Ukrainian].
- Kalmykova, L.O. (2008). *Psihologiya formuvannya movlennevoyi diyalnosti u ditej doshkilnogo viku [Psychology of formation the speech activity in preschool children]*. Kyiv: Feniks [in Ukrainian].
- Kalmykova, L.O. (2016). Pro stan rozvitku movlennja jak dijalnosti u ditej p'jati rokiv [On Status of Speech Developmen as an Activity of Five Years Old Children]. *Psiholingvistika – Psycholinguistics*, 19(1), 84–98 [in Ukrainian].
- Kalmykova, L.O. (2017). *Perspektivnist i nastupnist v navchannimovi j rozvitku movlennja ditej doshkilnogo i molodshogo shkilnogo viku: psiholingvistichnij i lingvometodichnij vimiri [Perspective and Continuity in Language Learning and Language Development in Preschool and Primary School Children: Psycholinguistic and Linguomethodological Dimensions]*. Kiyiv: Vidavnychij Dim «Slovo» [in Ukrainian].
- Kharchenko, N.V. (2016). Rozvitok movnoi osobistosti doshkilnika v konteksti audijuvannja: avtorskij pidhid [Development of Preschooler's Language Identity in the Context of Listening: Auther's Approach]. *Psiholingvistika – Psycholinguistics*, 19(1), 183–197 [in Ukrainian].
- Luria, A.R. (1998). *Yazyk i soznanie [Language and Cognition]*. E.D. Khomskaya (Ed.). Rostov n/D: Feniks [in Russian].
- Ushakova, T.N. (2004). *Rech: istoki i principy razvitiya [Speech: the Origins and Principles of the Development]*. Moscow: PERSE [in Russian].
- Vygotskiy, L.S. (2011). *Myshlenie i rech [Thought and Language]*. Moscow: AST: Astrel [in Russian].

UNITY OF THEORY AND PRACTICE IN THE PROMOTION OF PRESCHOOL CHILD'S MUSICALITY IN THE TEACHER'S AND CHILD'S COLLABORATION

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Abstract. *This scientific article involves holism, anthropological and action methodological approaches. The article includes theoretical substantiations based on J. Greata's (2006) concepts of the musical activity impact on the child holistic entirety development, B. Vikmane (1995) and L. Mackevicha's (1999), Latvian preschool music scientists, conceptions about music content and A. Liduma's (2004-2016) researches in the child musicality (emotional responsiveness, musical hearing, sense of rhythm, musical memory and musical thinking, voice vocal range and singing skill) development promotion possibilities through the teacher and the child collaboration in the preschool music sessions. The empiric research analyzes the integrity of theory and practice in the music teacher pedagogical action at the integrative music session at preschool with 3-6-year-old children in x primary school at the preschool interest education. Conclusions are drawn that the child's positive attitude to his/her musicality development is promoted due to the scientifically substantiated music content accordant to the children needs, the teacher's orientation and skill to create in equality based collaboration with children.*

Keywords: *action, child's musicality, collaboration, preschool.*

Introduction

The scene of the past 20 years in preschool pedagogy shows irreversible changes having been occurred in preschool pedagogy and preschool music pedagogy in the world in general. They have affected Latvia as well. It is to be noted that due to globalization and experience exchange influence in various projects, the teachers' perceptions of values have changed, which undeniably affects the attitude of the younger generation towards music in preschool education in Latvia.

The changes taking place during school year 2019/2020 in Latvia due to implementation of the project School 2030 (Pirmsskolas mācību programma, 2019) imply the music researcher/scientist (the author of this article) to indicate to project promoters the necessity of following the principle of unity of theory and practice for the sake of sequence of child's musicality development at Preschool educational institution.

It is necessary because child's (3-7 years) self-experience in general, and in particular in musical activity, is low. Often it lacks at all, if musical environment at home corresponding to child's age has not been ensured, as parents have little interest in child's musical activity for various reasons.

The different students' attitudes to music as observed during lectures make it possible to confirm teacher's work significance, as only engaging activities could possibly encourage teachers-to-be to make use of musical activities throughout the run of a whole day at preschool educational institutions in the future.

Observations during course of the annual conferences of Latvia's preschool music education association (from year 2010) demonstrate the diverse attitude of music teachers towards the values of Latvian folk music, i.e., folk music in general and folk song as a means of promoting the musicality and citizenship of a preschool child. It is important to remind that preschool children's attitude to musical values depends on the work of a skilled teachers' team at a preschool education institution. Understandably, the music content must meet the actual needs of the child, including Latvian folk music, which was compiled by the whole nation and is a unique and unrepeatable value .

The preschool pedagogical process in Latvia till 2017/2018 school year was organized purposefully on the above mentioned basis. Holistic development is being promoted by the child's personally significant action, by self-realization of the inborn need to explore the world during observation and imitation processes. The teacher's support at Preschool is significant for the formation of the child's habits and self-regulation.

The empiric research reveals interpretation of observations and interviews at the annual conferences of Latvia's preschool music education association during 10 years and the paper's author self-experience analysis about the pedagogical collaboration at music game play studies with 3-7 years old children and discussions with parents. This research explores collaboration for promotion of the child musicality as a personally significant value in the process of collaboration between a teacher and a child.

The aim of the study: to analyze theory and practice unity in the collaboration of a music teacher and a child at preschool education of interests as a means to promote child's musicality.

Literature review: Theoretical basis of the child's musicality

The theoretical basis of this research are findings about collaboration as a teaching and learning method and upbringing principle by Maurice Balson (1995), Ausma Shpona's (2006) upbringing theory about the teacher's position to collaboration, Christopf Wulf's (2007) anthropological approach to the human's

development at a definite place and time, Joanne Greata's findings about necessity to promote musicality during early childhood (years 0-8) and Anna Liduma's (2004, 2015, 2017) research about the content of preschool music sessions.

The theoretical substantiation of the article is the conclusion of Boris Teplov that the basic components of musicality are emotional responsiveness, hearing and the sense of rhythm, which is confirmed by the article author's observations in the pedagogical practice of the music teacher (Teplov, 1947). Singing and voice vocal range are fostered as well in a targeted and systematic action. Musical action promotes the child's musical memory and musical thinking (Liduma, 2004).

Blazma Vikmane, the first Latvian scientist in Preschool music pedagogy, wrote about the significance of the teacher's action in her dissertation already in 1995. Therefore, it is important for all teachers to be musically educated and to help the child perceive music, to create a positive attitude towards music, promote children's musical action and children's musicality in general, as emphasized in Linda Mackevicha's promotion work in 1999. To be able to carry it out professionally, all preschool teachers need to acquire the theory of collaboration essence, accept the value of collaboration, so that collaborative skills can be used in practice. The content of this article highlights collaboration as a social and personally significant value, which has the potential to influence the child's musicality and the attitude of the child towards musical action as a whole.

It is necessary to mention that during this research preschool pedagogical process was organized according the regulations No 533 "Regulations of state education guidelines" by Ministry of Education and Science and the Cabinet of Ministers (CM), as of 17 August 2012 (Noteikumi par..., 2012). In order to maintain the principles and needs of the child's psychic development processes, the children's comprehensive (balanced physical, psychic, social) and harmonious (balanced intellectual, emotional, will) development is being promoted, knowledge, skills and attitudes needed for individual and social life are being taught at preschool for further use at elementary school (Liduma, 2017; Liduma, 2018).

Musicality is formed at a particular place and time for each child according to his/her inherited capacities. Taking into account the holistic approach to the child's musical development, A. Liduma has defined musicality. *Musicality is an integrated personality trait, consisting of emotional perception and emotional responsiveness, musical hearing, sense of rhythm, voice vocal range, singing quality, musical memory and musical thinking* (Liduma, 2004). Emotional responsiveness is the basic indication and core of musicality (Teplov, 1947). The ability to respond emotionally as an innate quality, promoted by an age-appropriate content in a child-friendly environment, forms musicality as a personality trait (Liduma, 2004).

Relying on Ch. Wulf's anthropologic methodology approach on human development at a particular place, time and space (Wulf, 2007), a 13-year's study (years 2004-2016) examined the relationships between the ability to respond emotionally and the formation of musicality, and it was found that there is a mutual correlation between them. *A unit of the causes and effects of two or more pedagogical facts or phenomena in a new quality is a correlation.* Relationships can exist and do not interfere with each other. Thus, musicality and emotional responsiveness are mutually reinforcing and influencing each other (Liduma, 2015).

Musicality is being developed gradually in the musical environment of the family (Vikmane, 1995; Mackevicha, 1999; Līduma, 2004). The timely start of a child's musical activity in home's musical environment is important. Attitudes towards oneself, others, people, nature, work, culture and the state form in the collaboration of a child, parents, grandparents, peers and teachers. This is illustrated in the model (see Figure 1).

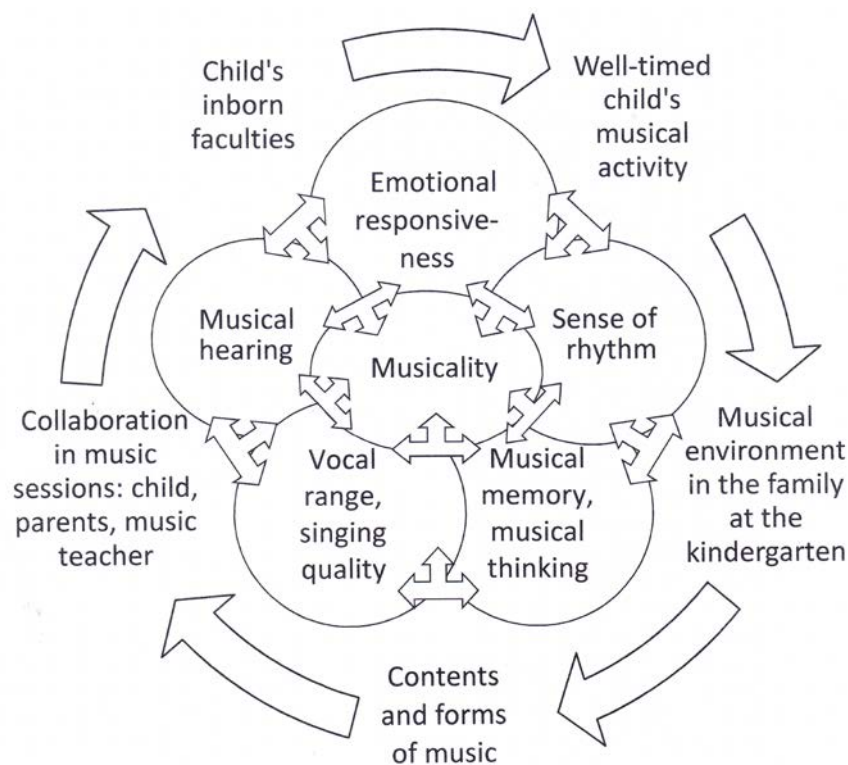


Figure 1 *Model of child's musicality development in action* (Līduma, 2015)

The development of the child's musical thinking is of particular importance. In the course of a gradual empirical study, the child's musical thinking indicators were formulated:

- 1) wants to talk about music;

- 2) wishes to listen music repeatedly;
- 3) shows interest in the names of the notes;
- 4) wishes to write notes;
- 5) is able to characterize the mood of music;
- 6) characterizes musical expression means (Liduma, 2015).

It is important that the theory and practice of playwork recognises that children's play should ideally be “freely chosen, personally directed and intrinsically motivated” (Playwork principles, 2004/2015). Therefore, equal collaboration between a teacher and a child is important at game play music sessions.

Discussion: A child and teacher collaboration content in a musical activity

The quality of collaboration among children, parents and teachers is important in preschool educational practice. Parental patience, persistent and independent children action and targeted teacher support are required. During the empirical study, it was examined and concluded that emotional responsiveness as a hereditary quality is the basic feature of musicality and a musicality center promoted by musical pedagogical means. By child's emotional response to the musical activity, the volume (range) of his/her vocal voice and the quality of singing (interest in singing and singing skills) gradually develop during his/her lifetime. The range is influenced by the child's inborn potentials, and the voice vocal range and singing quality of each child develops at an individual pace (Liduma, 2015).

From 1986 to 2016, while working as a music teacher in the interest education musicality promoting group with preschool children, the teacher's experience at preschool was systematically reflected and analyzed. It was found that an authoritarian style of work is not acceptable in pedagogical work, as it impedes the child's emotional responsiveness and limits creativity, because the aim of the teacher's work is to teach songs. An authoritarian teacher forces to do and demands unconditional obedience. It limits the child's independence and promotes passivity.

Observations revealed that preschool children with a low social experience remain aloof from such teachers and do not want to sing along. Due to the negative experience acquired at preschool, children are not responsive to musical activity at school.

The attitude of a liberal teacher in children as well leads to an uncritical approach to their activities. Failure to plan their time prevents children from exercising systematic musical activity, because the child's self-organized musical activity is necessary.

In the music classes of interest education in Latvia, observing the children's response to the teacher's musical action, it was found that a democratic style of the teacher's work is necessary. In the daily work of the music teacher it manifests as the promotion of a preschooler development in collaboration with the child in singing along. Therefore, for each musical class, the teacher together with the children, sets the goal and chooses the means appropriate to the needs of the child: content, diverse methods and forms.

Lev Vygotsky's theory about the actual zone of the child's development (the child is doing/performing himself/herself individually) and the zone proximal development where the child collaborates with the teacher (Vygotskij, 1997) and receives the teacher's support in a personally significant action, is useful in practice, working with 3-7 year old children.

The position of a democratic teacher (indirect management, teacher-consultant and collaboration partner) at work with preschoolers enables:

- 1) to agree with the children on the content of the songs to be mastered;
- 2) to collaborate equally with the child;
- 3) to consult and advise the child, as far as possible, to complete the task accurately;
- 4) to involve parents in collaboration (child-teacher-parent), encourage and stimulate them to support their children. Then the children feel good and safe, they want to collaborate, they are positive and responsive. Therefore, the position of the teacher, pedagogical tact and an individual approach to each child are important (the criterion for collaboration).

Sometimes the teacher is waiting for a faster musicality development result too soon, but each child develops differently and individually. This leads to the teacher's inner conflict, the expectations confronting opportunities and their implementation. A lengthy inner conflict causes external conflicts, and thus the teacher involuntarily pushes his/her will too much rather than encourages the child to act.

The teacher should encourage the child to act systematically, to be aware of the musical needs and to organize the day independently. The following sequence would be preferable for promoting the musical activity:

- 1) *to create disposition;*
- 2) *set a goal;*
- 3) *to choose means;*
- 4) *enter activity: listening, singing, movements, mimics, simultaneous activity;*
- 5) *to reflect the results: contentedness for the accomplished (psychological), developed skill to emotionally respond and increased musicality quality (pedagogical).*

Results: Outcomes of empiric research

Observing the dynamics of emotional responsiveness of the child (247 respondents) during the first phase of the research, while developing the promotion work (1998-2002) and the second stage (a selection of 300 respondents) in the next 13 school years (2004-2016), it was concluded that observed emotional responses of 547 children were very different.

Comparing the emotional responsiveness of respondents and other components of musicality in both phases, it was concluded that in the second stage of the study children had a higher level of emotional responsiveness. Analyzing the teacher's activity, it was found that the emotional responsiveness of the children is affected by the change in the teacher's attitude towards children. Children's observations and discussions with their parents gave the opportunity to conclude that the musical environment at home is important for a timely musicality and emotional development.

Work with 3 y.o. and 4 y.o. preschoolers was complicated. Throughout the study, only some children were emotionally responsive in each group. This is due to the lack of a suitable musical environment at home.

Partial emotional responses could be observed after one month of work, when the child was adapted to the group, accepted the teacher and dealt with the pedagogical environment. During 13 years, only 10 children had an age-appropriate voice vocal range. Out of all 3-year-olds and 4-year-olds, only 20 were emotionally responsive to music, 50 were partially emotionally responsive, and 30 did not respond emotionally at all.

In order to make the children feel safer, in the first two months of each year, for three-year-olds and four-year-olds, music classes were organized together with their parents. In the integrated game activities, parents both observed children's activities and, with their children, participated in games and other activity types. As almost all children had an unclear articulation, it delayed the development of emotional responsiveness at the beginning, as children could not clearly pronounce the words.

By discussions with parents of 3 year-olds (100 respondents) after the open door sessions, it was found out that the parents sing together with their child in 20 families only. 80 children had no musical experience. Positive changes were observed after the TV show "*Ğimeņu dziedāšana*" (*Family singing*). The example from real life practice influenced positively. The children even tried to sing the songs not appropriate for their voice vocal range.

Better results were observed with the 5 year-olds, who were learning music for the second year. Already at the very beginning of the school year, out of 100 respondents, 60 children were emotionally responsive, 20 children were

partly emotionally responsive, while other 20 children, who had started learning music for the first year, were emotionally unresponsive.

6 year-olds (100 respondents) with a previous emotional responsiveness experience adapted quickly and 70 children were emotionally responsive immediately. 20 children were partly emotionally responsive. 10 children, who had joined the group only at the age of 6 years, were emotionally unresponsive (See Figure 2).

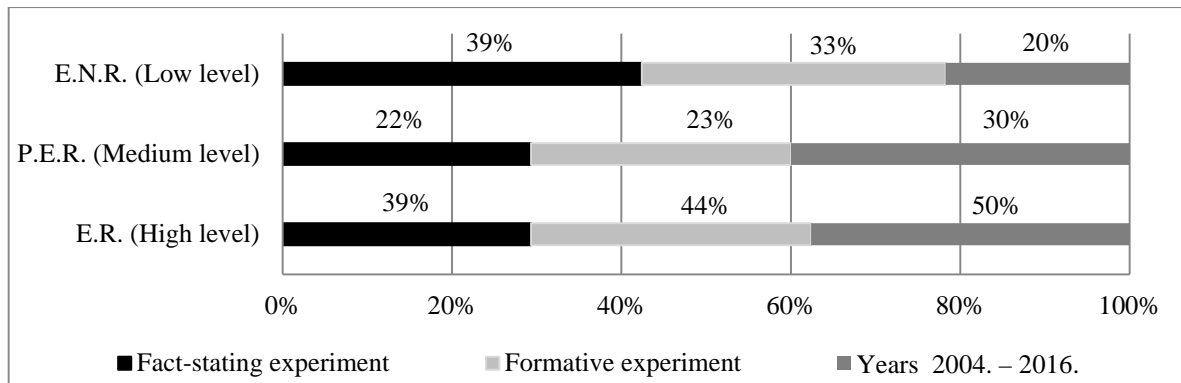


Figure 2 *Dynamics of emotional responsiveness*

A theory-based empirical study suggests that an individual approach and differentiated tasks for each child are needed. The teacher’s mastery, positive attitude towards any child is important. In general, children’s emotional responsiveness has improved and the dynamics is positive. Therefore, one of the important collaboration criteria is the *musical environment*.

In both stages of the study, children initially adapted and only then (approx. within a month) began to respond emotionally. Due to an illness or other delays, such adaptation cases repeated several times. The main benefit for the teacher was the improvement of collaborative competence.

It was the skill to work democratically, patiently, purposefully, unassumingly, timely changing forms of work, meeting the needs of children, and ensuring an individual approach to each child. After promotional work (1997-2004) defending in 2004, the developed theory of musicality promotion was applied by author of this research in the practice of the music pedagogue.

Collaboration with children parents was organized as well. The musical group teachers and children's initiative were joint concerts “*We sing together*”. Parents, children, sisters and brothers, grandparents and friends participated. Each family presented a musical performance. Thus, in musical action, the succession of musicality development was promoted, the musical environment at home and the tradition of singing along in the family were promoted. The children and parents’ attitude was positive about it. Observations in the pedagogues’ practice

confirmed that in pre-school age children, self-experience is acquired by observing and imitating adults. The adult's example stimulates perception, provokes emotional responsiveness, and child's musicality is fostered in collaboration.

Exercising with the child in practice, according to the criteria, indicators and levels of cross-correlations of the emotional responsiveness and the musicality promoting, in practice an individualized approach to each child for fostering of their emotional responsiveness and involving into activity with an appropriate musical content work session adjusted to the child's needs. Other significant factors are positive appraisal and positive performance by the teacher, ability to stimulate interest in the process of singing along – all together, as well as individually.

The child's ability to emotionally respond to music and the musicality development as a whole is promoted by the appropriate to the child's age musical environment at home and at preschool, when the child has started purposeful and persistent musical activity at an early age. Then meanwhile storing of the musical experience, apprehension of musical ideas and recalling into memory, remembering are being accomplished. Each musicality component is being promoted by the child's systematic personally significant activity.

Conclusions

This research revealed the cross-correlations of the emotional responsiveness and the musicality development, which are influenced by the objective (*MC regulations, environment, content, methods, forms*) and the subjective (*pedagogue position/attitudes and the child position/attitudes*) pedagogical means.

Particularly significant is the child's position/status in musicality development by activity: *free choice, self-dependence and responsibility in equity based collaboration (parents-child-teacher)*.

The pedagogical preconditions for promoting musicality are: well-balanced and appropriate for child's age stage contents of classes in singing; integrated and appropriate for the relevant age group and his/her psyche and educating him/her – songs and games – constitutes the world the child understands and is personally significant to him/her.

Succession in developing musicality is provided by a teacher, a child and his/her parents, in collaboration between a preschool child and a teacher in the upbringing process (teacher-child-parents). *Efficiency of developing musicality for the children of preschool age is directly dependant on meeting succession and regularity principles and on implementing the contents, methods and techniques for mutual collaboration of children and different generations.*

The theory/practice based research revealed that any changes to be implemented require a scientific basis developed by scientists of each particular country, which would promote the development of citizenship towards one's own country, and then towards other countries.

References

- Balsons, M. (1996). *Kā izprast klases uzvedību*. Lielvārde: Lievārds.
- Greata, J. (2006). *An Introduction to Music in Early Childhood Education*. Australia, Mexico, Singapore, Spain, United Kingdom, United States: Thomson Delmar Learning.
- Līduma, A. (2004). *Pirmsskolas vecuma bērnu muzikalitātes pedagoģiskais aspekts*. Rīga: LU.
- Līduma, A. (2015). *Bērna muzikalitāte*. Rīga: Librum.
- Liduma, A. (2017). Collaboration in the kindergarten as a pedagogical means for developing positive attitudes. *International dialogues on education: Past and Present. IDE, 4, 1, 100-106*. Retrieved from <http://www.ide-journal.org/journal/?issue=2017-volume-4-number-1>
- Liduma, A. (2018). Scientific substantiation: for and against 6-year-old children commencing school education. *Society, Integration, Education. Volume II, 585-601* DOI: 10.17770/sie2018vol1.3377
- Mackeviča, L. (1999). *Mērķtiecīga mūzikas uztvere kā pirmsskolas vecuma bērnu audzināšanas līdzeklis: Promocijas darba kopsavilkums*. Liepāja.
- Noteikumi par Valsts pirmsskolas izglītības vadlīnijām – Likumi.lv.* (2012). Pieejams <https://likumi.lv/doc.php?id=250854>
- Pirmsskolas mācību programma. (2019). *Valsts izglītības satura centrs. ESF projekts Nr.8.3.1.1/16/I/002 Kompetenču pieeja mācību saturā*. Pieejams <https://mape.skola2030.lv/resources/10>
- Playwork Principles*. Playwork Principles Scrutiny Group. (2004). Retrieved from <http://www.playengland.org.uk/playwork-2/playwork-principles/>
- Špona, A. (2006). *Audzināšanas process teorijā un praksē*. Rīga: Raka.
- Teplov, B.M. (1947). *Psihologija muzykalnyh sposobnostej*. Moskva: Leningrad: APN RSFSR.
- Vikmane, B. (1995). *Latviešu tautasdziesma kā pirmsskolas vecuma bērnu muzikālās dzirdes un balss attīstīšanas līdzeklis: Promocijas darba kopsavilkums*. Rīga.
- Wulf, Ch. (2007). *Antropologie. Geschochte, Kultur, Philosophie*. Reinbek bei Hamburg. Beltz Lexikon Pädagogik, 542-545
- Vygotskij, L.S. (1997). *Voprosy detskoj psihologii*. SanktPeterburg: Sojuz.

SADARBĪBA KĀ KOMUNIKĀCIJAS FORMA STARP VECĀKIEM UN PIRMSSKOLAS IZGLĪTĪBAS PEDAGOGIEM

Cooperation as a Form of Communication Between Parents and Pre-School Teachers

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Abstract. *Communication is a continuous process. Communication connects people. It is verbal communication, non-verbal or gesture-mimic communication and writing, when we express our opinion in writing. Communication has a management function that is closely linked to the management processes at the pre-school institution. Communication improves the flow of information between pre-school teachers and parents. Accuracy of information is an important aspect of communication, because the information transferred to parents is researched, analysed, interpreted and preserved. Therefore, pre-school teachers need to spend time working on information that is then accurately formulated for parents. An important aspect is the way information is communicated. It is important that communication between pre-school teachers and parents is constructive, open and honest.*

The article aim is to analyse and evaluate the scientific literature and other sources of communication and cooperation, complete a survey to find pre-school parents' preferred forms of cooperation with pre-school teachers.

Keywords: *communication, cooperation, pre-school teachers, parents*

Ievads

Introduction

Komunikācija ir saziņas forma starp ģimenes locekļiem, kolēģiem, kaimiņiem, radniekiem, kā arī sociālajos tīklos. Komunikācija tiek uzskatīta par nepārtrauktu procesu, kam ir liela nozīme visās jomās, kas skar sadarbību. Komunikācijas procesa laikā pastāv dažāda veida šķēršļi un pārpratumi, kas savukārt ietekmē sadarbību. Lai no tiem izvairītos, komunikācijas procesa dalībniekiem ir nepieciešamas prasmes, lai efektīvi pārvarētu komunikācijas šķēršļus (Kapur, 2018).

Raksta autores piekrīt R.Kapuram (Kapur, 2018), ka komunikācijai ir liela nozīmē sadarbības veidošanā. Uzsākot pirmsskolas gaitas, bērns iepazīst savu pirmo pedagogu, citus pirmsskolas izglītības iestādes darbiniekus un citus bērnus. Un katra satikšanās veido bērna attieksmi pret apkārtējo vidi un sevi pašu. Ja vecāki ir vērsti uz sadarbību un uzticas pedagogam kā profesionālim savā jomā, tad bērns apgūs nepieciešamas prasmes un iemaņas.

E. Apsalons uzskata, ka komunikācija ir informācijas un kopīgas izpratnes nodošanas process no vienas personas otrai. Labas komunikācijas prasmes ir ļoti svarīgas, lai veidotos pozitīva sadarbība starp pedagogiem un vecākiem, tāpēc pedagogiem ir svarīgi būt efektīviem komunikatoriem. Viens no svarīgiem faktoriem, lai pēc komunikācijas sekotu veiksmīga sadarbība, ir komunikācijas kompetence - ir prasme sarunāties, saprasties ar citu personu, kā arī nonākt pie abiem pieņemama rezultāta (Apsalons, 2013).

Raksta autores atzīst, lai pēc komunikācijas sekotu sadarbība, ir ļoti svarīgi abām iesaistītajām pusēm uzticēties un saskatīt kopīgu mērķi šajā sadarbības procesā. Sadarbībā starp vecākiem un pirmsskolas pedagogiem, galvenais mērķis ir bērns un viņa labsajūta pirmsskolas izglītības iestādē. Caur šo komunikāciju arī bērns mācās, kā komunicēt ar līdzcilvēkiem, jo gan vecāki, gan pirmsskolas pedagogi ir bērna paraugi kā darboties vai uzvesties pareizi. Tāpēc svarīgi komunikācijā saglabāt savstarpējo cieņu.

Pedagoga spējai komunicēt un uz klausīt, kā arī spējai būt godīgam, ir izšķiroša nozīme. Pedagogam ir jābūt profesionāli kompetentam un pedagogs ir tas, ka iedrošina un atbalsta, palīdz uzsākt un turpināt sadarbību ar vecākiem, sniedzot atbalstu pedagoģisko problēmu risināšanā (Braše, 2010).

Raksta autores atzīst, ka sadarbība ar vecākiem ir viens no svarīgākajiem faktoriem, lai bērns pirmsskolas izglītības iestādē veiksmīgi integrētos mācību vidē. Sadarbība balstās uz uzticēšanos, iesaistīšanos un vēlmi līdzdarboties. Visam jābūt līdzsvarā, tad sadarbība norit veiksmīgi. Pirmsskolas izglītības pedagogam un vecākiem apmainoties viedokļiem, tiek rasti risinājumi.

Raksta mērķis: analizēt un izvērtēt zinātnisko literatūru par komunikāciju un sadarbību, kā arī noskaidrot pirmsskolas izglītības iestādes vecāku vēlamās sadarbības formas ar pirmsskolas pedagogiem.

Komunikācija kā konkrētas darbības process ***Communication as a Process of Concrete Action***

Jēdziena “komunikācija” (latīņu *communicatio*) izskaidrojums ir process, kad kaut kas “tiek darīts kopā”. Klasiskajā komunikācijas zinātnē ar komunikāciju saprot saziņu cilvēku starpā. Šo procesu apzīmē kā saziņu divu personu starpā, kur viens ir informācijas sūtītājs, bet otrs – saņēmējs, kā arī to var apzīmēt kā

atgriezenisku reakciju, kad ziņas saņēmējs reaģē uz saņemto informāciju (Veinberga, 2019).

Komunikāciju definē kā informācijas un kopīgas izpratnes pārsūtīšanas procesu no viena persona citai. Tā ir domu, ideju, emociju un izpratnes radīšana vai apmaiņa starp informācijas sūtītāju un saņēmēju (Adu-Oppong, 2014).

S.Lasmane komunikāciju definē par faktu, tēlu, jūtu, vēlmju, darbības un tās zīmju un nozīmju izpausmi (Lasmane, 2012).

Analizējot šo pētnieku definīcijas par komunikāciju, raksta autore atzīst, ka komunikācija ir kādas konkrētas darbības process – runāšana ar kādu personu vai personu grupu, grāmatas lasīšana, dziesmas klausīšanās u.c., kur procesa laikā ir informācijas saņēmējs un informācijas sūtītājs.

Pirmā komunikācijas forma varēja būt alu zīmējumi, piktogrammas Francijā pirms 30 000 gadiem, vai arī metālā un mālā gravētie teksti šumeru kultūrā. Kā arī pirmā masu komunikācija varēja būt Jūlija Cezara laikā, kad tika izdota pirmā avīze, kas bija iespiests teksts uz vaska plāksnēm (Fang, 1997).

S. Veinberga atzīst, ka pastāv trīs komunikāciju veidi – verbālā, neverbālā un rakstu:

- verbālā jeb auditīvā komunikācija visplašāk tiek izmantota dialoga formā, nereti informācija tiek nodota ar skaņu palīdzību un tad ziņas saņēmējam jāprot atšifrēt informāciju;
- neverbālā komunikācija notiek ar vēstījuma nodošanu, izmantojot ķermeņa valodu, kustību, intonāciju, maņu un acu kontakta palīdzību, kā arī ar tērpu, smaržām, krāsu un citām simbolisku saturu saturošām formām. Šis komunikācijas veids ir dominējošais cilvēku starpā;
- rakstu komunikācija ir informācija apmaiņa ar pierakstu simboliku, rakstu zīmēm, zīmējumu palīdzību (Veinberga, 2019).

Veiksmīgas komunikācijas rezultātā ir saprašanās par diskutējamo jautājumu, kā arī sadarbības attiecību veidošana. Lai cilvēki varētu sarunāties, jābūt motivācijai sadarboties. Savukārt sadarbošanās būs veiksmīga, ja spēs nonākt pie abpusēja pieņemama risinājuma (Apsalons, 2013).

Raksta autore atzīst, ka komunikācijas pamatā pirmsskolas izglītības iestādē starp vecākiem un pedagogiem ir lietišķas sarunas. Protams, sarunas lietišķums ir atkarīgs no sarunu temata, un tas, cik lietišķi spēj būt sarunas biedri. Bieži vien, ja sarunu temats ir nepatīkams, tad pār sarunu sāk valdīt emocijas, kas ir lielākais šķērslis konstruktīvai sarunai.

Lietišķas sarunas ***Business Talks***

Lietišķas sarunas ir tās sarunas, kas noris lietišķā kontekstā. Katrās lietišķās pārrunās valodas lietojums var būt gan komunikatīvs ar mērķi saprast sarunu partneri; gan stratēģisks ar mērķi gūt panākumus; gan normatīvs ar mērķi noteikt attiecību izveidi un pat ekspresīvs, kura mērķis ir savas subjektīvās attieksmes paušana, jo pārrunu laikā, cenšamies saprasties ar savu partneri, ietekmēt viņu un gūt panākumus sarunas rezultātā, noregulēt situāciju un paust savu subjektīvo vērtējumu (Apsalons, 2013).

Raksta autore atzīst, ka daļai cilvēku ir dabiska spēja būt lietišķam visās dzīves situācijās, bet savukārt tie, kam nepiemīt šī īpašība, to var apgūt, piemēram, lasot dažādu literatūru un apmeklējot personības izaugsmes kursus. Bet jāpiebilst, ka instinkti ir stiprāki par veselo saprātu un jāpaiet laikam, lai mācības dotu noturīgu rezultātu.

Komunikatīvs dialogs ir kopīga domāšana un rīcība, aiz kā seko sadarbība. Komunikatīvu sarunu veido desmit secīgi soļi:

1. sarunas uzsākšana ar mērķi radīt emocionālo fonu;
2. tilta teikuma izteikšana, kad ir skaidra pārrunu norises laika noteikšana un zināma darba kārtība;
3. sarunas partnera vajadzību un vēlmju apspriešana, lai būtu skaidri zināmas sarunu partnera vajadzības;
4. iespējamo alternatīvu iztirzājums, kad ir vienošanās par sarunu partnera vajadzībām un vēlmēm;
5. vienošanās par objektīviem kritērijiem, lai spētu izvērtēt alternatīvas;
6. vienošanās par abām pusēm saistošiem mērķiem, lai būtu iespējama sadarbība;
7. argumentēts risinājuma piedāvājums;
8. līdzīgu risinājumu piemēru minēšana;
9. vienošanās par to, ka mūsu piedāvājums ir tieši tas, kas nepieciešams sarunu partnerim;
10. panāktās vienošanās nostiprināšana, abpusēju saistību uzņemšanās un rīcības plāna izveide (Apsalons, 2013).

Negodīgas manipulācijas paņēmieni:

- uzbrukums personībai: visizplatītākais veids negodīgai manipulācijai, jo šādā veidā ir visvieglāk padarīt sarunu partneri nedrošu un ietekmēt viņu rīkoties mums vēlamā veidā;
- iznīcinošas frāzes, kuru uzdevums ir iznīcināt sarunu partneri un pārņemt vadības grožus un turpināt sarunu sev vēlamā virzienā;

- izdomāti fakti jeb melošana ir paņēmiens, ar kuru palīdzību sarunu partneris vēlas panākt piekrišanu nepatiesiem faktiem;
- hipotētiski jautājumi, lai apšaubītu mūsu pārliecību;
- draudi izmantot sankcijas, kad pārspīlējam tikai teorētiski kādas rīcības sekas;
- pārspīlēšana, kas var izpausties kā mērķtiecīga viedokļa novešana līdz absurdam;
- kritiskie jautājumi, uz kuriem nevar atbildēt pēc būtības;
- viedokļa sagrozīšana, ja sarunu partneris nespēj oponent mūsu viedoklim, viņš maina viedokļa formulējumu (Apsalons, 2013).

Raksta autore atzīst, ka visi manipulācijas paņēmieni tiek izmantoti situācijās, kad kāds sarunu biedrs nav kompetents sarunu tematā, jūtas aizskarts vai apdraudēts. Negodīgie manipulācijas paņēmieni ir kā aizsargreakcija, kas balstīta uz emocijām.

Sadarbības formas *Forms of Cooperation*

Sadarbība ir kopīga darbība un savstarpējs atbalsts kopīgu mērķu sasniegšanai (Latvian Oxford Living Dictionaries, 2019).

Sadarbība ar vecākiem tiek uzskatīta par vienu no būtiskākajiem faktoriem, lai bērns pirmsskolas izglītības iestādē spētu apgūt jaunas zināšanas un prasmes un veiksmīgi integrētos mācību vidē. Vecāku iesaistīšana pirmsskolas izglītības iestādes dzīvē pozitīvi ietekmē bērna sasniegumus un motivāciju, kā arī sadarbība starp vecākiem un izglītības iestādi, vecākus padara labāk informētus par izglītības iestādes darbību. Iesaistoties mājas darbu izpildes procesā, vecāki kļūst par mācību procesa dalībniekiem, nevis tikai situācijas novērotājiem (Tavas & Bilač, 2011).

Lai sadarbība ar vecākiem noritētu efektīvi, pirmsskolas izglītības pedagogu uzdevums ir izstrādāt sadarbības nosacījumus, jo pedagogi ir tie, kas “sper pirmo soli” labas sadarbības virzienā. Pirmsskolas izglītības pedagogiem ir jābūt gataviem atteikties no aizspriedumiem un uzturēt kontaktu ar katru vecāku. Nenoliedzami, ka sadarbības efektivitāte ir atkarīga no abām pusēm, bet pirmsskolas izglītības pedagogi ir tie, kas dod signālu draudzīgas vides veidošanā, ka arī rada mierīgu atmosfēru sarunām. Tieši tāpat pirmsskolas izglītības pedagogiem ir jābūt gataviem saņemt un bez emocijām analizēt kritiku. Priekšnosacījumi labai sadarbībai no pirmsskolas izglītības pedagogu puses ir:

- būt godīgiem, atklātiem un komunikabliem;
- klausoties, ļaut vecākiem runāt, izrādīt sapratni;
- nebūt kategoriskiem un ar stereotipiem;

- būt elastīgiem, atvērtiem pārmaiņām un ieteikumiem;
- vienmēr domāt par sarunas formu un saturu, izvēloties pareizo vietu un laiku;
- skaidri un stingri runāt par savām prasībām un cerībām, lai vecāki to zinātu un saprastu;
- būt gataviem sniegt vecākiem sliktas ziņas, neaizmirstot pieminēt bērna pozitīvās īpašības;
- uzklausot kritiku – nepārtraukt runātāju;
- piedāvāt palīdzību un pārrunāt veidus, kā tikt galā ar konkrētu situāciju (Faber & Mazlish).

Daugavpils pilsētas pirmsskolas izglītības iestādē *Pasaciņa* tiek izdalītas trīs galvenās sadarbības formas:

- individuālās sadarbības formas ir pārrunas, pedagoģiskās sarunas, individuālās konsultācijas;
- kolektīvās sadarbības formas ir vecāku sapulces, kopsapulces, atvērto durvju dienas, vecāku iesaistīšana svētku sagatavošanā, vecāku pasts, kopējas ekskursijas, koncerti;
- informatīvās sadarbības formas ir bērnu un vecāku darbu izstādes, informatīvie stendi vecākiem, anketēšana, aptaujas, bērnu portfolio (Sadarbība ar ģimeni, 2019).

Raksta autores atzīst, ka Daugavpils pilsētas pirmsskolas izglītības iestādē “Pasaciņa” ir pārskatāms un saprotams sadarbības formu sadalījums. Vecāki var lieliski atrast laiku un veidu, lai sadarbotos ar pirmsskolas izglītības iestādes pedagogiem un iesaistītos zināšanu apguves procesos. Individuālās sadarbības formas būs piemērotas vecākiem, kas ir noslogoti ikdienas darbos, kā arī tiem vecākiem, kuru bērniem ir nepieciešama individuāla pieeja mācību un audzināšanas procesos. Savukārt kolektīvā sadarbības forma ir piemērota tiem vecākiem, kam īpaši svarīgi ir fiziski iesaistīties bērna izglītības procesā un pirmsskolas izglītības iestādes darbībā. Informatīvā sadarbības forma būs piemērota intravertiem vecākiem, kas vēlas būt informēti par notiekošo pirmsskolas izglītības iestādē, kā arī pavadīt laiku kopā ar bērnu, pildot uzdotos mājas darbus, kā arī izteikt savu viedokli anonīmi.

Pētījuma metodoloģija *Methodology of research*

Lai veiktu empīrisko pētījumu, raksta autores izmantoja aptaujas metodi – anketēšanu, ar kuras palīdzību tika veikts pētījums par pirmsskolas pedagogu un vecāku sadarbības formām. Raksta autores, balstoties uz zinātnisko literatūru par sadarbības formām, kā arī personīgo pieredzi, izstrādāja anketu, lai aptaujātu

vecākus Jelgavas pirmsskolas izglītības iestādē. Anketa sastāv no trīs slēgtajiem jeb strukturētajiem atbilžu jautājumiem: 1) Kura individuālā sadarbības forma Jums būtu saistošāka? 2) Kura (-s) kolektīvās sadarbības forma (-s) Jums būtu saistošākas? 3) Kura (-s) informatīvās sadarbības formas Jums būtu saistošākas?

Anketēšana bija brīvprātīga un anonīma. Anketēšanā piedalījās 173 respondenti.

Pētījumā izmantotas teorētiskās pētījuma metodes - zinātniskās un metodiskās literatūras apzināšana, analīze un izvērtēšana, kā arī empīriskās pētījumu metodes: anketēšana, pieredzes refleksija un χ^2 kritēriju metode.

Rezultāti

Results

Izmantojot χ^2 kritērija metodi (Arhipova & Bāliņa, 2006), respondentu paraugkopa tika analizēta, lai noskaidrotu, vai pastāv būtiskās atšķirības starp respondentu atbilžu biežumu un kāda ir dominējošā atbilde paraugkopā.

Datu analīzei tika izvirzītas šādas hipotēzes:

H_0 : respondentu atbilžu biežums būtiski neatšķiras;

H_1 : respondentu atbilžu biežums būtiski atšķiras.

Datu analīzi par respondentu atbilžu biežumu uz jautājumu *Kura individuālā sadarbības forma Jums būtu saistošāka?* var redzēt 1. un 2. tabulā.

Pēc 1. tabulas rezultātiem, kur atspoguļota starpība starp frekvencēm, raksta autore secina, ka ir novērota statistiski nozīmīga novirze atbildei "*Individuālās konsultācijas*" (38.0).

1. tabula. χ^2 kritērija frekvences par respondentu individuālo sadarbības formu biežumu
Table 1 Chi-Square Frequency of Respondent' Individual Form of Cooperation

	Novērotais biežums	Teorētiskais biežums	Starpība
Pārrunas, pedagogiskās sarunas	56	94.0	-38.0
Individuālās konsultācijas	132	94.0	38.0
Kopā	188		

2. tabula. χ^2 kritērija rezultāti par respondentu individuālo sadarbības formu biežumu
Table 2 Chi-Square Test Statistics of Respondent' Individual Form of Cooperation

	Atbildes
χ^2 testa faktiskā vērtība	30.723
brīvības pakāpju skaits	1
p-vērtība	0.000

Tā kā p -vērtība = 0.000 < 0.05 (skatīt 2. tabulā), tad ar varbūtību 95% var noraidīt nulles hipotēzi un pieņemt alternatīvo hipotēzi, ka respondentu atbilžu biežums būtiski atšķiras. Lielākā daļa vecāku izvēlas individuālas konsultācijas, jo šādas sarunas rezultātā vecāks tiek informēts tikai par savu bērnu. Sarunas gaitā ir iespējams izrunāt aktuālus un jūtīgus jautājumus, kas skar bērna iekļaušanos grupā.

Aptaujas otrajam jautājumam “Kura (-s) kolektīvās sadarbības forma (-s) Jums būtu saistošākas?” tika izvirzītas šādas hipotēzes:

H_0 : respondentu atbilžu biežums būtiski neatšķiras.

H_1 : respondentu atbilžu biežums būtiski atšķiras.

Datu analīzi par respondentu atbilžu biežumu uz jautājumu *Kura (-s) kolektīvās sadarbības forma (-s) Jums būtu saistošākas?* var redzēt 3. un 4. tabulā.

3. tabula. χ^2 kritērija frekvences par respondentu kolektīvo sadarbības formu biežumu
Table 3 Chi-Square Frequency of Respondent' Collective Form of Cooperation

	Novērotais biežums	Teorētiskais biežums	Starpība
Vecāku sapulces	145	61.3	83.7
Kopsapulces	10	61.3	-51.3
Atvērto durvju dienas	71	61.3	9.7
Vecāku iesaistīšana svētku sagatavošanā	41	61.3	-20.3
Vecāku pasts	19	61.3	-42.3
Kopējas ekskursijas	67	61.3	5.7
Koncerti	76	61.3	14.7
Kopā	429		

Pēc 3. tabulas rezultātiem, kur atspoguļota starpība starp frekvencēm, raksta autore secina, ka ir novērota statistiski nozīmīga novirze atbildei “*Vecāku sapulces*” (83.7).

Tā kā p -vērtība = 0.000 < 0.05 (skatīt 4. tabulā), tad ar varbūtību 95% var noraidīt nulles hipotēzi un pieņemt alternatīvo hipotēzi, ka respondentu atbilžu biežums būtiski atšķiras. Vecākiem saistošākā kolektīvā sadarbības forma ir vecāku sapulces, jo aktuālā informācija tiek pasniegta īsi un kodolīgi. Ir iespēja iepazīties, un satikties ar citiem grupas vecākiem, apspriest aktualitātes un sniegt pieredzes refleksiju, kā arī vecāku sapulcē lēmumi tiek pieņemti ātrāk, pretēji, diskutējot *WhatsApp* vai e-pastu sarakstes veidā.

4. tabula. χ^2 kritērija rezultāti par respondentu kolektīvo sadarbības formu biežumu
Table 4 Chi-Square Test Statistics of Respondent' Collective Form of Cooperation

	Atbildes
χ^2 testa faktiskā vērtība	198.765
brīvības pakāpju skaits	6
p -vērtība	0.000

Aptaujas trešajam jautājumam “Kura (-s) informatīvās sadarbības formas Jums būtu saistošākas?” tika izvirzītas šādas hipotēzes:

H_0 : respondentu atbilžu biežums būtiski neatšķiras.

H_1 : respondentu atbilžu biežums būtiski atšķiras.

Datu analīzi par respondentu atbilžu biežumu uz jautājumu *Kura (-s) informatīvās sadarbības formas Jums būtu saistošākas?* var redzēt 5. un 6. tabulā.

5. tabula. χ^2 kritērija frekvences par respondentu informatīvo sadarbības formu biežumu
Table 5 Chi-Square Frequency of Respondent' Informative Form of Cooperation

	Novērotais biežums	Teorētiskais biežums	Starpība
Bērnu un vecāku darbu izstādes	56	83.5	-27.5
Informatīvie stendi vecākiem	131	83.5	47.5
Anketēšana/aptauja	26	83.5	-57.5
Bērnu portfolio	121	83.5	37.5
Kopā	334		

Pēc 5. tabulas rezultātiem, kur atspoguļota starpība starp frekvencēm, raksta autore secina, ka ir novērota statistiski nozīmīga novirze atbildei “*Informatīvie stendi vecākiem*” (47.5).

6. tabula. χ^2 kritērija rezultāti par respondentu informatīvo sadarbības formu biežumu
Table 6 Chi-Square Test Statistics of Respondent' Informative Form of Cooperation

	Atbildes
χ^2 testa faktiskā vērtība	920.15
brīvības pakāpju skaits	3
p-vērtība	0.000

Tā kā p-vērtība = 0.000 < 0.05 (skatīt 6.tabulā), tad ar varbūtību 95% var noraidīt nulles hipotēzi un pieņemt alternatīvo hipotēzi, ka respondentu atbilžu biežums būtiski atšķiras. Vecākiem ir aktuāli redzēt pirmsskolas izglītības iestādes aktuālo informāciju pie informatīvā stenda, jo tādējādi var ērti un uzskatāmi sekot līdz aktualitātēm izglītības iestādē un grupā. Vecākās grupās, kur bērns pats spēj apgērbties, vecāks tajā brīdī iepazīstas ar informāciju. Savukārt, ja laika ir maz, tad šo informāciju var nofotografēt ar viedierīci un izlasīt mājās.

Secinājumi Conclusions

Vecāki izvēlas individuālas sarunas (p-vērtība = 0.000 < 0.05) ar pirmsskolas izglītības pedagogu, jo šādas sarunas rezultātā vecāks tiek informēts tikai par savu

bērnu. Sarunas gaitā ir iespējams izrunāt aktuālus un jūtīgus jautājumus, kas skar bērna iekļaušanos grupā.

Vecākiem saistošākā kolektīvā sadarbības forma ir vecāku sapulces (p-vērtība = $0.000 < 0.05$), jo aktuālā informācija tiek pasniegta īsi un kodolīgi. Ir iespēja iepazīties, un satīties ar citiem grupas vecākiem, apspriest aktualitātes un sniegt pieredzes refleksiju, kā arī vecāku sapulcē lēmumi tiek pieņemti ātrāk, pretēji, diskutējot *WhatsApp* lietotnē vai e-pastu sarakstes veidā.

Vecākiem ir nepieciešams redzēt pirmsskolas izglītības iestādes aktuālo informāciju pie informatīvā stenda (p-vērtība = $0.000 < 0.05$), jo tādējādi var ērti un uzskatāmi sekot līdzi aktualitātēm pirmsskolas izglītības iestādē un grupā. Vecākās grupās, kur bērns pats spēj apgērbties, vecāks tajā brīdī iepazīstas ar informāciju un tas palīdz ietaupīt laiku ikdienā. Savukārt, ja laika ir maz, tad šo informāciju var nofotografēt ar viedierīci un izlasīt mājās.

Individuālās sadarbības formas būs piemērotas vecākiem, kas ir noslogoti ikdienas darbos, kolektīvā sadarbības forma ir piemērota tiem vecākiem, kam svarīgi ir fiziski iesaistīties bērna izglītības procesā un informatīvā sadarbības forma būs piemērota intravertiem vecākiem, kas vēlas būt informēti par notiekošo pirmsskolas izglītības iestādē.

Summary

Accuracy of information is an important aspect of communication, because the information transferred to parents is researched, analysed, interpreted and preserved. Therefore, pre-school teachers need to spend time working on information that is then accurately formulated for parents. An important aspect is the way information is communicated. It is important that communication between pre-school teachers and parents is constructive, open and honest.

The article aim is to analyse and evaluate the scientific literature of communication and cooperation, complete a survey to find pre-school parents' preferred forms of cooperation with pre-school teachers.

In the research used: theoretical research methods - research of scientific and methodological literature, analysis and evaluation; empirical research methods - data acquisition and data processing methods: questionnaire, reflection of experience and chi square criteria method. In the survey participated 173 respondents.

The results of the survey show that parents are more interested in individual cooperation (p-value = $0.000 < 0.05$) in situations where the actual information is about the child or a specific situation, while a collective form of cooperation - parental meeting (p-value = $0.000 < 0.05$) - helps to actively discuss current issues and quickly make decisions. And the informative form of cooperation - information stand (p-value = $0.000 < 0.05$) - helps save time, because you can read the information, when a child comes to pre-school institution or going home.

Individual forms of cooperation will work well for parents who are busy with their daily work, collective form of cooperation - for parents who need to know about the child's education

process and informative form of cooperation - parents who want to be informed of the current in pre-school institution.

Literatūra References

- Adu-Oppong, A.A. (2014). *Communication in the Workplace: Guidelines for Improving Effectiveness*. Retrieved from https://www.researchgate.net/publication/304782482_communication_in_the_workplace_guidelines_for_improving_effectiveness
- Apsalons, E. (2013). *Komunikācijas kompetence. Kā saprasties un veidot attiecības*. Rīga: Zvaigzne ABC.
- Arhipova, I., & Bāliņa, S. (2006). *Statistika ekonomikā un biznesā*. Rīga: Datorzinību centrs.
- Braše, L. (2010). *Ģimenes loma skolēnu socializācijā*. Rīga: RaKa.
- Faber, A., & Mazlish, E. (n.d.). *Cooperation between school and parents. Supporting the educational process*. Cieszyn: Psychologists from the Psychological and Pedagogical Counselling Centre in Cieszyn.
- Fang, I. (1997). *A History of Mass Communication*. Newton: Butterworth - Heinemann.
- Kapur, R. (2018). *Barriers to Effective Communication*. Retrieved from https://www.researchgate.net/publication/323794732_Barriers_to_Effective_Communication
- Lasmane, S. (2012). *Komunikācijas ētika*. Rīga: LU akadēmiskas atbalsts.
- Latvian Oxford Living Dictionaries*. (2019). Retrieved from Oxford Living Dictionaries: <https://lv.oxforddictionaries.com/definition/SADARB%C4%AABA>
- Sadarbība ar ģimeni. (2019). Retrieved from <http://www.daugavpils10pii.lv>: <http://www.daugavpils10pii.lv/sadarbiba-ar-gimeni>
- Tavas, D., & Bilač, S. (2011). *School Websites: a Possibility of Cooperation with Parents?* Croatia: Metodički obzori.
- Veinberga, S. (2019). *Komunikācija. Teorija un prakse*. Liepāja: Sava grāmata.

РАЗВИТИЕ ВОЛЕВОЙ СФЕРЫ СТУДЕНТОВ- БУДУЩИХ ПЕДАГОГОВ ДОШКОЛЬНОГО ОБРАЗОВАНИЯ

Volitional Sphere Development of Students-Prospective Preschool Teachers

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Abstract. *This article focuses on the problem of volitional sphere developing as an important part of human individuality. The theoretical basis is O. Grebenyuk's individuality concept. In it, the individuality is defined as the unity of seven spheres, including volitional one which characterise the originality and uniqueness of a person. Positive development of volitional sphere affects self-development and success of preschool teacher's professional activity. This study addresses three key issues. First, it looks at the problem of volitional sphere in preschool teacher's individuality and identifies the system of professionally important components. Second, it turns to examine dynamics of students' volitional sphere during professional training at the university. Finally, the paper considers professionally important components of the volitional sphere that need to be developed. The data for this study were collected using the questionnaire "The Technique of Student's Individuality" by T. Grebenyuk. Sixty-three students were recruited for this research. The participants study at Immanuel Kant Baltic Federal University, they are future preschool teachers. The results suggest that the structure of the volitional sphere changes from the first to the fourth year of study. In the fourth year, the components, that influence the development of subjectivity, dominate. The capacity for prolong volitional effort is not sufficiently developed among all participants in the study.*

Keywords: *individuality, volitional sphere, preschool education, students.*

Введение Introduction

Общим метатрендом современного мира является ускорение: возрастает скорость протекания всех процессов и явлений (Loshkareva, Luksha, Ninenko, Smagin, & Sudakov, 2019). На фоне этих изменений трансформируются требования к профессиональному образованию: усвоение знаний, умений, навыков характеризует тактические образовательные единицы; развитие и формирование компетентностей, компетенций? профессионально важных качеств и свойств приобретает стратегический характер. Переход к принципиально иному содержанию

профессионального образования обеспечивает его развивающий характер и способен стать средством самореализации и самоутверждения личности в динамичном профессиональном мире (Zeer & Symanuyuk, 2005).

Важную роль в процессе профессионального образования играет развитие волевой регуляции, благодаря которой субъект учебно-профессиональной деятельности не просто осваивает предметную область профессии, способы восприятия и понимание предмета профессиональной деятельности, но и приобщается к профессиональной культуре, традициям, ценностным ориентациям, овладевает образцами решения профессиональных задач (Bordovskaya, & Rozum, 2013; Klimov, Noskova, & Solnceva, 2019). Волевая регуляция оказывает влияние на саморазвитие (SHul'ga & SHlyarnikov, 2009), на самосовершенствование (Anikeeva, 2013), способствует самостоятельной и целенаправленной деятельности по самоизменению в процессе профессионального становления (Garanina, 2017).

Профессиональная деятельность педагога дошкольного образования имеет ряд особенностей, связанных со сложной организацией образовательного пространства и временной структуры, с широким спектром видов общения и деятельности, с большим количеством профессиональных функций и задач, с высокой степенью включенности в интенсивное, сложное по содержанию взаимодействие с различными участниками образовательных отношений (Syurtukova & Filippova, 2012; Nesyна, 2019). Профессиональная деятельность воспитателя считается одной из самых напряженных и требует развития волевой регуляции. Соответственно, цель данной статьи – выявить особенности динамики волевой сферы студентов-будущих педагогов дошкольного образования в процессе профессионального обучения.

Теоретический анализ *Theoretical framework*

Проблема воли введена в науку Аристотелем для обозначения определенного класса действий и поступков, детерминированных пониманием их нужности и необходимости (Aristotel', 1976). В монографии Е.П. Ильина проводится глубокий теоретический анализ проблемы воли в науке, обосновывается использование этого термина, раскрывается его сущность как реального психического явления, состоящего в преднамеренном и сознательном произвольном управлении. Волевая регуляция является разновидностью произвольного управления и реализуется через волевые действия, для которых характерно проявление волевых усилий. Воля представляет собой самоуправление своим

поведением с помощью сознания, предполагает самостоятельность человека в принятии решений, в инициации действий, их осуществлении и контроле. Главная сущность воли состоит в самости (П'ин, 2000). Воля представляет собой «целенаправленное стремление» (Husmam & Corno, 2010, 724).

Воля понимается как «способность человека действовать в направлении сознательно поставленной цели, преодолевая при этом внутренние препятствия (то есть свои непосредственные желания и стремления)» (Zinchenko & Meshcheryakov, 1996, 54). Волевые качества представляют собой реализацию способности к волевому усилию и умение его проявлять (П'ин, 2000). Среди собственно волевых качеств выделяются целеустремленность, терпеливость, упорство, настойчивость, смелость, выдержка и решительность (П'ин, 2000; Shalyan, 2015).

Теоретической основой выполненного исследования является концепция индивидуальности О.С. Гребенюка. В этой концепции волевая сфера является одной из сфер индивидуальности. Индивидуальность рассматривается как интегральная психологическая характеристика человека, отражающая семь сфер психики: интеллектуальную, мотивационную, эмоциональную, волевою, предметно-практическую, экзистенциальную и сферу саморегуляции. В концепции педагогики индивидуальности О.С. Гребенюка индивидуальность является педагогической категорией (Grebenuyk & Grebenuyk, 2019). Индивидуальность студента представляет собой сплав, единство психических сфер с присущими возрастными особенностями. Развитие и саморазвитие индивидуальности в процессе профессионального образования является важной педагогической задачей (Grebenuyk, 2017). В научной школе «Педагогика индивидуальности» сформулированы цели формирования волевой сферы студентов: формирование терпения, самообладания, выдержки в профессиональной деятельности, формирование стремления к развитию волевых качеств, формирование готовности к преодолению трудностей и препятствий в профессиональной деятельности (Grebenuyk, 2017). Предложены упражнения и приемы для формирования волевой сферы (Pantyushin, 2002). В своем исследовании мы предположили наличие положительной динамики в развитии составляющих волевой сферы в процессе профессионального обучения будущих педагогов дошкольного образования.

Методы *Methodology*

При изучении волевой сферы будущих педагогов дошкольного образования особое внимание необходимо уделить тем профессионально важным компонентам, которые, во-первых, актуализируются и развиваются в процессе учебно-профессиональной деятельности, во-вторых, определяют дальнейшее профессиональное становление и развитие. Для сбора эмпирических данных была применена «Карта индивидуальности студента» Т.Б. Гребенюк (Grebenuk, 2017). Данная методика позволяет оценить развитие и формирование компонентов, которые являются важными для учебно-профессиональной деятельности студентов:

- 1) способность осознанно ставить далекие цели,
- 2) способность к длительному волевому усилию,
- 3) умение достигать поставленные цели,
- 4) умение преодолевать внешние и внутренние препятствия,
- 5) умение тормозить свои побуждения,
- 6) умение формировать свои нравственные привычки,
- 7) самостоятельность в достижении цели,
- 8) настойчивость и упорство.

Каждый компонент оценивался студентами по шкале от одного до семи баллов, в зависимости от степени развития. В исследовании принимали участие 63 студента четырех курсов программы бакалавриата «Дошкольное образование» направления «Психолого-педагогическое образование» Балтийского федерального университета им. И. Канта: 12 студентов первого курса, 15 студентов второго курса, 21 - третьего курса и 12 студентов четвертого курса. В организации исследования использовался метод поперечных срезов. Карты индивидуальности заполнялись студентами в конце учебного года. Все участники исследования женского пола. На этапе обработки эмпирического материала были использованы: χ^2 критерий Пирсона, критерий ϕ^* - угловое преобразование Фишера, коэффициент ранговой корреляции r_s Спирмена.

Результаты *Results*

В целом, будущие педагоги наиболее высоко оценили «способность осознанно ставить далекие цели» ($M=5.32$). Более низкие оценки у следующих компонентов: «умение формировать свои нравственные привычки» ($M=5.19$), «умение достигать поставленные цели» (5.17), «самостоятельность в достижении целей» ($M=5.13$), «настойчивость,

упорство» (M=5.08). Наименьшие оценки в выборке студентов получили: «умение преодолевать трудности» (M=4.94), «умение тормозить свои побуждения» (M=4.88). «Способность к длительному волевому усилию» участники исследования оценили наиболее низко (M=4.78).

Динамика компонентов волевой сферы будущих педагогов в процессе профессионального образования выглядит следующим образом (Таблица 1).

*Таблица 1. Оценка компонентов волевой сферы студентов
Table 1 Rating given to students' volitional sphere*

Компоненты	1 курс	2 курс	3 курс	4 курс
Способность осознанно ставить далекие цели	6.08	4.93	5.14	5.33
Способность к длительному волевому усилию	4.58	4.93	4.86	4.67
Умение достигать поставленные цели	5.08	5.13	5.19	5.27
Умение преодолевать внешние и внутренние препятствия	4.33	5.07	4.90	4.93
Умение тормозить свои побуждения	5.83	4.93	4.71	4.33
Умение формировать свои нравственные привычки	5.17	5.40	5.19	5.00
Самостоятельность в достижении цели	5.25	5.47	4.86	5.07
Настойчивость и упорство	4.67	5.67	5.05	4.87
Итоговые показатели	5.12	5.19	4.99	4.93

В структуре компонентов волевой сферы первокурсников наиболее развитыми являются «способность осознанно ставить далекие цели» и «умение тормозить свои побуждения», наименее развиты, по мнению студентов, «способность к длительному волевому усилию» и «умение преодолевать внешние и внутренние препятствия». В структуре волевой сферы студентов второго курса лидирующие позиции занимают «настойчивость и упорство» и «самостоятельность в достижении цели»; низкие оценки получили два компонента: «способность осознанно ставить далекие цели» и «способность к длительному волевому усилию». В волевой сфере студентов третьего курса наиболее развитыми оказались: «умение достигать поставленные цели», «умение формировать свои нравственные привычки» и «способность осознанно ставить далекие цели». В этой группе студентов наименьшие оценки получили «способность к длительному волевому усилию», «умение формировать свои нравственные привычки» и «способность осознанно ставить далекие цели». В структуре волевой сферы выпускников наиболее развитыми являются два компонента: «способность осознанно ставить далекие цели» и «умение достигать поставленные цели». Наименьшие оценки среди студентов четвертого курса получили «способность к длительному волевому усилию» и «умение тормозить свои

побуждения». Обращает на себя внимание тот факт, что студенты-будущие педагоги приписывают стабильно низкие оценки развитию способности к длительному волевому усилию. По остальным компонентам волевой сферы выявляются определенная динамика на уровне тенденций.

При проведении статистической обработки данных студенты были объединены в две группы: студенты младших курсов: первый и второй (27 человек) и студенты старших курсов: третий и четвертый (36 человек). При сопоставлении выраженности компонентов волевой сферы в этих группах выявлены статистически различия в динамике компонента «настойчивость и упорство» ($\chi^2=5.191$ $p\leq 0,05$): на старших курсах достоверно меньше студентов высоко оценивают у себя развитие этой составляющей волевой сферы ($\varphi^*=2.30$ $p\leq 0,05$). Также достоверно уменьшается количество студентов, высоко оценивающих развитие «умения тормозить свои побуждения» ($\varphi^*=1.67$ $p\leq 0,05$). Таким образом, самооценка развития настойчивости, упорства и умения тормозить свои побуждения снижается.

Корреляционный анализ показал, что в структуре волевой сферы первокурсников 34 достоверные положительные корреляционные связи. Наибольшее количество таких связей у трех компонентов: «умение формировать свои нравственные привычки», «самостоятельность в достижении цели», «настойчивость и упорство». При этом компонент, получившие наивысшие оценки – «способность ставить далекие цели» имеет всего одну корреляционную связь с «умением тормозить свои побуждения». Наибольшее количество положительных корреляционных связей в структуре волевой сферы студентов второго курса - 42: все компоненты связаны друг с другом, кроме «умения тормозить свои побуждения»; у этого компонента отсутствуют связи с другими компонентами. В структуре волевой сферы студентов третьего курса наименьшее число достоверных корреляционных связей - 16, при этом наиболее связанными с другими компонентами оказываются «способность к длительному волевому усилию» и «умение преодолевать внешние и внутренние препятствия». Не имеют корреляционных связей с другими компонентами сферы: «способность осознанно ставить далекие цели», «самостоятельность в достижении цели» и «настойчивость, упорство». У выпускников в структуре волевой сферы 24 статистически значимые положительные корреляционные связи, при этом наибольшее их количество у «умения преодолевать внешние и внутренние препятствия» и «самостоятельности в достижении цели». Отсутствуют корреляционные связи у компонента «способность осознанно ставить далекие цели», одна корреляционная связь у компонента «умение тормозить свои побуждения».

Обсуждение *Discussion*

Полученные в исследовании данные не подтвердили гипотезу нашего исследования. Динамика компонентов волевой сферы индивидуальности студентов-будущих педагогов имеет неоднозначный характер, при этом значимость компонентов волевой сферы меняется. На первом курсе структура волевой сферы представляет собой две независимые части. Первую часть составляет способность осознанно ставить далекие цели, именно этот компонент наиболее высоко оценивается первокурсниками. Вполне возможно, что данный факт отражает реакцию студентов на долгожданное поступление в университет, что является реализацией первого серьезного жизненного плана. Вторая часть волевой сферы представлена остальными взаимосвязанными компонентами, развитие которых довольно высоко оценивается первокурсниками. Именно первокурсники наиболее высоко оценили уровень развития компонентов волевых качеств. Иную картину можно наблюдать на втором курсе. Волевая сфера второкурсников представляет собой целостное образование взаимосвязанных компонентов, кроме умения тормозить свои побуждения. Это умение оказывается несвязанным с другими компонентами волевой сферы, студенты наиболее низко оценивают развитие этого компонента.

На старших курсах происходит существенная перестройка волевой сферы будущих педагогов дошкольного образования. Во-первых, на третьем курсе обнаружено наименьшее количество положительных корреляционных связей: компоненты волевой сферы оцениваются по-разному и ниже, чем на более младших курсах. Во-вторых, ведущими (наиболее связанными с другими компонентами) становятся «способность к длительному волевому усилию» и «умение преодолевать внешние и внутренние трудности», именно эти компоненты начинают определять тенденции в развитии волевой сферы. В-третьих, способность осознанно ставить далекие цели, умение формировать нравственные привычки, настойчивость и упорство занимают независимые позиции. Можно предположить, что студенты переживают определенный кризис профессионального и личностного развития, что отражается на самооценке своей индивидуальности, они используют иные критерии оценивания. На четвертом курсе волевая сфера становится более целостной, ее развитие определяется умением преодолевать внешние и внутренние трудности и самостоятельностью в достижении цели. Способность осознанно ставить далекие цели остается независимым компонентом (не имеет связей с другими составляющими волевой сферы), но это умение высоко оценивается выпускниками.

Важно отметить, приобретая опыт профессионального образования, осваивая профессию, студенты по-иному оценивают настойчивость, упорство и умение тормозить свои побуждения: на старших курсах студентов, высоко оценивших данные компоненты, достоверно меньше. В процессе приобщения к профессиональной деятельности, усвоения традиций и норм профессионального сообщества, требования к себе у студентов меняются. Профессиональное образование на основе практикоориентированной модели позволяет не просто освоить учебно-профессиональную деятельность, но и приобрести опыт профессиональной деятельности, осуществляя профессиональные пробы. Это способствует развитию профессионального самосознания (Klimov, Noskova, & Solnceva, 2019) и профессиональной идентичности (SHnejder, 2019), формированию более реалистичного образа Я в настоящем и будущем.

Все студенты-будущие педагоги отметили низкий уровень развития важного компонента волевой сферы – способности к длительному волевому усилию. Без этого компонента трудно представить самосовершенствование и самореализацию в педагогической сфере (Smancer, 2012), это компонент является важным условием достижения вершин профессионального развития (Bodalev, 2010).

Выводы *Conclusions*

Таким образом, проведенное исследование позволяет сделать следующие выводы.

В развитии волевой сферы студентов-будущих педагогов выделяются определенные тенденции. Первокурсники оценивают развитие компонентов волевой сферы наиболее позитивно, во многом опираясь на факт реализации первого важного профессионального и жизненного плана – поступление в университет и освоение учебно-профессиональной деятельности. Структура волевой сферы второкурсников наиболее целостна и организована, так как учебно-профессиональная деятельность уже освоена, самоутверждение в новой социальной роли (студента) состоялось; теперь проблемным становится реализация умения тормозить свои непосредственные побуждения. На третьем курсе будущие педагоги переживают кризис в развитии профессиональной идентичности в связи с погружением в профессиональные пробы, приобретением и осмыслением профессионального опыта, осознанным использованием более сложных профессиональных эталонов, вновь актуальной становится способность осознанно планировать будущее после окончания университета. На четвертом курсе волевая сфера становится более целостной, теперь ее

развитие определяют умение преодолевать препятствия (как внешние, так и внутренние) и самостоятельность в достижении цели. Таким образом, от первого к четвертому курсу происходит подлинное становление субъекта профессиональной деятельности и саморазвития индивидуальности.

В процессе профессионального образования будущих педагогов дошкольного образования постепенно формируется более реалистичное представление о собственных волевых особенностях, их самооценка становится более адекватной. Обращает на себя внимание факт осознания всеми студентами недостаточности важного компонента волевой сферы - способность к длительному волевому усилию, что можно рассматривать как необходимую цель дальнейшего саморазвития, так как без этого компонента трудно представить позитивное профессиональное развитие и самореализацию в педагогической сфере.

Summary

The conducted study leads us to draw the following conclusions. In the development of the volitional sphere of students – prospective teachers, certain trends can be highlighted. The first-year students evaluate the development of the components of the volitional sphere most positively, relying mainly on the fact of the implementation of the first important professional and life plan - entering the university and mastering educational and professional skills. The structure of the volitional sphere of the second-year students is the most integral and organized, given that the educational and professional skills have already been mastered, self-actualization in the new social role (student) has taken place; now realization of the ability to inhibit one's immediate impulses becomes problematic. In the third year, the prospective teachers experience a crisis in the development of the professional identity due to the necessity to do an internship, acquisition and comprehension of the professional experience, the conscious use of more complex professional standards; the ability to consciously plan the future after graduation becomes relevant again. In the fourth year, the volitional sphere becomes more integral, now its development is determined by the ability to overcome obstacles (both external and internal) and independence in achieving the goal. Thus, in the period from the first to the fourth year, the true formation of the subject of professional activity and self-development of individuality take place. In the process of professional education of the prospective preschool teachers, a more realistic idea of their own volitional features is gradually formed, their self-esteem becomes more adequate. Noteworthy is the fact that all students are aware of the insufficiency of an important component of the volitional sphere - the capacity for long-term volitional effort, which can be considered a necessary goal for further self-development, since without this component it is difficult to imagine positive professional development and self-realization in the pedagogical sphere.

Литература References

Anikeeva, N.V. (2013). Znachenie volevykh kachestvv professional'nom stanovlenii. *Vestnik Moskovskogo universiteta MVD Rossii*, 5, 242-245.

- Aristotel'. (1976). *Sochineniya v 4 t. T.1*. Moskva, Mysl'.
- Bodalev, A.A. (2010). *Akmeologiya. Nastoyashchij chelovek. Kakov on i kak im tanovyatsya*. Moskva, Rech'.
- Bordovskaya, N.V., & Rozum S.I. (2013). *Psihologiya i pedagogika*. Sankt-Peterburg, Piter.
- Garanina, ZH.G. (2017). Osobennosti volevoj regulyacii v processe lichnostno-professional'nogo samorazvitiya budushchih specialistov. *Povolzhskij pedagogicheskij vestnik*, 3, 87-92.
- Grebenyuk, T.B. (2017). *Formirovanie individual'nosti studenta- budushchego pedagoga*. Berlin: Lap Lambert Academic Publishing.
- Grebenyuk, O.S., & Grebenyuk, T.B. (2019). *Pedagogika individual'nosti*. Moskva, YUrajt.
- Husman, J., & Corno, L. (2010). Volitional Control of Learning. In *International Encyclopedia of Educational* (3th ed.). Elsevier Science, 724-731. DOI: <https://doi.org/10.1016/B978-0-08-044894-7.00604-7>
- Il'in, E.P. (2000). *Psihologiya voli*. Sankt-Peterburg, Piter.
- Klimov, E.A., Noskova, O.G., & Solnceva, G.N. (2019). Psihologiya truda, inzhenernaya psihologiya i ergonomika. Moskva, YUrajt.
- Loshkareva, E., Luksha, P., Ninenko, I., Smagin, I., & Sudakov, D. (2019). *Navyki budushchego. CHto nuzhno znat' i umet' v novom slozhnom mire*. Retrieved from https://futuref.org/futureskills_ru
- Markova, A.K. (1996). *Psihologiya professionalizma*. Moskva, Znanie.
- Nesyua, S. (2019). Individuality of kindergarten teachers. *Society. Integration. Education. Proceeding of the International Scientific Conference*, 2, 544-554. DOI: <http://dx.doi.org/10.17770/sie2019vol2.3784>
- Pantyushin, O.V. (2002). *Formirovanie volevoj sfery individual'nosti studentov v processe ovladeniya navykami inoyazychnoj rechevoj deyatel'nosti v tekhnicheskome vuze*. Kaliningrad, Izdatel'stvo KGTU.
- Shamlyan, K. (2015). Volitional Organization of Personality as a Subject of Empirical Research, *Journal of Educational Culture and Society*, 2, 257-267. DOI: 10.15503/jecs20152.257.267
- Smancer, A.P. (2012). Stimulirovanie professional'nogo samosovershenstvovaniya budushchih pedagogov v processe obrazovaniya. *Vestnik Polockogo universiteta. Seriya E. Pedagogicheskie nauki*, 5, 7-12.
- Syurtukova, E.Y., & Filippova, YU.V. (2012). Psihicheskoe vygoranie pedagogov: perspektivy i issledovaniya. *Vestnik YAroslavskogo gosudarstvennogo universiteta. Seriya Gumanitarnye nauki*, 1, 89-91.
- SHnejder, L.B. (2019). *Psihologiya kar'ery*. Moskva, YUrajt.
- SHul'ga, T.I., & SHlyapnikov, V.N. (2009). Osobennosti volevoj regulyacii v processe ovladeniya professional'noj deyatel'nost'yu. *Vestnik Moskovskogo gosudarstvennogo oblastnogo universiteta. Seriya «Psihologicheskie nauki»*, 2, 85-91.
- Zeer, E.F., & Symanyuk, E.E. (2005). *Psihologiya professional'nyh destrukcij*. Moskva, Akademicheskij proekt.
- Zinchenko, V.P., & Meshcheryakov, B.G. (1996). *Psihologicheskij slovar'*. Moskva, Pedagogika-press.

CHILD'S READINESS FOR SCHOOL AS PRIORITY SUBJECT DETERMINANT

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Abstract. *The article deals with the issue of a child's readiness for school as an important personal determinant and a holistic system of child's individual characteristics. The child's readiness for school has been considered in the research holistically. It involves the development of motivational and cognitive activity, the level of formation of communication mechanisms, analytic-synthetic and volitional activities. Complex characteristics of physiological, mental, motivational and intellectual components of the preschooler's readiness for school have been taken into account. The objective of the article consists in analyzing the child's readiness for organized schooling as an important subjective determinant and justification of the cause-and-effect relationship between preschooler readiness for school and family education. Certain criteria for the six-year-old children's psychophysiological readiness for school in the process of conducting a comprehensive study have been considered. They are as follows: the health group (first or second); the level of physical and motor development in relation to age and sex norms; sensorimotor properties and skills; intellectual development, social maturity. In order to diagnose the child's readiness for school the following methods have been used in the research: an experimental conversation to identify a preschooler's internal position (by T. Nezhnova); school readiness assessment (by Kern's-Yersek test); the technique of "Graphic Dictation" (by D. Elkonin); the test "Preservation of Quantity" (by J. Piaget); Philippine test etc. Based on the study of parents' involvement in the process of preparing children for school, the conditionality of the child's level of readiness is substantiated by the system of factors, certain conditions of the family in which she was brought up. The study proves that the child's successful transition from pre-school to school is possible on condition that the child has developed appropriate physical, social and mental skills ensuring his/her readiness for school. The integrity of the process of the child's preparation for school and the development of the above mentioned components are the key to the child's further progress and socialization at school.*

Keywords: *preschooler, child's readiness for school, child's preparation for school, school maturity, preschool education, family, school.*

Introduction

The 21-st century identifies and largely corrects traditional trends in social development. There are dominant things nowadays: informatization, globalization, integration, technologicalization, urbanization. It has usually a positive impact on social ontogeny, but often dominates the personality that attempts to cope successfully with the challenges and risks of the modern world. The person should activate additional psychological mechanisms for it. It would enable to feel confident, comfortable, protected, successful. The development of a new person should start from an early age, since the mechanisms and nature of sensitive periods will not give it a second chance in the future, no matter how sophisticated educational technologies might be. All highly developed countries of the world work on such educational tasks.

Defining the responsibility of education for human life and health as one of its priorities, scientists emphasize its new function: "... we must teach the young generation to survive in extreme social and economic conditions, to foster a peculiar culture of existence in the world, in a society that isn't included not only to global "terrestrial" but also to cosmic, world processes" (Frankl, 1990).

Education is characterized by modern scholars as the most conservative component of the modern society life: "At the same time, national educational systems, despite individual initiatives and projects, remain isolated and most rigid elements of modern civilization... Reforms transform only the material components in this field. The form of education (its content, methods, tools, goals, programs, algorithms etc), without affecting its "human dimension" – people involved in educational processes. Educational systems ignore the problems and challenges of a globalizing world" (Rogers, 2002). In this sense, personal educational determinants need to be taken into account not only in the process of constructing the latest educational models, but also education must become personally focused.

We will make an attempt to investigate the essential characteristics of both the process of preparing a child for school in the present environment and its readiness for schooling in the globalized and informative circumstances of society. We argue that the development of a personality is most productive during the preschool childhood. It determines the next vector of human life in our belief.

The aim of our article is to investigate and substantiate the system of preparing the child for school, analyze the child's readiness for organized schooling as an important subject determinant, substantiate of cause and effect

relationships between the level of readiness of pupil of preschool age and family education.

A number of theoretical and empirical methods were used to achieve this goal: *theoretical* – analysis (theoretical, terminological) – to determine basic theoretical positions and concepts; abstraction and concretization – for establishing the laws and principles of the process of preparing a child for school and forming the personal readiness of the preschooler; *empirical* – “Educational motivation” by M. Ginsburg (Ginsburg, 1988), “Talk about school” by T. Nezhnova (Nezhnova, 1988); Philippine test (Philippine test, 2003); questionnaire “Profile of social development of a child of six years old” (Pavelkiv & Tsigipalo, 2013) and methodology “Sequence of events” (Pavelkiv & Tsigipalo, 2013); Kern-Yersek test (Yersek, 1978), “Graphic Dictation” by D.Elkonin (Elkonin, 2010), Quantity Saving test J.Piaget (Piaget, 1969) and surveys of parents; *mathematical* – for quantitative and qualitative analysis of empirical data.

Theoretical basis of the study

A significant feature of modern preschool is the fact that global change has affected social life in all its planes and dimensions and in particular they have affected the life of the individual. Modern preschoolers are in a dynamic and rapidly changing environment. They are characterized by high emotional sensitivity, early adaptation to the environment, mental activity, awareness in various spheres of life, change of traditional values, etc. The complex and contradictory perception of the environment requires the individual's special skills and mechanisms to adapt to and function in the world. These processes must begin in early childhood, when the child is open to change and his or her life vector is plastic.

The processes of globalization and integration of the modern world also actualize the personal determinants of pre-school education, expand the space of pre-school education and require changes in the essential and formal dimensions: formation of new content of education; empowering inclusive education; a radical change in the paradigm of Ukrainian education from authoritarianism to humanism and democracy; close attention to the education and development of each individual, taking into account his own life trajectory of development. It is in this sense that pre-school education is of particular importance, as the starting opportunities of the child at the beginning of his / her systemic school education will determine the character of life progress and the corresponding life trajectory (Pantyuk, 2016).

The analysis of the scientific literature (Kosenko, 2016; Krutiy, 2009; Fedorovych, 2003; Cherepanya, 2006) proves that the preparation of children for

school is a complex process and covers all spheres of life of a preschooler: play, communication, work, socialization, etc. The integrity of this process is that it applies to all areas of the child's life and to all levels of development: social, personal, motivational, volitional, intellectual, physical, and physiological. All of them are necessary for a comfortable stay of the child in school, realization of communication tasks, successful mastering of the school program, preservation and strengthening of her health. In the course of the study, we identified a number of determinants that significantly influence the preparation of the child for school and the formation of appropriate readiness. These include axiological, globalization, economic (material), personal (subjective), institutional, and cultural and educational. Since our scientific exploration is about subjective determinant, we will give a brief description of it in both the social and pedagogical dimensions.

The role and place of the individual in social development are indisputable. Even though a person always acts and depends on social conditions and circumstances, the fact that the role of the individual in the social development is important is still objective. The history of social development shows that it is the personality that can accelerate the progress of social progress, and it can also cause social regression. In particular, science is not a collective creation, it is usually developed by individuals. The same applies to the arts, culture, education and other areas of human life. Therefore, the personal determinant is social in nature (Pantiuk, 2016).

Analysis of education as a social phenomenon indicates the priority role of the individual in it. It is primarily about two subjects of the educational process – the child (the student) and the teacher-educator. In all modern educational documents, the child's personality is recognized as individual, unique, so the subjective determinant of preparing a child for school is the priority of a humane, child-centered, personally-oriented education that takes into account the needs, preferences, opportunities, needs and tendencies. We believe that the personal determinant should be the formative basis for the selection of all pedagogical tools for preparing the child for school (Pantiuk, 2016)

It should be noted that modern educators in the system of preparing children for school are noted for interesting and non-standard approaches, focusing on the personal determinant and the importance of individual approach to each child. So, necessary for the formation of the child's readiness for school, scientists consider the principles of emotional satisfaction, problems, understanding of cognitive material and reliance on the past experience of the child, ensuring the unity of activity, emotional and intellectual, priority enrichment of the personal experience of the child, integration, unity of the institution of seven preschool basic quality education (Havrysh, Brezhneva, Kindrat, & Reypolska, 2015).

Exactly in the positions of close cooperation between the institution of pre-school education and the family on the education of basic qualities in the context of preparing the child for schooling, foreign scholars also emphasize. They emphasize the importance of this stage in the “development of each child and their family”, because they believe that “... transition to school is marked by stressful situations for the future student, the guarantee of which can be eliminated as closely as possible by all participants in the educational process, because for the special support during this period the child expects from his closest people – from father and mother” (Marzec & Borda, 2016; Niesel & Griebel, 2017).

However, the most valuable in the scientific position of scientists, in our opinion, is the child-centered approach, the interpretation of the child subject of the educational process: “The process of understanding and appropriation of the child intellectual, cultural, spiritual values of mankind does not occur mechanically by the formula: “educator gives – the child bearer. In order to avoid “impoverishment of the soul when enriching information” (O. Leontiev’s statement), it is necessary for the child to be a subject of activity, in particular, of the process of cognition” (Havrysh et al., 2015).

Important in the process of preparing a child for school is the harmony and balance between education, upbringing and development, which we consider the equilibrium and necessary components of the personality formation process. The diminishing role of any of them is detrimental to the child: “It is clear that the educational process can be comprehensively effective only on condition of its integrity, only in the unity of its educational and developmental functions, since the personality itself is one and indivisible. Any attempt to artificially dismember this integrity, to exert a separate educational, educational or developmental influence on certain qualities of a person is pre-eminently condemned, after all, leading to a violation of harmony, absolutely unacceptable distortions in the world view and world outlook” (Skotnyj, 2004).

Our study also proves that the transfer of the share development and upbringing to education and assimilation of a large amount of information, which is often not subject to systematization in view of the small experience of a preschool child, threatens not only the loss of interest in learning, but also significantly impairs health.

Methodology and Results

Investigation objective and tasks taken into consideration, the experimental research of children’ preparedness level for study at school based on three preschool educational establishments (PEE) in the city of Drohobych, Lviv region (PEE № 11 “Svitlyachok”, PEE № 13 “Kazka” and PEE № 24

“Smerichka”) was carried out. 150 children of the senior preschool age were involved in the experiment. The experimental study was performed in October through December, 2019.

At the preliminary stage, evaluation criteria system of a child's preparedness for school, as well as diagnostic methods complex were selected. Particular attention was paid to the methodological work and cooperation of the pedagogical staff and parents, who participated in the experiment. The issues of the child getting ready for school were discussed at the methodological councils, creative teams' meetings, parents' evenings, general activities being coordinated.

The experimental work objective and its core were brought to the attention of the preschool pedagogical staff involved in details. Group studies were carried out according to typical requirements. The outcomes accounting and processing were recorded in the study protocols, containing the results of teaching and educational process. The observation data were compared with the established standards, thus enabling to estimate deviations from the norm. Regular monitoring of each pre-schooler and group development dynamics was provided. The findings obtained were summarized in tables and diagrams to compare development effectiveness of individual children and experimental groups on the whole.

The methods used were determined by the research objective and inextricably linked in terms of teaching process content and specifics. When choosing methods, its actual effectiveness as well as validity of results for characterizing the parameter under study, were considered. Thus, a child's experimental outcomes were mutually complementary, so providing a comprehensive picture of preparedness for school in the respect of motivation, physical, social, and psychological preparedness.

In order to evaluate the level of a child's motivation preparedness for school, we used methodology “Motivation for study” by M. Ginsburg (Ginsburg, 1988) and “Discussion on the school” by T. Niezhnova (Niezhnova, 1988). The results made it possible to find out an interest for school study in senior preschool children and revealed the specifics of a schoolchild's intrinsic position. The following criteria were used: a child's wish for going to school, based on the adequate notion about it; positive attitude towards study; willingness for communication. According to the results of these methods, 7.2% of respondents have a high level of motivational readiness to study at school, an average of 40.5% and a low of 52.3%.

To estimate the levels of a child's physical fitness for school, we used oriented graphic A test by (Yersek, 1978) and Philippine test (Philippine test, 2003), which provided data about the development of fine arm/hand motor function and visual motor coordination, as well as information on the body

proportions (head, trunk, limbs) and growth rate (half-growth jump) of every child. The accepted physical fitness criteria were excellent health status, proper coordination, free spatial orientation, correct posture, “muscle strength – age” compliance, and preparedness of the hand for writing. The application of this methodology made it possible to find out: 7.4% of children with high level of physical readiness for school education, 41.8% with average level and 50.8% with low level.

When determining the level of a child's social preparedness for school, we used a questionnaire “Profile of 6-year old child development” (Pavelkiv & Tsigipalo, 2013) and methodology “Sequence of events” (Pavelkiv & Tsigipalo, 2013). Based on them, we found whether senior preschool children reveal a need for communication with their age-mates, readiness to submit to group interests and rules, dialogue skills, as well as ability to compose stories on the known subject, to communicate differently with teachers, parents, and age-mates. Accordingly, a child's ability to apprehend, preserve and recreate information, as well as skills in establishing relations with age-mates and grownups were considered to be the indicators of social preparedness. The results obtained by these methods were as follows: 6% of preschoolers have a high level of social activity for schooling, 42.6% have an average, and 53.4% have a low one.

It should be noted that levels of intellectual development as the basis of child's psychological readiness for schooling were determined using Kern-Yersek test (Yersek, 1978); method of D. Elkonin “Graphic Dictation” (Elkonin, 2010); Jean Piaget's test “Conservation of number” (Piaget, 1969). It made possible to obtain information about the development of spontaneous regulation of elder preschoolers activity, formation of their thinking function, development of observation, perception, memory, attention, speech, etc. Elder preschoolers were distinguished by differentiation (perceptive maturity), spontaneous concentration of attention, analytical thinking (the ability to understand essential features and interconnections between phenomena), rational approach to reality (the comparative decrease of imagination importance), logic memorizing, some abilities and skills of sound analysis of words, preparation of hand for writing (definite development of fine motor function of the hand and visual motor coordination). According to the determined stages of elder preschoolers, cognition they were ranked as high, average or low levels of intellectual development. Our study found that 8.4% of pre-school children, 38.4% with average and 55.2% with low level of intellectual readiness at school.

It should be noted that elder preschoolers were examined thoroughly as for their readiness for schooling. Detailed findings of examination were noted in individual notebook and special forms for each child. Individual examination was performed by two teachers at once. The child's answers, results of performed tasks were noted by one of the teachers, while the other concentrated

attention on preschooler's behaviour. Joint action assisted in assessment of child progress.

All indices were summarized by given algorithm above, and give rise to determine the levels of children readiness for schooling (see table below).

Table 1 Indices of children's readiness for schooling

Components of readiness	High level (%)	Average level (%)	Low level (%)
Motivational	7,2	40,5	52,3
Physical	7,4	41,8	50,8
Social	6,0	42,6	53,4
Intellectual (mental)	8,4	38,4	55,2
General index	10,8	42,2	49,7

Analysis of the results of confirmation experiment showed that at the end of 6 age-period not all children achieved the level of readiness and did not get the opportunity for systematic successful study at school. Poor development of speech; formal, unconscious usage of different notions and words; underdevelopment of fine motor function; insufficient development of spontaneous memory and attention; unformed skills for self-control development, etc. were not achieved.

This experiment proved the formation of necessary psychic features, new growth and volume of knowledge and skills for some kinds of activities that are determined for this group of preschoolers. Average and low levels dominated in the assessment of readiness for schooling in most children of experimental group.

Thus, the results of confirmation experiment based on general indices, revealed insufficient readiness level of elder preschoolers, that proved non-efficient training of children. Overwhelming majority of children participating in the experiment showed low or average levels of the assigned personal new growth. Low results were observed for such components as "social readiness", "physical readiness", and "motivational readiness".

We consider that the most significant influence on a child's readiness for school has an atmosphere of family upbringing, the absence of conflicts in it, its values, and the status of the child in it. So, in order to study the problem of preparing children for school, we conducted a survey of parents. Based on the analysis of its results, we have learned the parents' attitude to the process of preparing children for school, understanding its importance, their role and responsibility for its effectiveness.

Thus, the parental survey showed the following results. Among 220 surveyed parents who answered the questionnaire, 54.5% believe that

children go to school reluctantly or without much desire. 45.5% of parents believe that the child is not yet ready for school. 77.3% of parents confirm that children experience their successes and failures emotionally; 22.7% cannot answer this question. It was found that children quite often share their impressions with their parents about the classes held at the institution of pre-school education – this was admitted by 63.6% of parents. Mostly, the negative and positive impressions are almost equal – 45.5%. Parents claim that children willingly complete the proposed tasks at home – 31.8%.

The experience of working with parents, our observations, conversations with tutors made it possible to classify parents on the basis of their attitude to the preparation of the child for school. So, to the first group we have attributed parents who monitor this issue in mass media and scientific literature, ask for advice the employees of the preschool education institution (tutors, psychologist), willingly respond to proposals of cooperation and implement recommendations; to the second group we have attributed parents who are not indifferent to the process of preparation of the child for school, they often follow the recommendations of the educators, but do not show activity and interest in this process; to the third - we have attributed the parents who are quite passive in this process and put all responsibility for its quality on the pedagogical staff of the institution of pre-school education.

As a result of comparing our diagnosed levels of children's readiness for schooling and their parents' belonging to one of the above mentioned groups, we can state that there is a close causal relationship between the level of child preparation for school and the system of factors determined by the family conditions in which the child was brought up.

Conclusions

Having summarized the theoretical and applied experience of preparing children for school, taking into account the subjective determinants in the context of the presence, we can identify the priority directions for organizing this process: close interaction of family, domestic environment, pre-school educational institution and school; recognition of the child as the subject of the educational process; formation of communicative skills, stimulation of cognitive activity; care for physical and mental health; improvement of the network of institutions for preparing children for school, modernization of the educational space; development of individually oriented programs for school preparation; training teachers to meet the demands of technologically advanced, globalized world.

Another of its component are naturally defined in the light of the complex vision of the problem of preparing a child for school – pedagogical education

and culture of parents. Unfortunately, it is often marked by incompetence and inconsistency of educational influences; excessive authoritarianism, lack of proper family communication etc. In view of it, the pedagogical education of parents and their active participation in the children education requires the interaction of the pedagogical community and prudent common approaches. It would provide an adequate level of pedagogical knowledge and competence of parents. The prospects for further research are considered in this context.

References

- Cherepania, N. (2006). *Orhanizatsiino-pedahohichni umovy pidhotovky ditei do shkoly*: avtoref. dys. na zdobuttia nauk. stupenia kand. ped. nauk. Odesa.
- Fedorovych, L. (2003). *Pidhotovka ditei do shkoly v umovakh navchalno-vykhovnoho kompleksu*: avtoref. dys. na zdobuttia nauk. stup. kand. ped. nauk. Kryvyi Rih.
- Filipinskyj test. (2003). In Maksymenko, S., Maksymenko, K., & Glavnyk, O. (Eds.), *Gotovnist dytyny do navchannya* (p. 10). Kyiv: Mikros-SVS.
- Frankl, V. (1990). *Chelovek v poiskah smysla: sbornik / per. s angl. i nem.* D.A. Leont'eva, M.P. Papusha, E.V. Jejdmana. Moskva: Progress.
- Elkonyn, D. (2010). *Nekotorye voprosy diagnostyky psyxycheskogo razvitiya detej: diagnostika uchebnoj deyatelnosti i intellektualnogo razvitiya detej*. M.: Pedagogyka, yzdanye 2-estereotypnoe.
- Gavrysh, N., Bryezhnyeva, O., Kindrat, I., & Rejpolska, O. (2015). *Rozumne vyxovannya suchasnyx doshkilnyat : metodychnyj posibnyk*. Kyiv : Slovo.
- Gynzburg, M. (1988). *Razvitye motyvov uchenyya u detej 6-7 let*. Moskva: Pedagogyka.
- Havrysh, N. (2002). *Rozvytok movlennyevotvorchoyi diyalnosti v doshkilnomu dytynstvi*: dys. d-ra ped. nauk. Kyiv: Nacionalnyj pedahohichnyj universytet imeni M.P. Drahomanova.
- Havrysh, N. (2006). *Dity i sotsium: osoblyvosti sotsializatsii ditei doshkilnoho ta molodshoho shkilnoho viku*. Luhansk: Alma-Mater.
- Jyrasek, Ya. (1978). *Dyagnostyka shkolnoj zrelosti. Dyagnostyka psyxycheskogo razvityya*. Praga.
- Kosenko, Yu. (2016). Suchasni pohliady na problemu nastupnosti doshkilnoi i pochatkovoï osvity. *Aktualni problemy nauky ta osvity*: zb. nauk.-prakt. konf. vykladachiv MDU. Mariupol: MDU.
- Krutii, K. (2009). *Osvitnii prostir doshkilnoho navchalnoho zakladu*: u 2-kh ch. Zaporizhzhia: TOV «LIPS» LTD.
- Marzec, B., & Borda, M. (2016). *Partnerska współpraca przedszkola z rodzicami w wynikach ewaluacji zewnętrznej*. Biblioteka Współczesnej Myśli Pedagogicznej. Kraków, T.V.
- Nezhnova, T. (1988). Dynamika «vnutrennej pozycyy» pry perexode ot doshkolnogo k mladshemu shkolnomu vozrastu. *Vesti Moskovskogo universiteta. Seriya 14. Psixologiya*, 1.
- Niesel, R., & Griebel, W. (2017). *Transitionen zwischen Familie, KiTa und Schule. Zur Bewältigung von Übergängen zwischen Familie und Bildungseinrichtungen und zwischen den Bildungseinrichtungen*.
- Pavelkiv, D., & Tsigipalo, O. (2013). *Psixodiagnostychnyj instrumentarij v umovax doshkilnogo zakladu*: navch. posib. Kyiv: Centr uchbovoyi literatury.

- Pantiuk, T. (2014). Formuvannia psykholohichnoi hotovnosti dytyny do shkilnoho navchannia. *Zbiór raportów naukowych «Współczesne tendencje w nauce i edukacji»*, 15–18.
- Pantiuk, T. (2016). *Pidhotovka ditei do shkoly v Ukraini: suspilno-pedahohichnyi kontekst*. Drohobych: Red.-vyd. viddil DDPU im. I. Franka.
- Pantiuk, T., & Ivakh, S. (2011). *Metodyka spivpratsi doshkilnykh zakladiv z rodynamy*. Drohobych: Red.-vyd. viddil DDPU im. I. Franka.
- Piaget, J. (1969). *Izbrannye psihologicheskie trudy*. M.: Prosveshhenie.
- Rodzhers, K., & Frejberg, D. (2002). *Svoboda uchit'sja*. Moskva: Smysl.
- Skotnyj, V. (2004). *Filosofiya osvity: ekzystenciya irracionalnogo v racionalnomu*. Drohobych: Vymir.

ПРЕДСТАВЛЕНИЯ ДЕТЕЙ МЛАДШЕГО ДОШКОЛЬНОГО ВОЗРАСТА О КУЛЬТУРЕ ЗДОРОВЬЯ ЧЕЛОВЕКА

Representations of Children of Younger Preschool Age about the Culture of Human Health

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Abstract. *The article deals with the problem of representations of modern children 3-4 years of age about the culture of human health. The authors analyze different approaches to the structure of the phenomenon "culture of health"; specify the place of culture health in the culture of the personality of the preschool child, the teacher's role in the formation of children's health culture.*

The article describes an empirical study of actual representations of children of younger preschool age about the culture of health: the diagnostic tools are characterized, the procedure of diagnosis is described, and the results are analyzed. The authors identify the specific representations of children 3-4 years of age about the culture of health, make a conclusion about representations which are typical for modern children of younger preschool age. The results of the study can be used as a basis for designing the content of the pedagogical work on the formation of components of the preschoolers' health culture.

Keywords: *health culture, younger preschool age.*

Введение **Introduction**

Социальная направленность государственной политики в области образования, в том числе дошкольного, главным приоритетом определяет сохранение и укрепление здоровья педагогов и воспитанников, поскольку здоровье – это базовая ценность и необходимое условие «физического, духовного и социального благополучия личности, а не только отсутствие болезней и физических дефектов» (Oficial'nyj sajt Vsemirnoj organizacii zdravoohranenija, 2019).

Научным сообществом качественной характеристикой здоровой личности признается культура здоровья, которая имеет многокомпонентную структуру, характеризующую здоровье как высшую ценность: эмоционально-личностное отношение человека к своему здоровью, знание и потребность ведения здорового образа жизни, забота о собственном здоровье и здоровье окружающих.

Здоровье детей является одним из важнейших показателей, определяющих потенциал страны, одна из характеристик национальной безопасности. Причинами, неблагоприятно влияющими на состояние здоровья детей, его сохранность и укрепление, учеными отмечаются: неправильный образ жизни (гиподинамия, нездоровое питание; увеличение информационного потока и, соответственно, интенсификация образования детей), а также отсутствие системы формирования знаний и представлений, связанных с вопросами здоровья и здорового образа жизни. Снижение адаптационных ресурсов детского организма приводит к более частым травмам, риску возникновения соматических заболеваний, снижению работоспособности детей; эмоциональное переутомление повышает уровень конфликтности во взаимоотношениях со сверстниками и взрослыми, что со временем может усиливать социальную дезадаптацию.

Отношение ребенка дошкольного возраста к своему здоровью тесно связано со степенью сформированности в его сознании базы представлений о «здоровье, здоровом образе жизни» - «образа здоровья», как идеала, к которому ребенок должен стремиться, а также через развитие способности к (со)действию и сопереживанию. Поскольку большинство городских детей в России начинают посещать сад с трех лет, значит, именно с этого возраста начинается целенаправленная педагогическая работа по формированию представлений о значимости здоровья и умений бережно к нему относиться; в 3-4 года детей возникают психологические предпосылки для формирования представлений о себе и своем организме, поэтому малыши способны проявлять устойчивый интерес и бережное отношение к своему здоровью (Latygovskaja, 2018).

Таким образом, целью исследования являлось обобщение научных взглядов на содержание компонентов модели «культура здоровья» в структуре личности ребенка дошкольного возраста и диагностика актуальных представлений детей 3-4 лет о культуре здоровья человека; методами исследования выступили теоретический анализ и обобщение научных источников по проблеме исследования, опрос, наблюдение и анализ эмпирических данных.

Теоретические основы категории «культура здоровья дошкольника» *The theoretical background of the category “Health culture of the preschool”*

Дефиниция понятия «культура здоровья» - не однородна, что связано с различными аспектами исследований в области философии, психологии, социологии, валеологии, медицины, педагогики и других научных сфер деятельности, развивающих концепции здоровья с позиций аксиологического, акмеологического, системного, культурологического, социокультурного и других подходов.

Так, культура здоровья в научных исследованиях представлена, как:

- показатель успешной социализации личности (Kolycheva, 2002);
- ценность, выполняющая регулятивно-ориентирующую функцию деятельности по «ортобиотическому» (осознанно самоценному, самопознающему) здоровьесбережению (Alhasov, 2005; Vyhovskaja, 2013; Derkunskaia, 2005);
- информированность в области здоровьесбережения (Voloshina, 2002);
- потребность, смысл личности в сохранении здоровья, забота о себе и других людях (Gorbushina, 2005; Bugental & McBeath, 1995);
- валеологическая культура личности - синоним индивидуальной культуры здоровья человека в конкретных условиях жизнедеятельности (Madzhuga & Sinicina, 2014; Novoselova, 2000);
- интегративная характеристика, включающая ценностный, интеллектуальный, когнитивный, мотивационный, эмоциональный, личностный, смысловой, действенно-практический, волевой и другие компоненты (Irhin & Irhina, 2017; Vicheva, 2016; Kolycheva, 2002).

Модель культуры здоровья ребенка дошкольного возраста базируется на следующих принципах (Maljarchuk & Sybikova, 2008): аксиологическом (ценностное отношение дошкольников к здоровью соотносится с данными исследования ценностных ориентаций детей (Dombek, Lebedeva, & Mikhailova, Pradun & Shlat, 2019); холистическом, в соответствии с которым здоровье рассматривается как система, представляющая собой совокупность телесного, душевного, духовного компонентов; принципе ответственности за личное и общественное состояние здоровья; принципе культуросообразности, характеризующим преемственности традиций и норм здоровья; герменевтическом принципе с идеей осознания дошкольниками с помощью педагогического руководства деятельности по здоровьесбережению в качестве жизненно необходимой и осмысленной.

Основываясь на концепции структуры личности К.К. Платонова (Platonov, 1986), а также на результатах исследований ученых (Derkunskaja, 2005; Latygovskaja, 2018) авторы в теоретическом исследовании выдвинули предположение о том, что представления дошкольника о культуре здоровья человека складываются из трех блоков: *когнитивного* (знания об организме, о способах здоровьесбережения и самопомощи), *мотивационно-личностного* (потребность поддерживать здоровье, готовность к здоровьесберегающей деятельности, интерес к правилам здоровьесберегающего поведения, положительный эмоциональный настрой) и *деятельностного* (ведение здорового образа жизни, включающего три категории: уровень, качество и стиль жизни (личная гигиена, здоровое питание, двигательная активность, позитивное общение), демонстрация безопасного поведения при участии взрослого).

При этом факторами и средствами воспитания культуры здоровья дошкольников являются: образно-словесные ассоциации, имеющие отношение к здоровью, и оценка взрослыми различных аспектов здоровьесберегающего поведения, организация рационального режима дня и здорового питания, развитие культурно-гигиенических навыков, психоэмоциональный комфорт, закаливание организма, оптимальная двигательная активность, педагогическая работа по профилактике заболеваний детей, совместная деятельность с взрослыми и сверстниками, которые демонстрируют образцы поведения, моделирование ситуаций, здоровьесберегающая инфраструктура детского сада (Jumatova, 2017; Kas'janova, 2010; Krylova, 2008).

Действительно, если в течение дня двигательная активность дошкольника ограничена, значит, не реализуются его ключевые физиологические потребности. Поведение дошкольников, основанное на правиле «Не быть собой, а быть как все», препятствующее свободе его самореализации, приводит к проявлениям у детей невротических реакций.

Эмпирическое исследование представлений детей младшего дошкольного возраста о культуре здоровья человека
Empirical research of the representations of children of younger preschool age about the culture of human health

С целью выявления актуальных представлений о культуре здоровья (1) когнитивного, 2) мотивационно-личностного и 3) деятельностного компонентов) у детей 3-4 лет было проведено эмпирическое исследование, в котором приняло участие 100 воспитанников детских садов г. Пскова и Псковского района. Методы исследования: опрос, наблюдение (модификация (Derkunskaja, 2005)).

1. Опросник выявлял особенности знаний и представлений дошкольников о здоровье, о строении тела человека, об умениях и навыках, содействующих его поддержанию, укреплению и сохранению и состоял из следующих вопросов:

1. Кто это (*демонстрировалось изображение человека*)?
2. Покажи, какие части есть у тела человека? Назови их (или - что это?).
3. Зачем человеку голова?
4. Что человек делает с помощью рук?
5. Что человек делает с помощью ног?
6. Зачем человеку туловище? Знаешь ли ты, что находится внутри туловища? Назови, пожалуйста.
7. Что нужно сделать, чтобы оставаться здоровым (что такое здоровье (болезнь))?
8. Зачем заниматься спортом (делать зарядку, двигаться)?
9. Куда и к кому нужно обращаться, если человек заболел?

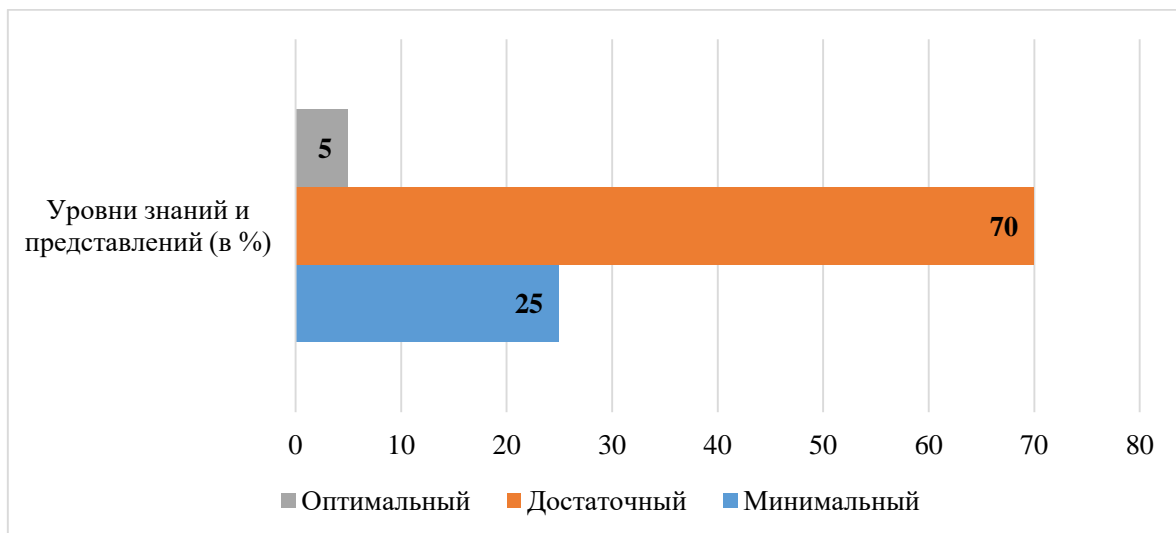


Рисунок 1. Уровни сформированности у дошкольников когнитивного компонента культуры здоровья человека

Figure 1 Levels of the formation in preschoolers of the cognitive components culture of human health

Результаты опроса оценивались согласно уровневым показателям (рисунок 1): *оптимальный*: ребенок знает все части тела человека, правильно называет их и верно объясняет их назначение. Не допускает ошибок, уверен в своих знаниях, легко демонстрирует их, эрудирован; *достаточный*: ребенок называет части тела человека, объясняет их назначение, допуская при этом некоторые ошибки. Не всегда уверен в

собственных ответах, испытывает определенные трудности; *минимальный*: ребенок испытывает затруднения в назывании частей тела человека, часто ошибается, не может объяснить их назначения, отказывается отвечать или не отвечает на вопросы. Преобладание достаточного уровня знаний и представлений детей об «образе здоровья» – ожидаемый итог диагностики, поскольку целенаправленная работа по формированию когнитивного компонента культуры здоровья в данный возрастной период только началась: знания уточняются, обогащаются и систематизируются.

Отвечая на вопросы, дети из группы с оптимальным уровнем сформированности когнитивного компонента культуры здоровья (5%) давали точные и полные ответы, с интересом дополняли свой ответ. Эти дети знают, что в голове «находится мозг, чтобы думать», «здоровый – тот, кто на спорт ходит и улыбается, а не плачет», «если заболел, нужно идти в поликлинику к детскому врачу». На вопрос «Знаешь ли ты, что находится внутри туловища?», эти дошкольники отвечали: «сердце», «столб туловища, который держит голову, руки и ноги», «кровь».

Испытуемые из группы с достаточным уровнем (70%) на аналогичный вопрос давали ответы: «еда», «арбуз, колбаса». Дети, по результатам опроса отнесенные к минимальному уровню (25%), испытывали трудности при ответе на данный вопрос. Испытуемые данной группы давали неточные ответы на вопросы («голова нужна для того, чтобы есть», «чтобы панамку носить», «прическу делать»), плохо знают части тела (например, не знают, где находится стопа). На ряд вопросов эти дошкольники отвечали «не знаю», демонстрировали отсутствие интереса к общению, при этом один ребенок с удовольствием подробно описала свою розовую юбку и кофту, которую «ей надела мама».

В случае болезни некоторые дети предлагали «пойти к Айболиту – он сделает больные уколы». Большинство детей (92%) предназначение частей тела соотносили со знакомыми и интересными детям действиями: «играть», «вкусное кушать», «спортом заниматься (делать зарядку), чтобы веселее жить». Можно констатировать, что дети младшего дошкольного возраста понимают, что такое болезнь, но дать самую элементарную характеристику здоровью еще не могут. Вследствие этого никакого отношения к нему у детей 3-4 лет практически не складывается. На вопрос, что нужно делать, чтобы оставаться здоровым, многие дети (77%) отвечали: нужно не простужаться, не есть на улице мороженого и т. д. Из этих ответов следует, что в младшем дошкольном возрасте дети начинают осознавать внешние угрозы здоровью (дождь, сквозняк), а также в своих собственных действиях (например, мочить ноги).

2. Диагностика сформированности мотивационно-личностного компонента культуры здоровья как составляющей представлений детей об

«образе здоровья» проводилась в ходе наблюдения. Выявлялись особенности ценностного отношения детей 3-4 лет к здоровью и мотивации дошкольников к здоровому образу жизни.

В ходе наблюдения обращалось внимание на следующие детские проявления: интерес к правилам здоровьесберегающего и безопасного поведения; удовольствие в ходе выполнения простейших умений и навыков гигиенической и двигательной культуры; интерес к самопознанию и самообслуживанию; доброжелательность во взаимодействии со сверстниками и взрослыми. Результаты наблюдения представлены в таблице 1.

Таблица 1. Результаты диагностики мотивационно-личностного компонента представлений дошкольников о культуре здоровья человека
Table 1 Diagnostic results of the motivational-personal component of preschoolers' ideas about culture of human health

Критерии	проявляется	не проявляется	проявляется избирательно
Интерес к правилам здоровьесберегающего и безопасного поведения	40 %	10 %	50 %
Удовольствие в ходе выполнения простейших умений и навыков гигиенической и двигательной культуры	60 %	10 %	30 %
Интерес к самопознанию и самообслуживанию	70 %	10 %	20 %
Доброжелательность во взаимодействии со сверстниками и взрослыми	70 %	10 %	20 %

Анализируя результаты наблюдения, необходимо отметить преобладающие проявления интереса дошкольников к самореализации в деятельности по самообслуживанию, в познании своего организма (70%); интереса к поддержанию доброжелательных отношений с детьми и взрослыми (70%). Можно предположить, что это связано с расширением социального окружения дошкольников, усложнением коммуникации, а также с зарождением элементарного образа собственного «Я».

Детей, в целом, привлекают процедуры демонстрации двигательной активности (зарядка), культурно-гигиенических навыков (60%), однако эта тенденция сохраняется при постоянном руководстве педагога, поскольку 30% дошкольников избирательны в проявлениях гигиенической и двигательной культуры. Необходимость регулярного сопровождения

воспитателем дошкольников при освоении правил здоровьесберегающего и безопасного поведения иллюстрируют результаты по этому критерию: только 40% детей проявляют интерес к данному аспекту здоровьесбережения, который характеризуется избирательностью для большинства дошкольников (50%).

3. Деятельностный компонент культуры здоровья в представлениях дошкольников об «образе здоровья» проявлялся в степени:

- а) применения ребенком здоровьесберегающих знаний, умений и навыков в опыте самообслуживания;
- б) актуализации здоровьесберегающих знаний, умений и навыков в ситуации здоровьесбережения;
- в) самостоятельности решения задачи здоровьесбережения, которое содействует сохранению здоровья.

На рисунке 2 представлены результаты наблюдения за проявлениями дошкольниками деятельностного компонента культуры здоровья. На гистограмме показаны данные о сформированности составляющих деятельностного компонента культуры здоровья.

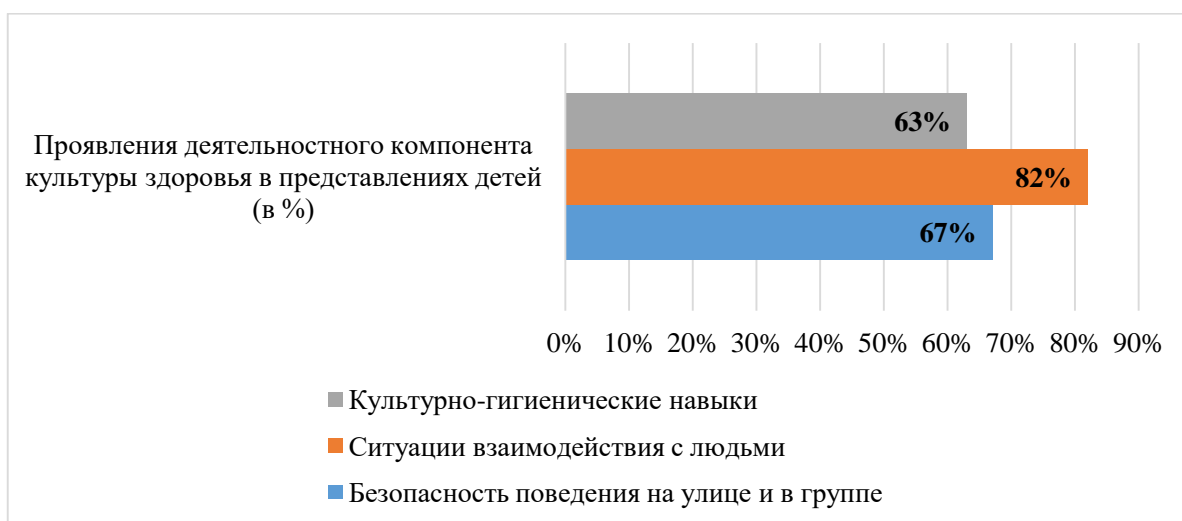


Рисунок 2. Результаты диагностики сформированности у дошкольников деятельностного компонента культуры здоровья человека
Figure 2 Diagnostic results of the formation in preschoolers of the activity component culture of human health

Культурно-гигиенические умения и навыки дошкольники демонстрируют в процессе одевания, посещения туалетной комнаты, мытья рук, использования полотенца и салфеток. 63% испытуемых показали потребность и самостоятельность в опыте самообслуживания: знают алгоритм выполнения действий самообслуживания (мытьё рук, одевание), целесообразность гигиенических процедур («чтобы микробов не было»),

проявляют интерес к результату самостоятельных проб одевания и раздевания, уборки игрушек; дети пытаются сохранять и показывать правильную осанку. 27% детей забывают о важности соблюдения гигиены – действуют только после напоминания воспитателя, играют с салфетками за столом, неправильно держат столовые приборы, вытирают руки об одежду, одеваются только с помощью взрослого.

Безопасность поведения на улице и в группе детского сада наблюдалась у 67% испытуемых. Эти дошкольники могли подробно рассказать о правилах поведения пешехода при переходе улицы, оказания первой помощи при попадании, например, песка в глаза. 23% демонстрировали небезопасную двигательную активность: бегали и прыгали, не обращая внимания на окружающую обстановку и напутствия взрослых, спускались по лестнице, не держась за перила.

В ситуации общения и взаимодействия со сверстниками и взрослыми 82% дошкольников актуализировали умения доброжелательного общения: использовали культурные речевые обороты (приветствия, прощания, благодарности), инициировали общение, игры. 18% детей в ряде ситуаций проявляли вербальную и физическую агрессию, не воспринимали словесное обращение к ним воспитателя.

Заключение *Conclusions*

На основании результатов диагностики представлений детей 3-4 лет об «образе здоровья» человека целесообразно обозначить основные направления педагогической работы, включающей комплекс организационно-педагогических условий.

В процессе целенаправленного формирования представлений о культуре здоровья у детей четвертого года жизни необходимо решать следующие задачи:

- 1) продолжить знакомить с внешними частями тела человека; дать представление о способах выражения своих состояний с помощью мимики и жестов; знать основные правила заботы о своем организме; учить устанавливать связи между строением органа и его назначением;
- 2) продолжать формировать привычку к режиму двигательной активности, развивая настойчивость; знакомить с профилактикой заболеваний: самомассаж, закаливание, правильное дыхание, чередование активности и отдыха;
- 3) с помощью взрослого устанавливать связь между совершаемыми действиями, привычками и настроением, самочувствием;

- 4) рассказывать о правилах первой помощи при травмах и обморожениях: например, озябли ноги — попрыгай, пошевели пальцами;
- 5) рассказывать о правилах поведения за столом (не играть столовыми приборами, не разговаривать с полным ртом); учить рациональным способам самообслуживания;
- 6) научить заботиться о здоровье окружающих: при чихании и кашле прикрывать рот и нос платком.

Summary

A personality health culture is characterized as a multicomponent personality education included in a single system of a person's general culture, aimed at the process of the mastering the experience of health saving and fulfilling the need for a healthy lifestyle.

The preschooler's ideas about the human health culture are made up of three blocks: cognitive (knowledge about the body, ways of maintaining health and self-help), motivational and personal (the need to maintain health, preparedness for healthy activities, interest in the rules of healthy behavior, a positive emotional attitude) and activity (maintaining a healthy lifestyle, which includes three categories: level, quality and lifestyle (personal hygiene, healthy nutrition, physical activity, positive communication), demonstration of the safe behavior with the participation of an adult).

An empirical study was aimed at diagnosing the formation of all components of a human health culture in the structure of preschoolers' ideas about the "health image". In the process of observation and questioning, the idea of a personal "health image" formed in the child's mind could be diagnosed by a number of indicators: the degree of development of self-care skills; manifestations of activity in the game, communication; compliance with the rules of the safe behavior; control your own emotions in the process of the interacting with people. Diagnostic results showed the prevailing manifestations of the interest of preschoolers in self-realization in self-care activities, in the knowledge of their body; interest in maintaining friendly relations with children and adults. The value attitude of children 3-4 years old to health is characterized as intuitively correct, since it is only beginning to take shape at this age. Motivation for a healthy lifestyle, safe health-saving behavior is extremely unstable and requires constant of the pedagogical support.

The average level of preschoolers' cognitive component of the human health culture indicates the need to create certain organizational and pedagogical conditions.

Литература References

- Alhasov, D. (2005). Formirovanie ortobioticheskoy kul'tury zdorov'ja uchashhihsja. *Uchitel'*, 2, 83-85.
- Bicheva, I.B. (2016). Kul'tura zdorov'ja lichnosti: nauchno-teoreticheskij kontekst // *Gumanitarnye nauchnye issledovanija*, 9(61), 154 – 157.
- Bugental, J.F.T., & McBeath, B. (1995). Depth existential therapy: Evolution since World War II. In B. Bonger & L. Beutler (Eds.), *Comprehensive textbook of psychotherapy: theory and practice* (pp. 111–121). New York: Oxford University Press.

- Byhovskaja, I.M. (2013). Kul'tura zdorov'ja kak znachimyj faktor lichnostnogo statusa v sovremennom obshhestve // *Sovremennoe sostojanie kul'tury i obshhestva: osobennosti i perspektivy razvitija Rossii*. Moskva. 187 – 193.
- Gorbushina, S.N. (2005). *Mirovozzrencheskie determinanty formirovaniya kul'tury zdorov'ja budushhego uchitelja: diss. ... d-ra ped. nauk*. Ufa. Retrieved from <http://elibrary.udsu.ru/xmlui/bitstream/handle/123456789/2472/Gorbuchina.pdf?sequence=1>
- Derkunsckaja, V.A. (2005). *Diagnostika kul'tury zdorov'ja doshkol'nikov*. Moskva: Pedagogicheskoe obshhestvo Rossii.
- Dombek, S., Lebedeva, N., Mikhailova, A., Pradun, I., & Shlat, N. (2019). The peculiarity of the value orientations of modern preschoolers. *Society, Integration, Education. Proceedings of the International Scientific Conference 24th -25th May 24, II*, 506-516. DOI: <http://dx.doi.org/10.17770/sie2019vol2.3761>
- Irhin, V.N., & Irhina, I.V. (2017). *Zdorov'eorientirovannaja dejatel'nost' uchitelja na uroke: uchebnoe posobie*. Belgorod: ID «Belgorod» NIU «BelGU».
- Jumatova, D.B. (2017). *Kul'tura zdorov'ja doshkol'nika. Cikl igr-puteshestvij*. Sankt-Peterburg: OOO «IZDATEL'STVO «DETSTVO-PRESS».
- Kas'janova, L.G. (2010). *Formirovanie predstavlenij o zdorovom obraze zhizni u detej starshego doshkol'nogo vozrasta: ucheb.-metod*. Shadrinsk: Shadrinskij Dom Pechati.
- Kolycheva, Z.I. (2002). Kul'tura zdorov'ja i social'noe razvitie lichnosti. *Severnyj region: nauka i sociokul'turnaja dinamika: Sbornik tezisov dokladov Vserossijskoj nauchnoj konferencii*, 19-20.
- Krylova, N.I. (2008). *Zdorov'esberegajushhee prostranstvo v DOU*. Volgograd: Uchitel'.
- Latygovskaja, O.V. (2018). *Formirovanie kul'tury zdorov'ja detej mladshhego doshkol'nogo vozrasta: avtoreferat dis. ... kandidata pedagogicheskikh nauk: po special'nosti 13.00.02 Teorija i metodika obuchenija i vospitanija (doshkol'noe obrazovanie); Uchrezhdenie obrazovanija "Belorusskij gosudarstvennyj pedagogicheskij universitet imeni Maksima Tanka"*. Minsk.
- Madzhuga, A.G., & Sinicina, I.A. (2014). *Zdorov'esozidajushhaja pedagogika: teorija, metodologija, opyt, perspektivy razvitija: [monografija]*. Moskva: Logos.
- Maljarchuk, N.N., & Cybikova, E.N. (2008). «Zdorovyj obraz zhizni» - *Uchebnoe posobie*. Tjumen': Izdatel'stvo Tjumenskogo gosudarstvennogo universiteta.
- Novoselova, I.I. (2000). *Razvitie kul'tury duhovnogo i fizicheskogo zdorov'ja budushhego uchitelja v processe professional'noj podgotovki: avtoref. dis. ... kand. ped. nauk: 13.00.01; Mar. gos. ped. in-t im. N.K. Krupskoj*. Joshkar-Ola.
- Oficial'nyj sajt Vsemirnoj organizacii zdravoohranjenja*. Retrieved from <http://www.who.int/ru/>
- Platonov, K.K. (1986). *Struktura i razvitie lichnosti; otv. red. A.D. Glotochkin; AN SSSR, In-t psihologii*. Moskva: Nauka.
- Voloshina, L.N. (2006). *Razvitie zdorov'esberegajushhego obrazovatel'nogo prostranstva doshkol'nyh uchrezhdenij: metodologija, teorija, praktika: avtoreferat dis. ... doktora pedagogicheskikh nauk: 13.00.04 / Ur. gos. ped. un-t. Ekaterinburg*.

ПОРТРЕТ ВОСПИТАТЕЛЯ ДЕТСКОГО САДА В СОЦИОКУЛЬТУРНОМ ПРОСТРАНСТВЕ СОВРЕМЕННОЙ РОССИИ

Portrait of the Kindergarten Teacher in the Social and Cultural Space of the Modern Russia

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Abstract. *The article discusses the problem of actual requirements to the kindergarten teacher, which are imposed by society (state), educational organization, the family of the pupil and children of preschool age. The author analyzes the provisions of a number of documents regulating the activities of the teacher, systematizes the results of scientific research about the role of the teacher in modern preschool education.*

The article describes the theoretical model of the way of the teacher of the preschool educational organization in modern social and cultural conditions: mission, function, result, – answering the question "What should be a modern kindergarten teacher?".

The results of the study can be used as a basis for the modernization of the content of the professional activity (professional standard) of the modern teacher of a preschool educational organization.

The article is intended for public reading and for those who are interested in pedagogical research.

Keywords: *social and cultural space, kindergarten teacher, kindergarten.*

Введение

Introduction

Преобразования в системе дошкольного образования Российской Федерации (РФ), изменение социокультурных приоритетов в подходах к образованию детей раннего и дошкольного возраста выразились в формировании обновленного образа современного воспитателя дошкольной образовательной организации (ДОО).

Педагог ДОО оказался перед непростым выбором стратегии профессионального поведения согласно современным требованиям, предъявляемым к нему обществом, государством и непосредственными участниками образовательного процесса – ребенком и семьей воспитанника.

Важными характеристиками личности и деятельности педагога детского сада становятся личностный потенциал и профессиональный

функционал, выходящие за пределы нормативной деятельности, содержательно представленной в Федеральном законе «Об образовании в РФ» (<https://www.garant.ru/products/ipo/prime/doc/71875430/>), Федеральном государственном образовательном стандарте дошкольного образования (<https://fgos.ru/>), Профессиональном стандарте педагога (далее – Стандарт педагога) (<https://base.garant.ru/70535556/>).

Например, Стандарт педагога систематизирует концептуальные идеи образа, роли и функций педагога в современном обществе. В частности, в его содержание включены основные требования к квалификации воспитателя – это общенациональная рамка требований, содержащая описание основных компетенций через трудовые действия и функции.

В соответствии со Стандартом педагога, основным источником его профессионального роста является готовность к самообразованию: способности к инновационной деятельности, педагогическому творчеству, ответственность, активность и самостоятельность в принятии решений.

Ключевыми тенденциями в переосмыслении миссии педагога ДОО стали: оптимальное сочетание владения воспитателями традиционными и инновационными технологиями в реализации дошкольного образования, выражающемся в проектировании и осуществлении инновационной деятельности, связанной с разработкой основной образовательной программы ДОО и рабочих программ педагогов; готовность воспитателя действовать на границе профессиональных областей, в условиях профессиональной мобильности (метапредметность деятельности) и эффективно взаимодействовать с субъектами образовательного процесса. Важно подчеркнуть тот факт, что оценка качества дошкольного образования в современных условиях переориентирована с мониторинга развития детей на оценку развивающей среды и педагогических технологий (игровых, здоровьесберегающих, проектных), разработку, апробацию, распространение которых осуществляет воспитатель.

Таким образом, замысел систематизации концептуальных идей образа, роли и функций педагога ДОО в современном социокультурном пространстве России положен в основу цели исследования – создания модели (миссия, функции, результат) профиограммы современного воспитателя детского сада. В работе были использованы методы исследования: теоретический анализ и обобщение научных источников по проблеме исследования, педагогическое моделирование.

Теоретическая основа темы *The theoretical background*

В современных социокультурных условиях происходит стремительное смещение функции педагога в образовательном процессе: педагог преобразуется из транслятора знаний и образца умений в эксперта, исследователя, аниматора, наставника, фасилитатора, медиатора. В связи с этим изменяется содержание педагогической деятельности, которая все больше приобретает инновационный характер (Prohорова, 2015), что проявляется в:

- снижении значения традиционных форм работы;
- изменении технологий оценки как деятельности педагога, так и качества образования детей: активно используются в современных детских садах портфолио, экспертные оценки, самоанализ, оценочный лист и др.
- возрастании роли методической и научно–исследовательской работы, направленных на организацию и реализацию образовательных, социальных, исследовательских проектов с привлечением всех субъектов образовательного процесса;
- необходимости гибкости и индивидуализации образовательного процесса, в том числе за счет широкого применения ИКТ (информационно–коммуникативных технологий) и реализации индивидуальных образовательных траекторий детей и, прежде всего, дошкольников с ОВЗ;
- создании условий для сетевого взаимодействия ДОО и других организаций, реализующих образовательные и просветительские программы для детей (центры развития, библиотеки, детские студии).

Портрет воспитателя – восприятие государства и общества (руководства). Модель личностно–профессиональных качеств воспитателя детского сада базируется на трех составляющих (Shlat & Orlov, 2014):

- базой обобщенных общекультурных, метапредметных знаний, умений и качеств (включая умение учиться). Так, по мнению Э. Тоффлера (Toffler, 1970), специалист будущего должен быть готов к принятию ответственных и разумных решений, причем в быстро меняющихся условиях и независимо от мнения большинства, быть коммуникабельным, любознательным, уверенным и целеустремленным;
- системой профессиональных компетенций, необходимых для эффективного решения профессиональных задач на основе

интеграции науки и образования, его междисциплинарности, информатизация образования, усиления воспитательного потенциала системы образования, позволяющего педагогу ДОО эффективно взаимодействовать со специалистами смежных профессий;

- наличием определенной ценностной позиции, основанной на принятии ценности непрерывного «образования длиною в жизнь» (life-long education), способности самостоятельно и успешно обновлять «багаж» профессиональных знаний и опыте реализации плана самообразования и саморазвития.

Согласно данным, полученным в ходе изучения мотивов педагогов ДОО (Kazanceva, 2017), наиболее важными для воспитателей являются показатели, связанные с мотивами удовлетворения потребностей в личностном росте и самоактуализации (53% педагогов), затем по значимости идут показатели, связанные с мотивами удовлетворения социальных потребностей (49% педагогов). Заинтересованность педагогов в своей деятельности даёт возможность руководству ДОО использовать в управлении мотивацией коллектива не столько экономические, сколько интеллектуально-творческие способы.

Как показывает реальная практика, факторами, препятствующими саморазвитию педагога ДОО, являются: недостаток времени; состояние здоровья; разочарование в результате имевшихся ранее неудач; недостаточная поддержка со стороны администрации; собственная инерция. По сути все обозначенные проблемы сводятся к трем явлениям современной профессиональной деятельности воспитателя: «ритм, цейтнот, нерв». Комплекс факторов, стимулирующих саморазвитие, включает: интерес к работе; возрастающую ответственность за результаты труда; пример коллег; внимание администрации к возникшей проблеме; новизну деятельности; обучение на курсах; пример и влияние администрации; организацию методической работы в дошкольном учреждении; возможность получения признания в коллективе.

Результаты исследования Я-концепции педагога Р. Бернсом (Burns, 1982) указывают на взаимозависимость позитивного восприятия педагогом воспитанников и развития у детей позитивной Я-концепции. Данный научный факт подтверждается реальной практикой взаимодействия семьи и детского сада: со стороны родительской общественности от воспитателей требуется доброжелательное отношение, внимательность и профессиональная компетентность: «тогда дети идут в сад с удовольствием».

Портрет воспитателя – восприятие родителей. Родители не хотят, чтобы воспитатели менялись в течение года и переходили из одной группы в другую. Видимо, они обеспокоены ситуацией повышенной «текучки» кадров из-за нестабильного материального вознаграждения труда педагогов детских садов, разногласий и конфликтов внутри коллектива.

При этом идеальный «портрет» современного педагога детского сада сопряжен с низким социальным статусом профессии педагога дошкольного образования в обществе, недостаточно высоким уровнем психолого–педагогической культуры родителей, неполной информированностью педагогов об условиях жизни ребенка дома и, соответственно, родителей – о жизнедеятельности ребенка в детском саду; стремлением педагогов дошкольного образования избегать «живого» общения, подменять его анкетированием, информационными стендами и др.; «закрытостью» дошкольного учреждения.

Результаты анкетирования педагогов дошкольных образовательных организаций и контент–анализ ситуации взаимодействия педагога и ребенка с ОВЗ показали неготовность педагогов работать в условиях инклюзивного образования (Vinokurova & Inevatkina, 2016), что еще больше усугубляет ситуацию конфронтации семьи и ДОО.

Портрет воспитателя – восприятие детей. В своих воспитателях дошкольники, прежде всего, ценят личностные качества («они добрые, хорошие, ласковые, никогда не злятся, хороший характер, добрая и внимательная, справедливая, терпеливая»); на втором месте по значимости для них – отношение педагога к детям («она часто улыбается, старается, чтобы у нас были и игрушки и тарелки, помогает, когда что–то не понимаю»), на третьем – внешность воспитателя («красивая, у нее платье красивое, хорошо одевается, у нее привлекательные кофты, нравятся ее юбочки и кофточки») (Shlat, 2019).

Портрет педагога, каким не хотят видеть своего воспитателя дети, сводится к трем «К»: Крик, Критика, Контроль. Непрофессионализм? Конечно. Отсутствие любви? Возможно. Данные, полученные по результатам наблюдения психолога Юлии Любимовой (Ljubimova, 2019), показывают –ребенок из общения с несдержанным гневливым громким взрослым выносит понимание того, что: «Меня не любят», «Я боюсь этого взрослого», «Я неважен», «Я это заслужил», «Меня накажет мама за плохое поведение», «Я не люблю этого взрослого», «У меня болит голова», «Я ничего не хочу», «Я хочу сделать назло», «Хочу к маме». Критика воспитателя порождает мысли ребенка о том, что «Я глупый (некрасивый, неумелый, непослушный...)», «У меня не получается...», «Мне грустно...».

Тотальный контроль воспитателя приводит к неуверенности и беспомощности: «Быть самостоятельным– это трудно», «Делать самому–

это опасно», «Пусть кто-то сделает за меня». Бесспорно, только профессионал с развитым чувством собственного достоинства будет строить взаимодействие в духе самоуважения и любви к детям.

Таким образом для каждого участника образовательных отношений портрет воспитателя ДОО – неоднозначен и связан с профессионально-, статусно- и индивидуально-личностно-обусловленными потребностями; в целом же, образ современного педагога – многолик. Поэтому оценка педагогической деятельности современного воспитателя должна проводиться на основе обратной связи с участниками образовательных отношений и оцениваться интегративными показателями.

Итак, на основе какого комплекса интегративных показателей будут консолидированы требования государства, общества, семьи и дошкольников к образу (миссии, функциям, результату деятельности) педагога ДОО?

Модель профессиограммы (миссия, функции, результат) современного воспитателя детского сада
Model of the professionalgram (mission, functions, result) of a modern kindergarten teacher

Сложность построения модели «образа современного воспитателя» объясняется полипарадигмальностью педагогики как науки и как искусства, педагогического мастерства.

Педагогическая парадигма в современной теории рассматривается как комплекс методологических и теоретических установок и позиций, определяющих способы построения педагогической деятельности (Aleksandrova, 2017). Фундаментальной, теоретико-методологической основой такой модели выступают системный и синергетический подходы, а практикоориентированной базой – личностно-ориентированный, деятельностный, компетентностный, культурологический, аксиологический, акмеологический и андрагогический подходы.

Эклектика всех указанных подходов может заложить научное основание как педагогических процессов в дошкольном образовании, так и интегративный характер профессиограммы современного педагога (Purgina, 2015). По сути, речь идет об интегративном подходе как системе всех подходов. Системообразующим элементом такой системы является позиция субъекта.

По своей сути, профессиональная позиция и деятельность воспитателя в современных образовательных условиях – не только инновационная, а интегративная (интеграции целей, видов и функций деятельности, технологий).

По мнению Н.С. Александровой «интегративный подход в исследовании профессиональной деятельности педагога дошкольного образования помогает выявить её многокомпонентность, преодолеть противоречия социокультурных контекстов и представить образование как создание и самоорганизацию новых форм индивидуального бытия» (Aleksandrova, 2017, 28).

Ведущими принципами конструирования образа современного воспитателя являются принципы непрерывности, диверсификации, партисипативности, фасилитации, субъектности, рефлексивности, позиционирования субъектной позиции педагога в проектной деятельности (Akbasheva, 2000).

Лежащая в основе Стандарта педагога модель личностно–ориентированного взаимодействия взрослых с ребенком в ходе освоения им содержания образования, призвана обеспечить субъектную позицию ребенка как в образовательном процессе, так и при проектировании развивающей предметно–пространственной среды группы и учреждения в целом, что также отражает идею субъектности как системообразующего элемента.

В таблице 1 представлена сравнительная характеристика концептуальных подходов (Gogoberidze & Solnceva, 2013; Volkova, 1998) к структуре субъектной позиции педагога ДОО как базовой характеристики профессиограммы современного воспитателя.

Таблица 1. Сравнительная характеристика концептуальных подходов к структуре субъектной позиции (СП) воспитателя детского сада

Table 1 The comparative characteristic of the conceptual approaches to the structure of the subjective position (SP) of the kindergarten teacher

Компоненты СП	Концепция Гогоберидзе А.Г.	Концепция Волковой Е.Н.
Рефлексивность	Проявляется через активность в различных сферах жизни, и прежде всего в профессиональной деятельности	Активность (преобразующая, осознанная, целенаправленная). Способность к рефлексии как факт осознания происходящего с самим собой. Самообладание, самоконтроль в деятельности
Смыслотворчество	Соотносится с самостоятельностью – ценностное, ответственное отношение к своей профессии, ее смыслу, целям и результатам	Уникальность субъекта – субъектность выявляется не столько в познавательном и деятельностном отношении к миру, сколько в отношении к людям
Избирательность	Предпосылка и показатель профессиональной компетентности – результата саморазвития	Саморазвитие – понимание человеком того, развивается ли он сам или ему создаются условия для развития или управления им
Автономность	Умение ориентироваться в имеющихся профессиональных возможностях, оценивать свои профессиональные достижения	Свобода выбора и ответственность за него

На рисунке 1 представлена структурная модель субъектной позиции педагога ДОО как базовой характеристики профессиограммы современного воспитателя, поскольку составляющие модель компоненты субъектной позиции по своей сути отвечают на запрос государства, общества, семьи, ребенка «Каким должен быть современный педагог ДОО?». Комплекс гностического, проектировочного, конструктивного, коммуникативного и организаторского компонентов инновационной профессиональной деятельности воспитателя (Jakovleva, 2012) полностью отражает структуру субъектной позиции педагога ДОО как базовой характеристики образа современного педагога ДОО:



Рисунок 1. Структурная модель субъектной позиции педагога ДОО как базовой характеристики профессиограммы современного воспитателя
Figure 1 Structural model of the subjective position of the teacher of the PEO as the basic characteristics of the modern kindergarten teacher's profессиограмм

Развитие гностического компонента основывается на адекватной самооценке и самопозиционирования педагога в (инновационной) деятельности, что и обуславливает его активность (**рефлексивность**) в инновационной методической деятельности; является источником его личностного роста в условиях инноваций и обеспечивается его общей удовлетворенностью профессиональной деятельностью.

Развитие проектировочного и конструктивного компонентов соотносится со **смыслотворчеством и автономностью**, поскольку связан с отбором эффективных, актуальных стратегий педагогической деятельности (условий, технологий, средств), способностью к продуцированию новых идей, желанием видеть и определять свои личностно–профессиональные проблемы, находить варианты их решения.

Преобразование коммуникативного компонента в новых социокультурных условиях предполагает высокий уровень пластичности, открытость, инициативность, обеспечение эмоционального комфорта всех участников образовательного процесса через изменение отношения к миру, профессии и к людям– это актуализирует **смыслотворческий** компонент СП. Самопозиционирование, саморазвитие педагога в профессиональной деятельности связано с динамикой организаторского компонента, который характеризуется в субъектной позиции через **рефлексивность** и **избирательность**. Результатом профессиональной деятельности воспитателя в его позитивном образе педагога ДОО предполагается становление социальной уверенности (эмоциональный интеллект, лидерские качества: активность, готовность решать профессиональные и жизненные проблемы (Molostova, 2015)) всех субъектов.

Заключение *Conclusions*

Новые социокультурные условия предполагают преодоление старых стереотипов, форм и методов организации дошкольного образования. При этом, важно творческое переосмысление традиционного опыта, служащего продуктивной основой развития системы дошкольного образования в современных условиях, в целом, и профессиональной деятельности педагога ДОО, в частности.

Установка на подготовку «педагога–универсала», способного обеспечить освоение разнообразных видов социального опыта должна привести к увеличению социальной привлекательности педагогической профессии. Необходимо отметить, что позитивный образ функционирования педагога ДОО является своеобразной гарантией его востребованности.

Резюмируя вышесказанное, важно отметить, что современный педагог ДОО в восприятии субъектов образования должен совершенствовать свои профессиональные способности, уметь адаптироваться в условиях меняющегося общества («непохожести поколений»), заниматься самообразованием с учетом обновляющейся нормативно–правовой базы; специалист ДОО должен быть готов к инновациям, поиску, осмыслению и реализации новых педагогических технологий.

Summary

The mission of the kindergarten teachers in the process of updating of the Federal legal framework and changes in the socio-economic nature was: the exploration of innovative technologies by teachers, the design of the educational process in terms of the professional mobility; the readiness of the kindergarten teachers to act on the border of professional areas and effectively interact with all subjects of the educational process (specialists and customers).

The portrait of a modern kindergarten teacher is perceived in different ways: the governing bodies, the state sees the teacher through the prism of the legal framework that regulates professional activities; the family, the children of preschool age see the kindergarten teachers from the point of view of emotional comfort, safety, positive communication, and a specific educational result of the interaction.

The image, professionogram of the kindergarten teacher's is designed on the basis of an integrative approach to the qualities of the educator's personality, his professional abilities, and the system-forming element – the subject position of the teacher.

The model of the subject position of a pre-school teacher as a basic characteristic of a modern educator's professionogram consists of four components that essentially reflect the requirements of the state, society, family, and preschoolers for the image of the kindergarten teacher (mission, functions, and performance) and the result of education - the formation of the social confidence.

References

- Akbasheva, R.Sh. (2000). *Organizacionno – pedagogicheskie uslovija formirovaniya sub"ektnoj pozicii pedagogov v proektirovochnoj dejatel'nosti doshkol'nyh uchrezhdenij: Dis. ... kand. ped. nauk: 13.00.08. Ufa.*
- Aleksandrova, N.S. (2017). Professional'naja dejatel'nost' pedagoga doshkol'nogo obrazovaniya v novyh sociokul'turnyh uslovijah. *Pedagogicheskoe obrazovanie v izmenjajushhemsja mire: sbornik nauchnyh trudov III Mezhdunarodnogo foruma po pedagogicheskomu obrazovaniju, Kazan', 23–25 maja 2017 g., 21–29. Izdatel'stvo: Otechestvo.*
- Burns, R.B. (1982). *Self-concept development and education.* London: Holt, Rinehart and Winston.
- Gogoberidze, A.G., & Solnceva, O.V. (2013). *Doshkol'naja pedagogika s osnovami metodik vospitaniya i obuchenija: uchebnik dlja bakalavrov po napravleniju 050100 "Pedagogika".* Sankt–Peterburg: Piter.
- Jakovleva, G.V. (2012). Tehnologija razvitija innovacionnoj metodicheskoy dejatel'nosti v doshkol'nom obrazovanii. *Russian Journal of Education and Psychology, 4(12).* Retrieved from <https://cyberleninka.ru/article/n/tehnologiya–razvitiya–innovatsionnoj–metodicheskoy–deyatelnosti–v–doshkolnom–obrazovanii>
- Kazanceva, A.A. (2017). Vnutrennjaja motivacija kak uslovie professional'nogo samoobrazovaniya pedagoga doshkol'noj obrazovatel'noj organizacii. *Uchjonye zapiski ZabGU, 12(2), 52–59.* Retrieved from <http://www.uchzap.com>
- Ljubimova, Ju. (2019). *Sovremennyj vospitatel' i problema trjoh «K».* Retrieved from <https://www.b17.ru/article/85061/>
- Molostova, N.Ju. (2015). Methodological basis of the criteria of social confidence. *Privolzhskij nauchnyj zhurnal, 2, 255–260.*

- Prohorova, M.P. (2015). Soderzhanie i vidy innovacionnoj dejatel'nosti pedagoga v uslovijah modernizacii pedagogicheskogo obrazovanija. *Sovremennye nauchnye issledovanija i innovacii*, 12. Retrieved from <http://web.snauka.ru/issues/2015/12/60257>
- Purgina, E.I. (2015). *Metodologicheskie podhody v sovremennom obrazovanii i pedagogicheskoy nauke: ucheb. posobie; Ural. gos. ped. un-t.* Ekaterinburg.
- Shlat, N. (2019). The "Territory of childhood": content, components, conditions of designing. *Society, Integration, Education. Proceedings of the International Scientific Conference. Volume II, May 24th–25th*, 597–609. DOI: <http://dx.doi.org/10.17770/sie2019vol2.3760>
- Shlat, N.Ju., & Orlov, A.O. (2014). Razrabotka i realizacija distancionnyh kursov povysheniya kvalifikacii specialistov doskol'nogo obrazovanija. *Mezhdunarodnyj jelektronnyj zhurnal "Obrazovatel'nye tehnologii i obshhestvo". Kazan': Kazanskij gosudarstvennyj tehnologicheskij universitet*, 17(3), 535–547. Retrieved from http://ifets.ieee.org/russian/periodical/V_173_2014EE.html
- Toffler, A. (1970). *Future shock*. New York: Random House edition published.
- Vinokurova, N.V., & Inevatkina, S.E. (2016). Problemy sovremennogo pedagogicheskogo obrazovanija. *Professional'naja podgotovka pedagoga doskol'noj obrazovatel'noj organizacii k realizacii inkluzivnogo obrazovanija*, 53(3), 78–84.
- Volkova, E.N. (1998). *Sub'ektnost' pedagoga (Teorija i praktika): Dis. ... d-ra psihol. nauk: 19.00.07.* Moskva.

MAIN FEATURES OF QUALITATIVE LEARNING SPACE AND PRE-SCHOOL CHILDREN LANGUAGE DEVELOPMENT

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Abstract. *The main goal of ongoing transformation of the Latvian pre-school education system is competence-based approach. The essence of this approach is to promote functionality, integrity and practical application of knowledge, explanation of the surroundings, universality of skills, creativity, problem solving. Modern society requests not only for teacher to demonstrate enthusiasm by sharing a deep level of content knowledge, but also necessity of learning space which focus on sensorial senses. It is a way of learning through doing, the process when children obtain knowledge and skills via personal experience, like being creative, flexible, able to analyse, think critically etc. The aim of this article is to analyse successfully created learning space and language development for pre-school age children based on literature analysis and adapted survey results. The empirical study, which took place in Riga, examines these two aspects in pre-school children development of language, communication and the prerequisites of reading and writing. The Latvia State Research Program “Latvian language” No. VPPIZM-2018/2-0002 researchers find out that children who attend minority pre-school education programme have insufficient support in Latvian language environment. Results, conclusions. Qualitative learning space promotes learning abilities and responsible attitudes. This important condition needs to be implemented in competence-based approach to see improvements in pre-school children language and communication development.*

Keywords: *learning space, a pre-school child, language development.*

Introduction

The education reform in Latvia is closely linked to the achievements of the project introducing the Competence Approach in Learning Content and the developed pre-school curriculum. Over the last decade, the philosophy and methodology of the child-centred approach has gained great support in Latvia. It is also supported by the new guidelines developed in 2018, which set out both the content of education and the principles for its implementation for children from the age of 1.5 years.

This new situation makes it necessary for both educators and parents to explore the content offered in the pre-school curriculum, to understand deeper the change in pedagogical approaches and relationship with educational theory and scientific research. As stated in the new program, the child gaining the first

preschool learning experience should be provided with the basis for future school training. This experience has a significant impact on the development of a child's personality, it is important for children to learn with pleasure, to explore the world, phenomena and relationships. In order to provide children with modern skills education, it is also important to improve the learning approach together with the content. (pre-school curriculum <https://mape.skola2030.lv/resources/10>).

The analysis of literature

The competence approach is closely linked to Experiential Education and Learning by Experience. Thus, the knowledge of different theories in general and experiential learning will ensure better success for pre-school teachers in their carrying out educational reform tasks. The new pre-school curriculum emphasises that the teacher, as a planner and an example of good practice, performs the following activities: 1) creates a situation in which a child needs to acquire new knowledge, skills or habits, and awareness; discusses the outcome (how, where, how to do this), learns about the child's past experience (what a child already knows); 2) offers new information and opportunities for a diverse learning experience and discusses what assessment criteria should be, directs child's learning and gives support when needed, calls for applying the learned in practice and confirms what has been done; 3) assesses the performance of the child and follows their long-term development of awareness and skills, identifying what has been achieved and describing growth; urges the child to assess their own performance on the basis of the criteria set out at the beginning, discusses where the learned skills could still be useful and how to improve the performance (pre-school curriculum <https://mape.skola2030.lv/resources/10>).

John Dewey's educational approach can provide concrete answers to educators and parents, show a way to the creation of the environment needed for child grow, create a dialogue more successfully, allow a child to find a solution in a practical situation, to explore things and to express value-based attitudes. (Dewey, 1938, 12) Therefore, the contribution of each scholar to the implementation of pedagogical ideas gives us the opportunity to see a variety of pedagogical techniques highlighting the characteristics and specificities of a specific age, changing the public attitude to the necessary means of developing the child's personality.

One of the most influential persons of modern educational theory is John Dewey. His approach remains important not only during his lifetime but also nowadays. Even before such theories like the Cultural-Historical Theory by Lev Vygotsky and Genetic Epistemology by Jean Piaget, John Dewey developed progressive ideas on education. (Vygotsky, 1984, 385; Piaget, 1969, 213; Dewey, 1938, 2) The previously stated experience encouraged John Dewey to take

a different perspective on learning environments and successful conditions for children development. “Their ideas on the growth and development of children, the importance of learning by experience from interaction with natural objects and the natural environment, and the role of schools and teachers in society, set the stage for John Dewey and progressive education movement of the 20th century. Experiential educators should still discuss and debate their ideas because the issues they discuss are still relevant.” (Smith & Knapp, 2011, 31). Dewey points out the importance of appropriate learning time when children interact with their environment and they are actively involved with the school curriculum. He also goes on to say that human beings better learn through a hands-on approach and disagree with thinkers of his time who support behaviourism. He states that behaviourism ideas are too simplistic and cannot fully explain complex learning processes. Dewey emphasizes the idea that children should take active part in the process of their own learning and a passive reception of knowledge would only create a situation of imperfect skill acquisition. It is crucial to give children learning opportunities which will make them link present content to previous experiences and knowledge. (Dewey, 1938, 5) Learning is a life-long (continuous) process which is based on experience. “The principle of continuity of experience means that each experience deals with something that has gone before and changes somewhat the quality of those who come after [...] What he learned in terms of knowledge and skill in a single situation becomes a tool for interrupting and effectively addressing the situation that follows. The process lasts as long as life and learning continue.” (Massari et al., 2018, 19). Dewey creates a completely different learning methodology by stating the importance of getting new knowledge through impressions made upon us by natural objects. Later on, this becomes known as experiential education and the base of similar approaches such as problem-based learning. (Dewey, 1938, 33)

At first, it can look like Dewey’s approach to learning processes may not particularly stand out today, but in the early and mid-1900s, his ideas of education were completely different from that time’s system of schooling. He created the child-centred approach which placed great importance on learning connected to needs and interests of the child and made others notice the significance of exploration done by children. (Dewey, 1938, 4) According to Dewey’s principles, the role of the teacher is to serve more as a facilitator than as an instructor. The teacher should notice interests of children and then help them to develop their specific skills. “Unlike the traditional class situation where pupils can complete with each other or remain uninvolved or unmotivated, if the teaching process is structured according to the principles of experiential learning in which the teacher facilitates progress and the focus is on the learning process and not on the product, then the pupils will engage in direct experience, cooperate and learn one from each other about situations and problems of the real environments. Experiential

learning advocates claim that pupils will be more motivated to learn when they have a personal stake in the topic than when they are asked to review a topic or read a chapter in the textbooks that they are not directly involved in and do not see the meaning.” (Massari et al., 2018, 22). This kind of situations creates good experience and makes children want to find new information and develop new skills. Following these principles, the teacher can increase children’s desire to explore what the world can offer to them. As it was said before, the teacher should notice students, their talents and interests and then opportunities and ways how they can fully develop specific skills.

Of course, it is very important to make educational process gradual. That is why teachers and parents should develop each skill step by step at an appropriate time. One of main tasks of preschool is to prepare children to school environment by developing self-care skills. One way how to develop these skills is to teach a child to take responsibility. Responsibilities in preschool can include cleaning work place after work/play, taking care of one’s clothes and personal items, informing adults about dangerous situations, following roles for group and preschool, and other responsibilities. Introducing these skills and including them in child’s daily life can develop a stable rhythm of life which will increase the sense of security and prepare children for the future. For children, it is important to offer different ways how to develop self-care skills and explain in what situations these skills will be useful. Furthermore, for gradual skill development, it would be useful to think the learning process over and set realistic goals for a teacher and for students. To promote children to take care of their responsibilities, the teachers created tasks that each child needs to do every day of the week, for example, making sure that they clean working area after work/play, helping the teacher assistant to prepare tables for meal time, cleaning after themselves, or helping others with difficult tasks. In the beginning of the day the teacher tells children of all the things planned for a day or days ahead, so that children can understand what needs to be done. The teacher also can give children play activities and assignments that needs to be done by the end of the day, and children can decide how fast or slow the task should be done. At the same time, making children feel the responsibility and think of all the work that should be done by the end of the day makes them feel as a partner in the decision-making process. Children are eager to help and take responsibility, so preschool is especially suited for developing the ability to take responsibility, to plan the time for completing all the tasks needed to be done, and to learn the skills of self-service. It is important to understand and explain to children that parents will not always be by their side and able to help. By developing self-care skills of children, parents and teachers make the adaptation process easier.

Early years’ education has always placed great emphasis on the environment, in both indoor and outdoor education (Pestalozzi, Froebel, Montessori,

Dewey, etc.). Moreover, access to the natural environment in the form of outdoor learning has become an important part of several early childhood curricula and frameworks, such as that of England, Scotland, Australia, and parts of Canada (Barrable, 2019). Giving chance to explore freely and develop child's skills in a thoughtfully organized and safe environment is a much more effective way to manage positive behaviour and encourage learning process than setting up an environment where the adult is all the time redirecting children. A well-organized environment will keep children interested in activities and prevent misbehaving. It is important to understand that the term environment includes not only a safe place where children learn and develop domain fields such as cognitive, communication, social and motor ones, but also age and interests appropriate materials, equipment and activities.

One of the concepts of a well-organized and prepared environment which is created to encourage the independent learning and exploration process is offered by Maria Montessori. The specialist in Maria Montessori work, Michael J. Swiderski believes that she is a representative person who started an educational reform movement. The Montessori school environment was arranged according to subject areas, e.g., cooking, cleaning, gardening, art, caring for animals, library corner. Children were always free to move around the room instead of staying at desks. There was no limit to how long children could work on something they had chosen. Another related element of the Montessori method was the "decentring" of the teacher. The teacher was a "keeper of the environment". When children got into activities, the task of the teacher was to keenly observe and to intervene from the periphery. The focus was on self-realisation through independent activities, and the diligence of the teacher to unobtrusively orchestrate the integrity of the environment (Swiderski, 2011, 201). In other words, the focus is not on teacher and teaching methods but on children. By careful observation and planning, teachers spot the direction where the child is heading at and provide all conditions to help them succeed in what was planned. By doing this, teachers allow children to learn from their own insights and can think of possible explanations. Thus, the teacher is a link between children and thoughtfully designed environment.

Patrick R. Frierson defines Montessori environment as a constructing environment (primarily at school) providing external support for children's already available capabilities. With respect to self-determination, she seeks an environment that facilitates two aspects. First, an environment should facilitate children's self-directed, persistent, attentive interest in activities. With it comes that self-control involved in pursuing a chosen task to completion with order and excellence. Secondly, and equally importantly, the environment should provide occasions to cultivate self-discipline involved in respect for others, social cooperation, and deliberate submission to legitimate authority

(Frierson, 2016, 340). Both aspects are important for children's successful development. By having appropriate self-control, children will be able to solve problems successfully and have higher academic achievements as well. They can experience frustration in a more effective way and have better developed critical thinking skills. Of course, struggles can be met not only with self-control but also with self-discipline. When the adult is teaching these skills, he needs to find age-appropriate tools to help children practice and acquire self-discipline and control.

Vidnere draw attention to the concept of environment and space and the following components of the school professional space have been listed:

- technical materials;
- educational;
- social;
- cultural;
- subjects and activities;
- interactively communicative (Vidnere, 2019, 47).

She supports the idea that the educational area of schools is a structure in which certain classes are interlinked and extended: informative educational, culturally educational, theoretical education and practical education (Vidnere, 2019, 46).

The human need for achievements involves self-empowerment. If these needs are met, the pupil is aware of the opportunities and skills to achieve the goal, he is well equipped and skilled to get out of current hardships. He follows his own achievements, has skills to learn, perform day-to-day works and is able to assess them adequately. If a pupil does not need self-empowerment, his behaviour starts demonstrating adult dependency. The pupil underestimates his achievements, feeling he has failed and got a lack of tenacity, a lack of skills, and then leaving jobs uncommitted. Failing to meet these needs can lead to the sense of low self-esteem, depression and worry about the future (Spona, 2006).

The development of a child's learning and the overall parenting process depend on the feelings of a child. It's important how a child treats her/himself, how adults and peers experience their luck and failure (Svence, 1999).

In satisfying the needs in information, internal psychological transformation, development, self-awareness-raising of learning take place. Unmet needs, especially in self-awareness, peer and teacher learning, lead to children's negative behaviour (Spona, 2006).

By encouraging children, we can help develop their internal forces and courage to move towards a positive goal. The purpose of encouragement is to shift children's thinking from *I can't do it* to *I'll do it*, and teaching them to focus not on the result but on the process and to gain pleasure from it. Encouragement is the most important thing we need (Kanepeja, 2012).

If a child fails, it reduces the desire to make an effort, causes indifference and intellectual passivity (Baltusite, 2006).

Kanepeja and Lieģeniece believe that the joy of a child arises from the ability to accomplish something if his or her actions are assessed positively. The positive assessment raises the child's self-awareness. The self-awareness of a child is driven by understanding who he is, what his qualities are, how others treat him, and how this attitude appears (Kaņepēja & Lieģeniece, 2012).

At the pre-school age, the family plays the most important role in the development of the child. Positive learning experience based on positive social and cognitive experience depends on the effects of parenting. The best way of parenting at the preschool age, and not only at this age, is parental behaviour as a model. The child learns more from what she/he sees than from what she/he hears (Beltusite, 2006).

In Latvia learning problems need to be addressed by educators in close cooperation with parents, especially in situations where the experience of using the Latvian language in the family is insufficient. In order for the educator to better plan and advance the learning of the Latvian language of the child, it is important to explore the opinion of parents or adults involved in the care of the child regarding the provision of the Latvian language environment.

The results of the empirical research

The research team is grateful to the Latvia State Research Program “Latvian language” No. VPPIZM-2018/2-0002 for the considerable support during project implementation (2018 – 2019). The Project is fully suited for Latvian or adapted by an international survey of parents of bilingual children in Utrecht Bilingual Language Exposure Calculator or UBiLEC developed in Utrecht (Netherlands), which is in practical use in the work of the project. It is a complex of measures that helps to understand the interests of the child, the occupation of the parents, the education and the experience of using the Latvian language of family members. Parents are very widely surveyed about their children’s linguistic experience at home, in the kindergarten, in other lessons and their spare time. For example, answers to the question “Where did your child hear Latvian for the first time?” give the educator a chance to get to know the environment in which the child has first had an interest in the Latvian language. It is important for the educator to raise awareness of the need for greater use of the Latvian language for parents, as well as to provide positive support for the child's attempts to speak Latvian.

The survey covers the question “How well does your child know/understand Latvian?”, which helps to assess the quality and level of the language to be learned. When the teacher receives information on this issue, the teacher can more

accurately launch a conversation on promoting the development of a child's speech, as well as better perform pedagogical observations in the kindergarten environment.

The survey is designed for evaluating the language of bilingual children. Two groups of children are identified in the work of the project: a group of bilingual children attending the Latvian pre-school education programme and children attending a minority programme, which includes learning the Latvian language. Survey took place in capital city of Latvia.

The results of the survey on the use of Latvian in the family and on family members who can support children in the acquisition of Latvian are reproduced in two tables (tables 1 and 2). The call in the survey was as follows: “Think about the people your child talks to regularly at home, please. Mark them with “+” in the table, indicating how often each of them speaks to the child in Latvian and Russian.

This is important for the educator to make concrete proposals to a family about people who the child could have the closest contact for promoting Latvian learning.

Table 1 Information on Latvian usage and people regularly talking to children at home (bilingual children attending a pre-school education programme in Latvian)

	Only Russian	Hardly ever Latvian, almost always Russian	Seldom Latvian, usually Russian	50% Latvian, 50% Russian	Usually Latvian, seldom Russian	Almost always Latvian, hardly ever Russian	Only Latvian
Mother	3	3	2				2
Father	4	2		1	1		2
Sister/brother	1	2	1	2		1	
Sister/brother		1	1				
Sister/brother	1						
Grandmother I	5	1			1		2
Grandmother II	5					1	
Grandfather I	4		1		1		1
Grandfather II	3						1
Babysitter	1						1

The first table shows that 9 adults communicate with children only in Latvian, but the table below illustrates the situation in which only one person communicates with children using the Latvian language. It means that children who attend minority pre-school education programme have insufficient support for the Latvian language development.

Table 2 Information on Latvian usage and people regularly talking to children at home (children attending a minority pre-school education programme and learning Latvian)

	Only Russian	Hardly ever Latvian, almost always Russian	Seldom Latvian, usually Russian	50% Latvian, 50% Russian	Usually Latvian, seldom Russian	Almost always Latvian, hardly ever Russian	Only Latvian
Mother	6	1	2		1		
Father	4	2	1				
Sister/brother	4	1	1				
Sister/brother	1						
Sister/brother							
Grandmother I	4	1					
Grandmother II	5						
Grandfather I	6	1					
Grandfather II	4	1					
Babysitter	2		1				1

To make clear how well these people understand or speak the language, they are asked at what age each of them came into contact with the Latvian language. However, the question “How often does your child speak Latvian or Russian with you or with another family member?” helps to find out about the child's conversations with each of the named people. A survey of parents helps to clarify the sequence of learning the languages by a bilingual child, the linguistic environment for the various stages of the child's development, and the role of people in the child's immediate neighbourhood in the development of a balanced bilingualism. It helps to clarify the intensity of language usage, as well as partly the quality of the language within and outside the family (i.e. at educational establishments, in different interest groups, on holidays). The adequacy of answers depends on parental attitudes and their feeling of responsibility, but in general, this survey is also an essential part of the learning and development of the child's language.

Fisher admits that the child grows better in a subject when he teaches it to others. This method below are intended to help children:

- Decomposition – invite children to summarize what they read or explain why they learned it, encouraging them to focus their attention on the main thoughts in the fragment on the story, and to check how they understood it;
- Questioning – invite children to ask questions about the material what they read or learnt, urging attention to the main thoughts and the way they understood them;

- Finding out – ask children to find out every place in the text that is difficult for them to take a critical assessment of their level of knowledge;
- Prediction – direct children to think more broadly beyond the limits of a given text and situation, so that they draw conclusions and justify them according to indications found in the content or structure of the text (Fisers, 2005).

The aim of the education reform and competence approach is an inquisitive, creative and vibrant child living a healthy, safe and active life, encouraged to act independently, interested in learning and pleased to gain the experience of her/himself, others, the surrounding world and interaction within it (Skola2030).

If we believe that it is essential to promote independence, objectivity, the ability to justify and affect decisions, which are made by others, if we respect the child's personality, then we choose to justify emotionally, enthusiastically or practically the various ideas to be pursued and agree with the child on the actions to be taken (Tauriņa, 2015, 96).

Puren stresses that the competence approach to learning plays an important role, but self-vision develops only if the child is aware of the importance of the obtained information in his life and see possibilities to use this information. This way leads to it through acquiring thinking and learning skills (Purens, 2017).

Conclusions

1. Children develop skills in action, observe the attitude of adults, imitate them and try various techniques. Children no longer have to passively watch adults perform different activities, instead, they can be active themselves.
2. Children have difficulties in reaching agreement with peers, in adhering to rules - they do not always want to complete work, evaluating what has been accomplished, and expressing judgment. Interest in different topics, getting to know different subjects and expressing opinions on what has been learned or accomplished
3. The teachers' effort to create a positive psychological microclimate in classroom is highly valued, which is a very important prerequisite for the development of students' motivation to learn. An important role in the pedagogical process has also been allocated to different aspects of inclusive education.
4. Important focus of the pedagogical process is currently the connection of the study content with real life, since the competence approach requires the purposeful acquisition of knowledge where each learner understands why he or she is learning the offered study content.

References

- Barrable, A. (2019). Refocusing Environmental Education in the Early Year: A Brief Introduction to a Pedagogy for Connection. *Education sciences*, 9, 61, 1-8. Retrieved from https://www.researchgate.net/publication/331873838_Refocusing_Environmental_Education_in_the_Early_Years_A_Brief_Introduction_to_a_Pedagogy_for_Connection
- Baltušīte, R. (2006). *Skolotāja loma mācīšanās motivācijā*. Rīga: Izdevniecība RaKa.
- Dewey, J. (1938). *Experience and Education*. New York: Kappa Delta Fi. Retrieved from <https://archive.org/details/ExperienceAndEducation-JohnDewey/mode/2up>
- Fišers, R. (2005). *Mācīsim bērniem mācīties*. Rīga: Izdevniecība RAKA.
- Frierson, P.R. (2016). Making Room for Children's Autonomy: Maria Montessori's Case for Seeing Children's Incapacity for Autonomy as an External Failing. *Journal of Philosophy of Education*, 50, 3. Retrieved from <https://onlinelibrary.wiley.com/doi/abs/10.1111/1467-9752.12134>
- Kaņepēja, R., Lieģeniece, D., Mangule, I., Ukstiņa, R., Dzintere, D., Stangaine, I., Miķelsone, I., Millere, I., Platpers, A., & Gaugere, Z. (2012). *Ceļā uz skolu. Bērnu sagatavošana pamatizglītības ieguvei*. Rīga: Apgāds Zvaigzne ABC.
- Massari, G.A., Miron, F.M., Kamantauskiene, V., Alat, Z., Mesquita, C., Tzakosta, M., Verheij, J.K., & Zirina, T. (2018). *A Handbook on Experiential Education. Pedagogical guidelines for teachers and parents*. Romania: Editura Universității Alexandru Ioan Cuza din Iași.
- Piazhe, Zh. (1969). *Izbrannye psihologicheskie trudy*. Moskva: Prosveshhenie. Retrieved from http://elib.gnpbu.ru/text/piazhe_izbrannye-psihologicheskie-trudy_1969/go,14;fs,1/
- Purēns, V. (2017). *Kā attīstīt kompetenci*. Rīga: Izdevniecība RaKa.
- Skola 2030, Ministru kabineta "Noteikumi par valsts pirmsskolas izglītības vadlīnijām un pirmsskolas izglītības programmu paraugiem" (2019). Retrieved from <http://www.skola2030.lv/lv/skolotajiem/izglitibas-pakapes/pirmsskola>
- Smith, T.E., & Knapp, C.E. (2011). *Sourcebook of Experiential Education. Key Thinkers and Their Contributions*. New York and London: Routledge.
- Svence, G. (1999). *Attīstības psiholoģija*. Rīga: Apgāds Zvaigzne ABC.
- Swiderski, M.J. (2011). Sourcebook of Experiential Education. Key Thinkers and Their Contributions. In Thomas E. Smith & Knapp Clifford. E. (Ed.), *Maria Montessori Founding Mother of Experiential Education?* (pp. 197-207). New York and London: Routledge.
- Špona, A. (2006). *Audzināšanas process teorijā un praksē*. Rīga: Izdevniecība RaKa.
- Tauriņa, A. (2015). Bērna sasniegumu veicināšana pirmsskolā. No A. Špona (sast.), *Bērna jautājumi - personības izaugsmes pamats* (86-108). Rīga: Izdevniecība RaKa.
- Vidnere, M. (2019). Skolotāja profesionālā identitāte. No A. Šteinberga (sast.), *Skolotāja profesionālās identitātes teorētiskie pamati* (24-49). Rīga: RTU Izdevniecība.
- Vygotskij, L.S. (1984). *Sobranie sochinenij v 6 t.: T. 4: Detskaja psihologija*. Moskva: Pedagogika. Retrieved from http://elib.gnpbu.ru/text/vygotsky_ss-v-6tt_t4_1984/go,384;fs,1/

PIRMSSKOLAS PEDAGOGU NODARBINĀTĪBAS NEVIENLĪDZĪBAS ASPEKTI LATVIJĀ

Aspects of Inequality in the Context of Employment of Pre-School Teachers in Latvia

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Abstract. *Policy-making in education involves social agents at national, municipal and institutional levels. National regulations and financial capacity of municipalities determine working conditions of teachers and employment aspects at all levels of the education system. For several years, discussions have been taking place in Latvia involving employers of education sector and policy makers on tackling inequalities in pay and workload principles for pre-school teachers. Situation of the pre-school teachers varies across municipalities and is affected by their financial opportunities to sustain educational institutions and ensure teachers' salaries. In 2019, Latvian Trade Union of Education and Science Employees conducted a survey of all 119 municipalities in order to identify inequalities in the context of the pre-school teachers' employment. Actor network theory was used to examine links and interactions between actors in education policy, thus addressing inequalities in pre-school education. According to the survey, workload of the pre-school teachers is being reduced in order to meet the requirements of the regulatory framework regarding the minimum monthly wage of the teachers. Higher wages the teachers receive in Pierīga region, which is comparatively wealthier than other regions of Latvia. In order to ensure equal pay for all pre-school teachers in all municipalities, it is necessary to ensure financing from the state budget.*

Keywords: *Actor network theory, inequality, interaction, pre-school teachers, salary, teacher workload.*

Ievads

Introduction

Pirmsskolas izglītības pakāpe ir pirmā izglītības sistēmā, kurai ir būtiska loma indivīda tālākajās izglītības gaitās, konkurētspējai darba tirgū, socializācijai atbilstoši sabiedrībā pastāvošajām vērtībām. Pirmsskolas izglītībā ir jānodarbina

augsta līmeņa motivēti speciālisti, tāpēc nepieciešams veidot stratēģisku pieeju, lai pilnveidotu pirmsskolas izglītības iestāžu (PII) pedagogu darba kvalitāti un motivāciju (Organisation for Economic Co-operation and Development [OECD], 2019). Latvijā, saskaņā ar Izglītības likumu, pirmsskolas izglītība īstenojama bērniem no 1,5 gada vecuma, taču šī pakalpojuma pieejamība un pedagogu piesaiste atkarīga no katras pašvaldības prioritātēm un finansiālajām iespējām. PII pedagogiem, kuri strādā ar bērniem vecuma posmā no 1,5 – 4 gadiem, darba samaksu nodrošina pašvaldības no sava budžeta, bet pedagogiem, kuri strādā ar sagatavošanas posma vecuma bērniem (5-6 gadi), darba samaksa tiek nodrošināta no valsts budžeta (Izglītības likums, b.g.). Lai arī Latvijā visiem pedagogiem, strādājot ar izglītojamiem, izglītības pamatprasības ir vienādas (“Noteikumi par pedagogiem [...]”, 2018), Ministru kabineta noteikumi par PII pedagoga darba slodzi un darba samaksu (“Pedagogu darba samaksas noteikumi”, 2016) ietver nevienlīdzību: noteiktā zemākā darba algas likme visiem pedagogiem ir vienāda, savukārt darba slodze PII pedagogiem ir ievērojami lielāka nekā citiem skolotājiem. Šī problēma Latvijā tikusi aktualizēta jau vairākus gadus.

Ienākumu nevienlīdzības jautājums plašāk ir aplūkots Eiropas sociālo tiesību pīlārā, ar ko Eiropas Komisija (EK) iepazīstināja 2017. gada aprīlī. Pīlāra trešais princips nosaka, ka visiem ir tiesības uz vienādām iespējām. No 14 pamatrādītājiem, kas iekļauti pievienotajā sociālo rezultātu pārskatā, viens attiecas tieši uz ienākumu nevienlīdzību, bet vairāki citi – uz politikas jomām, kas cieši saistītas ar ienākumu nevienlīdzības palielināšanās apkarošanu un vienlīdzīgu iespēju nodrošināšanu (“Nevienlīdzības novēršana”, 2016). EK norāda, ka nevienlīdzība ir daudzdimensionāla problēma. Lai gan nevienlīdzību var vērtēt daudzās dažādās dimensijās, divi pamatjēdzieni ir rezultātu (ienākumu un resursu sadales) nevienlīdzība un iespēju nevienlīdzība. Pirmsskolas izglītības iestāžu pedagogu nevienlīdzības aspekti aptver gan rezultātu, gan iespēju nevienlīdzību.

Pētījumā izmantotas aģentu tīkla teorijas atziņas, jo nevienlīdzības veidošanos PII pedagogu nodarbinātībā, kā arī tās novēršanu, ietekmē dažādi aģenti vairākos līmeņos. Pētījuma mērķis bija identificēt nevienlīdzību PII pedagogu nodarbinātības kontekstā un izstrādāt priekšlikumus nevienlīdzības mazināšanai. Raksta mērķis ir atspoguļot pētījuma rezultātus par nevienlīdzību PII pedagogu darba slodzes un mēneša darba algas likmes kontekstā. Būtiska ir aģentu savstarpējā mijiedarbība nevienlīdzības novēršanā.

**Aģentu mijiedarbība nevienlīdzības mazināšanā pirmsskolas izglītības
iestāžu pedagogu nodarbinātības kontekstā**
Actor interaction for reducing employment inequality of pre-school teachers

Aģentu tīkla teorijā (*actor network theory*) tiek izceltas aģentu raksturojošās pazīmes: spēja izraisīt rīcību un spēja piesaistīt citus aģentus savu mērķu īstenošanai. Par aģentu tiek uzskatīts ikviens, kas rada rīcību; aģents ir vienība, kas rīkojas vai uz kuru tiek vērsta citu aģentu rīcība (Latour, 1997). Citiem vārdiem, par aģentu tiek uzskatīts ikviens, kas piesaista, apvieno citus aģentus, ikviens elements, kas iesaista telpu ap sevi, padara citus elementus atkarīgus no sevis un traktē citu gribu savā darbībā un retorikā (Callon & Latour, 1981; Šūmane, 2010). Aģentu tīkls ir sociāli nozīmīgu mezglu kopums, ko savieno viena vai vairākas attiecības. Mezgli vai aģentu tīkla dalībnieki ir vienības, kuras savieno attiecības, kuru modeļi tiek pētīti. Šīs vienības parasti ir personas vai organizācijas, kas var būt savienotas ar citām vienībām, tās tiek pētītas kā mezgli (*nodes*) (Marin & Wellman, 2009). Aģentu tīkla jēdziens ļauj likvidēt mikro-makro atšķirību; tīkls nekad nav lielāks par citu, tas vienkārši ir garāks vai intensīvāk savienots. Būtiski sekot tam, kā noteiktais aģents kļūst stratēģisks, pateicoties tā vadīto savienojumu skaitam un kā tas zaudē savu nozīmi, zaudējot savienojumus (Latour, 1997). Latūrs (1997) norāda, ka aģents ir viss, kas darbojas, iesaistās un ietekmē pasauli, un pasaule ietekmē viņu. Aģents var būt gan cilvēcisks, gan jebkāds cits elements, kopā veidojot (neviendabīgu) aģentu tīklu (Chesterman, 2006). PII pedagogu nodarbinātības nevienlīdzības aspekti skar gan fiziskas personas (piemēram, skolotājs, skolotāja palīgs, atbalsta personāls, direktors), gan juridiskas personas (piemēram, Saeima, Izglītības un zinātnes ministrija, pašvaldības, izglītības iestādes), gan dokumentus (piemēram, normatīvie akti, Ekonomiskās sadarbības un attīstības organizācijas (OECD) ziņojumi, Valdības rīcības plāns), gan finansējumu (valsts, pašvaldību budžeta līdzekļi).

Aģentu savstarpējā mijiedarbība šī pētījuma kontekstā var notikt dažādos līmeņos, taču kopumā visi aģenti ir vienā tīklā, un PII pedagogu nodarbinātības nevienlīdzības aspektus iespējams risināt:

- izglītības iestādes līmenī, kurā aģenti ir pedagogi, iestādes vadība, iestādes arodorganizācija u.c.;
- pašvaldības līmenī, kurā aģenti ir pašvaldības, pedagogi, arodorganizācijas, politiskās partijas, vecāki u.c.;
- nacionālajā līmenī, kurā aģenti ir pedagogi, pašvaldības, arodorganizācija, iesaistītās ministrijas, Saeima, Tiesībsargs, vecāku nevalstiskās organizācijas u.c.;

- starptautiskajā līmenī, kurā aģenti ir pedagogi, arodbiedrības organizācijas, iesaistītās ministrijas, OECD, Starptautiskā darba organizācija u.c.

Lai risinātu ar PII pedagogu nodarbinātību saistīto nevienlīdzību, nepieciešama inovācija, kas ir kā jaunu tīklu izveidošana, ko Lo (*Law*) dēvē par heterogēno inženieriju, jo tajā ir būtiska dažādu aģentu apvienošana vienoti funkcionējošā sistēmā, tīklā (Law, 1987; Šūmane, 2010). Iepriekš minētie aģenti ir iesaistīti izglītības sistēmas tīklā, un kopīgā mijiedarbībā būtu nepieciešams veikt grozījumus Izglītības likumā, Ministru kabineta noteikumos, kas attiecīgi tālāk ietekmētu pašvaldībās pieņemtos lēmumus un pedagogu darba līgumos fiksēto, lai novērstu nevienlīdzību.

Aģentu darbība tiek traktēta kā mērķu īstenošana, iesaistīšanās realitātes veidošanā, kas savukārt ir aģentu mijiedarbības rezultāts (Bruun & Hukkinen, 2003). Viena no aģentu mijiedarbības formām ir sociālais dialogs. Sociālais dialogs daudzās Eiropas valstīs, tajā skaitā Eiropas Savienībā, ir kļuvis par neatņemamu labas pārvaldības sastāvdaļu, lai arī tā attīstība un pieredze dažādās ekonomikas nozarēs atšķiras (Bechter, Brandl, & Prosser, 2017). Sabiedrisko procesu veidošanā viena no noteicošajām lomām ir valstij, tomēr arī sociālie partneri, tajā skaitā arodbiedrības, var būtiski ietekmēt lēmumu pieņemšanu publiskajā pārvaldē. Sociālās un ekonomiskās izmaiņas sabiedrībā nereti ir atkarīgas no tā, kā arodbiedrības var aizstāvēt savas pozīcijas un darbinieku intereses nacionālā un pārnacionālā līmenī (Stacenko, 2014). Latvijā sociālā dialoga ietvaros arodbiedrības nodrošina darba ņēmēju (PII nodarbināto) intereses:

- apvienojot nozaru un profesionālās arodbiedrības kopējo darba, ekonomisko un sociālo tiesību aizstāvībai;
- īstenojot sociālo dialogu ar valdību un darba devēju organizācijām;
- pārstāvēt darbinieku intereses valsts un pārvaldes institūcijās un tiesā;
- veicot likumu, citu tiesību aktu projektu ekspertīzi un izstrādājot priekšlikumus izmaiņām;
- piedaloties starptautiskajā arodbiedrību kustībā (Stacenko, 2014).

Kopumā pirmsskolas izglītības pakāpē iesaistīto aģentu loks ir pietiekami plašs, un pētījuma ietvaros tiek pētīta noteikta problēma, tāpēc ir izvirzīti ierobežojumi aģentu izvēlē, iekļaujot pedagogus, pašvaldības, arodorganizācijas un normatīvos aktus.

Pētījuma metodoloģija *Research methodology*

Autores, izmantojot Latvijas Izglītības un zinātnes darbinieku arodbiedrības (LIZDA) resursus, 2019. gadā laika posmā no 30. septembra līdz 5. novembrim

veica 119 pašvaldību aptauju, izsūtot vēstules ar atvērtajiem jautājumiem un lūdzot sniegt rakstiskas atbildes par pirmsskolas izglītības iestāžu pedagogu darba slodzi un mēneša darba algas likmi. Vēstules ar jautājumiem un aptaujas mērķi tika izsūtītas elektroniski uz publiski pieejamajām pašvaldību e-pasta adresēm, savukārt atbildes tika saņemtas gan elektroniski, gan pa pastu. Aptaujā tika iekļauti četri jautājumi. Katrai pašvaldībai tika lūgts sniegt informāciju atsevišķi par pedagogiem, kuri strādā ar bērniem vecumā no 1,5 līdz 4 gadiem un par tiem, kuri strādā ar bērniem vecumā no 5 līdz 6 gadiem, jo šīm pedagogu grupām darba samaksa tiek nodrošināta no atšķirīgiem budžetiem. No aptaujātajām pašvaldībām 9 ir republikas pilsētas un 110 novadi, pārstāvot visus Latvijas plānošanas reģionus: Vidzemi 26, Kurzemi 20, Zemgali 22, Latgali 21 un Rīgas reģionu 30 pašvaldības. Pašvaldību sniegtās atbildes aptver informāciju par 12,3 tūkstošiem pirmsskolas izglītības iestādēs nodarbinātajiem pedagogiem (administrāciju, skolotājiem, skolotāju palīgiem un atbalsta personālu). Papildus iepriekšminētajam, 2019. gada decembrī LIZDA dalīborganizāciju ietvaros tika aptaujāti PII pedagogi, lai noskaidrotu ieteikumus nepieciešamajām izmaiņām pirmsskolas pedagogu darba slodzē un darba samaksā. Respondentiem tika lūgts rakstiski argumentēt problēmas PII darba slodzes un darba samaksas aspektos, kā arī izvirzīt priekšlikumus problēmu risinājumiem. Kopumā tika iegūta apkopota informācija no 12 LIZDA apvienoto arodorganizāciju līderiem, kas aptver visus Latvijas reģionus.

Iegūtie aptaujas rezultāti tiek atspoguļoti apkopotā veidā, tos analizējot gan kvantitatīvi, gan kvalitatīvi. Salīdzinājumam kā atskaites punkts rakstā tiek izmantoti PII pedagogu darba slodzi un darba samaksu reglamentējošie normatīvie akti.

Pētījuma rezultāti ***Research results***

Pētījumā nozīmīga bija pašvaldību kā aģentu apzināšana, jo publiski līdz šim nebija pieejami visaptveroši dati par PII pedagogu darba slodzi un tai atbilstošo samaksu. Kā otra būtiskākā aģentu grupa tika izvēlēti pirmsskolas izglītības iestāžu pedagogi, lai noskaidrotu viņu priekšlikumus nevienlīdzības novēršanai, ko izmantotu turpmākā aģentu mijiedarbībā. Kā trešā aģentu grupa tika izvēlēti normatīvie akti, kas reglamentē darba slodzes un darba samaksas kārtību, lai noskaidrotu, vai un kādas izmaiņas/inovācijas citiem aģentiem tajos jāveic.

Pašvaldību izglītības iestādēs bērnu no piecu gadu vecuma izglītošanā nodarbināto pedagogu darba samaksai, izņemot iestādes vadītāju, viņa vietnieku un atbalsta personāla darba samaksai, tiek nodrošināts valsts finansējums ("Noteikumi par darbiem [...], 2018). Līdz 2016. gada 1. septembrim pirmsskolas pedagogiem bija noteiktas 30 darba stundas ar izglītojamiem un 4 apmaksātas

darba stundas nodarbību sagatavošanai (savukārt, *pārējiem pedagogiem – 21 darba stundas nedēļā, tai skaitā mācību stundas, nodarbības un fakultatīvi, to sagatavošana, individuālais un grupu darbs, u.c. darbi*). Šobrīd pirmsskolas pedagogiem ir noteiktas 40 darba stundas nedēļā, tai skaitā 36 darba stundas ar izglītojamiem un 4 darba stundas – nodarbību sagatavošanai (savukārt, *pārējiem pedagogiem – 30 darba stundas nedēļā, tai skaitā mācību stundas, nodarbības un fakultatīvi, to sagatavošana, individuālais un grupu darbs, u.c. darbi*) (“Noteikumi par darbiem [..], 2018). Jāsecina, ka šāds normatīvais regulējums negatīvi ietekmē vienlīdzīgas iespējas saņemt vienādu stundas tarifa likmi pedagogiem, kuru nodarbinātībai ir noteiktas vienlīdzīgas prasības. Rēķinot pēc noteiktās zemākās darba algas likmes visiem pedagogiem – 750 euro mēnesī, pirmsskolas pedagogu stundas tarifa likme ir 4,69 euro, salīdzinot ar pārējiem pedagogiem, kuri ir tiesīgi saņemt augstāku atalgojumu – 6,25 euro stundā. Līdz ar 40 stundu darba nedēļas ieviešanu pirmsskolas skolotājiem, daudzās pašvaldību PII tika samazināta pirmsskolas pedagogu darba slodze. Apkopojot pašvaldību aptaujas rezultātus var secināt, ka tikai 40% (vai 48 pašvaldībās) no visiem PII pedagogiem, kuri strādā ar bērniem vecumā no 1,5 līdz 4 gadiem, tiek nodrošināta iespēja strādāt pilnu darba slodzi 40 stundas nedēļā (skatīt 1. tabulu). Tātad PII pedagogiem tiek ierobežotas vienlīdzīgas iespējas uz pilnu darba slodzi, kas savukārt izraisa nevienlīdzību ienākumu apjomā salīdzinot ar citu pašvaldību PII pedagogiem. Dažkārt nevienlīdzība slodzes un darba samaksas apjomā ir vērojama pat vienas pašvaldības ietvaros. Viens no iemesliem šādai nevienlīdzībai ir bērnu skaita atšķirības PII.

1. tabula. Vidējā pirmsskolas pedagogu slodze 119 pašvaldībās 2019. gadā
Table 1 Average workload of pre-school teachers in 119 municipalities, 2019

Pedagogi, kuri strādā ar bērniem vecumā no 1,5 līdz 4 gadiem			Pedagogi, kuri strādā ar bērniem vecumā no 5 līdz 6 gadiem		
Vidējā slodze pašvaldībā	Pašvaldību skaits	Īpatsvars % no kopējā skaitā	Vidējā slodze pašvaldībā	Pašvaldību skaits	Īpatsvars % no kopējā skaitā
x	x	x	0,26 – 0,49	3	2,5
0,50 – 0,69	9	7,6	0,50 – 0,69	6	5,0
0,70 – 0,79	8	6,7	0,70 – 0,79	12	10,1
0,80 – 0,89	25	21,0	0,80 – 0,89	17	14,3
0,90 – 0,99	29	24,4	0,90 – 0,99	52	43,7
1,00	48	40,3	1,00	29	24,4

Avots: LIZDA aptaujas dati

Visās pašvaldībās tiek nodrošināta algas likme, kura nav zemāka par normatīvajos aktos noteikto 750 euro mēnesī. Vairāk par noteikto zemāko mēneša darba algas likmi pašvaldība ir lēmusi maksāt tikai vienā piektajā daļā no pašvaldību kopskaita pirmsskolas pedagogiem, kuri strādā ar bērniem vecumā no

1,5 līdz 4 gadiem (skatīt 2. tabulu). Augstākā likme pirmsskolā ir noteikta Carnikavas novadā – 1006 euro.

2. tabula. *Pirmsskolas pedagogu vidējā mēneša darba algas likme (euro) 119 pašvaldībās 2019. gadā*

Table 2 *Average monthly salary (euro) for pre-school teachers in 119 municipalities, 2019*

Pedagogi, kuri strādā ar bērniem vecumā no 1,5 līdz 4 gadiem			Pedagogi, kuri strādā ar bērniem vecumā no 5 līdz 6 gadiem		
Vidējā darba algas likme pašvaldībā	Pašvaldību skaits	Īpatsvars % no kopējā skaitā	Vidējā darba algas likme pašvaldībā	Pašvaldību skaits	Īpatsvars % no kopējā skaitā
750	93	78,2	750	86	72,4
751 - 799	8	6,7	751 - 799	13	10,9
800 - 849	9	7,6	800 - 849	11	9,2
850 - 899	2	1,7	850 - 899	2	1,7
900 - 949	5	4,2	900 - 949	5	4,2
950 - 999	1	0,8	950 - 999	1	0,8
1000 - 1006	1	0,8	1000 - 1006	1	0,8

Avots: LIZDA aptaujas dati

Salīdzinot pirmsskolas pedagogu vidējo darba samaksu pašvaldībās ar 2018. gadā fiksēto vidējo darba samaksu (bruto) valstī, kura sasniedza 1004 euro mēnesī (Centrāla statistikas pārvalde [CSP], 2020) un izglītības nozarē – 823 euro, jāsecina, ka pirmsskolās atalgojums ir salīdzinoši ļoti zems. Pēc Finanšu ministrijas un Centrālās statistikas pārvaldes prognozēm, 2019. gadā vidējā darba samaksa valstī ir plānota – 1063, bet 2020. gadā -1121 euro mēnesī. Pirmsskolas izglītības iestāžu pedagogu darba samaksa ir būtiski zemāka nekā pārējiem pedagogiem neraugoties uz to, ka jau no 2004. gada tika noteiktas obligātās izglītības un profesionālās kvalifikācijas prasības pedagogiem, tostarp, arī pirmsskolas izglītības pedagogiem tika noteikta obligāta augstākā pedagoģiskā izglītība. Ļoti daudzi pirmsskolas pedagogi ieguva augstāko izglītību maksas studijās, kā arī regulāri apmeklēja profesionālās kompetences pilnveides kursus, īpaši jau pagājušajā un šajā mācību gadā, jo ar 2019./2020. mācību gadu tiek īstenots jaunais kompetencēs balstītais mācību saturs pirmsskolās. Arī 2019. gada OECD pētījums apliecina, ka Latvijā, Īslandē un Vācijā ir vislielākais stundu skaits, ko PII pedagogs pavada kopā ar bērnu, bet atalgojums ir viens no zemākajiem, salīdzinot ar citām OECD valstīm (OECD, 2019).

PII pedagogu nodarbinātības nevienlīdzības problēmas nav izdevies atrisināt jau vairāku gadu desmitu laikā, līdz ar to vēl nav sasniegts aģentu mijiedarbības rezultāts. LIZDA apvienoto arodorganizāciju līderu aptaujā visbiežāk kā viens no PII pedagogu nevienlīdzības problēmas risinājumiem minēti grozījumi Izglītības likumā, kas noteiktu, ka visiem PII pedagogiem darba samaksa tiek nodrošināta

no valsts budžeta. Aptaujātie respondenti uzskata, ka būtu nepieciešami grozījumi Ministru kabineta noteikumos Nr. 445 par pedagogu darba samaksu, kuros vienādotu zemāko darba algas likmi un darba slodzi. Tas novērstu situāciju, ka katra pašvaldība nodrošina zemāko darba samaksu un darba slodzi, atkarībā no saviem finansiālajiem resursiem un izpratnes par esošo nevienlīdzības problēmu. Inovācijas bieži saskaras ar pretestību no citiem aģentiem atšķirīgo interešu dēļ, tāpēc tās sekmīgai īstenošanai iniciatoriem jāatrod atbalstītāji, jāpārvar pretestība (Akrich, Callon, & Latour, 2002). Kā inovatori var būt arodorganizācijas, kura apvieno pedagogus un kuras kā aģentus - atbalstītājus problēmas risināšanai piesaista pašvaldības, politiskās partijas, vecākus, Izglītības un zinātnes ministriju, Saeimu. Inovācijas realizēšana atkarīga no inovatora prasmēm, iespējām ietekmēt citu aģentu intereses atbilstoši saviem izvirzītajiem mērķiem un cenšoties citus aģentus padarīt par inovācijas tīkla būtisku sastāvdaļu (Callon, 1987). Būtiskākais šķērslis inovācijas realizēšanai (nevienlīdzības novēršanai) ir fiskālā ietekme un atšķirīgās politikas veidotāju intereses, prioritātes.

Secinājumi un priekšlikumi *Conclusions and recommendations*

1. Pirmsskolas izglītības iestāžu pedagogu nodarbinātības nevienlīdzības aspekti aptver gan rezultātu, gan iespēju nevienlīdzību, skarot šādus aģentus: fiziskas personas, juridiskas personas, dokumentus, finansējumu.
2. Aģentu savstarpējā mijiedarbība var notikt dažādos līmeņos (iestādes, pašvaldības vai nacionālais), taču kopumā visi aģenti ir savienoti vienā tīklā.
3. Viena no aģentu mijiedarbības formām ir sociālais dialogs. Pedagogu nevienlīdzības mazināšanā viena no noteicošajām lomām ir valstij, tomēr arī sociālie partneri, tajā skaitā arodbiedrības, var būtiski ietekmēt lēmumu pieņemšanu publiskajā pārvaldē.
4. Latvijā noteiktais normatīvais regulējums negatīvi ietekmē vienlīdzīgas iespējas saņemt vienādu stundas tarifa likmi pirmsskolas pedagogiem, salīdzinājumā ar citiem pedagogiem, neraugoties uz to, ka visu pedagogu nodarbinātībai ir noteiktas vienlīdzīgas prasības.
5. Vairākumam pirmsskolas pedagogu tiek ierobežotas vienlīdzīgas iespējas uz pilnu darba slodzi, kas savukārt izraisa nevienlīdzību ienākumu apjomā, salīdzinot ar citiem pedagogiem.
6. Lielākajai daļai pirmsskolas pedagogu ir noteikta zemākā darba algas likme, kā arī mēneša ienākumu faktiskais apjoms ir vēl zemāks, jo pedagogiem nav iespēju strādāt pilnu darba slodzi.
7. Aģentu mijiedarbība dod pozitīvus rezultātus daļā no pašvaldībām, kurās pedagogu nevienlīdzība pašvaldības ietvaros ir novērsta.

8. Nevienlīdzības mazināšanai pedagogu nodarbinātībā kā risinājums ir jaunu inovāciju radīšana, kur viena no iespējām ir jauna aģentu tīklu izveidošana. Arodbiedrības organizācijai kā jaunu inovāciju aģentam būtu jārosina sociālā dialoga ietvaros veikt grozījumus normatīvajos aktos, kas noteiktu, ka visiem pirmsskolas pedagogiem darba samaksa tiek nodrošināta no valsts budžeta, kā arī jāvienādo darba slodze un stundas tarifa likme, salīdzinājumā ar citiem pedagogiem.

Summary

The aim of the study was to identify inequalities in the context of employment of the pre-school teachers and to develop proposals for its reduction. The authors of the paper particularly focus on inequalities of pre-school teachers' workload and monthly salary rates. In the paper, analysis of formation of inequalities is based on the findings of actor network theory. Interaction between actors in tackling inequality is essential. According to the theory, this process is influenced by a range of actors at several levels such as people (e.g. teachers, teacher assistants, support staff, school principals), legal bodies (e.g. Saeima, Ministry of Education and Science, municipalities, educational institutions), documents (e.g. laws, Reports of the Organization for Economic Co-operation and Development, Government Action Plan), and funding (the state's or municipal budget). Aspects of inequality in the employment of teachers in pre-school education embrace both inequalities in outcomes and opportunities, affecting all actor groups (people, legal bodies and organizations, documents, and funding).

The study reveals that equal opportunities for full-time employment are restricted for the teachers in a number of pre-school establishments in different regions of Latvia, which in turn leads to inequality of income in comparison with the pre-school teachers in Riga and Pierīga municipalities. Occasionally, inequalities of workload and pay can be observed even within a single municipality. One of the reasons for this is different number of children in pre-school establishments.

An interaction between actors can take place at different levels, namely pre-school, municipal, and national, but in general all actors are connected in one network. One of the forms of agent interaction is social dialogue. The state has a key role to play in reducing teacher employment inequality, but social partners, including trade unions, can also have a significant influence on decision-making in education policy. The regulatory framework in Latvia has a negative impact on equality of hourly rate for pre-school teachers compared to other teachers, despite the fact that there are equal requirements for the employment of all teachers. Most pre-school teachers are restricted to full-time employment opportunities, which in turn leads to income inequality compared to other educators. They have a lower salary rate, and the actual monthly income is even lower because they are not able to work full time.

The data show, that interaction between actors leads to positive changes in some municipalities where inequality of teachers has been eliminated within the municipality. Innovative solutions are welcomed in order to reduce inequalities in teacher employment. The authors propose developing new agent network within which a trade union organization as a new innovation agent should encourage social dialogue. The outcome of that should be amendments to legislation requiring all pre-school teachers to be remunerated from the state budget and equalize workload and hourly salary rates with other teachers.

Literatūra References

- Akrich, M., Callon, M., & Latour, B. (2002). The key to success in innovation. Part II: The art of choosing good spokespersons. *International Journal of Innovation Management*, 6(2), 207-225.
- Bechter, B., Brandl, B., & Prosser, T. (2017). Engagement in European Social Dialogue: An investigation into the role of social partner structural capacity. *Industrial Relations Journal*, 48(4), 365–382.
- Bruun, H., & Hukkinen, J. (2003). Crossing boundaries: An integrative framework for studying technological change. *Social Studies of Science*, 33(1), 95-116.
- Callon, M., & Latour, B. (1981). Unscrewing the big Leviathan: How actors macro-structure reality and how sociologists help them to do so. In K. Knorr-Cetina, & A.V. Cicourel (Eds.), *Advances in social theory and methodology. Toward an integration of micro- and macro-sociologies* (pp. 277-303). Boston: Routledge & Kegan Paul.
- Callon, M. (1987). Society in the making: The study of technology as a tool for sociological analysis. In W. Bijker, T. P. Hugues, & T. Pinch (Eds.), *The social construction of technological systems. New directions in the sociology and history of technology* (pp. 83-103). Cambridge, MA: MIT Press.
- Centrālā statistikas pārvalde. (2020). Darba samaksa. Pieejams <https://www.csb.gov.lv/lv/statistika/statistikas-temas/socialie-procesi/darba-samaksa>
- Chesterman, A. (2006). Questions in the sociology of translation. In J.F. Duarte, A. Rose, & T. Seruya (Eds.), *Translation studies at the interface of disciplines* (pp. 9-27). Amsterdam, NLD: John Benjamins Publishing Company.
- Izglītības likums. (1998). Pieejams <https://likumi.lv/doc.php?id=50759>
- Knoke, D., & Yang, S. (2008). *Social Network Analysis*. Los Angeles: Sage Publications.
- Latour, B. (1997). On actor-network theory. A few clarifications plus more than a few complications. Retrieved from <http://www.bruno-latour.fr/sites/default/files/P-67%20ACTOR-NETWORK.pdf>
- Law, J. (1987). Technology and heterogeneous engineering: The case of Portuguese expansion. In W. Bijker, T.P. Hugues, & T. Pinch (Eds.), *The social construction of technological systems. New directions in the sociology and history of technology* (pp. 111-135). Cambridge, MA: MIT Press.
- Marin, A., & Wellman, B. (2009). *Social Network Analysis*. Retrieved from <https://pdfs.semanticscholar.org/aa4d/5f9ae3f6e6ae16a1de02f7b6daddf615a238.pdf>
- Nevienlīdzības novēršana. (2016). Eiropas pusgada tematiskā faktu lapa. Pieejams https://ec.europa.eu/info/sites/info/files/file_import/european-semester_thematic_factsheet_addressing-inequalities_lv.pdf
- Noteikumi par darbiem, kas saistīti ar iespējamu risku citu cilvēku veselībai, un obligāto veselības pārbaūžu veikšanas kārtība Nr. 477. (2018). Pieejams <https://likumi.lv/ta/id/300636-noteikumi-par-darbiem-kas-saistiti-ar-iespejamu-risku-citu-cilveku-veselibai-un-obligato-veselibas-parbauzu-veikšanas-kartiba>
- Noteikumi par pedagogiem nepieciešamo izglītību un profesionālo kvalifikāciju un pedagogu profesionālās kompetences pilnveides kārtību Nr. 569. (2018). Pieejams <https://likumi.lv/ta/id/301572-noteikumi-par-pedagogiem-nepieciemamo-izglitibu-un-profesionalo-kvalifikaciju-un-pedagogu-profesionalas-kompetences-pilnveides>

- Organisation for Economic Co-operation and Development. (2019). *Education at a Glance 2018: OECD Indicators*. Paris: OECD Publishing. Retrieved from https://www.oecd-ilibrary.org/education/education-at-a-glance-2019_f8d7880d-en
- Pedagogu darba samaksas noteikumi Nr. 445. (2016). Pieejams <https://likumi.lv/ta/id/283667-pedagogu-darba-samaksas-noteikumi>
- Stacenko, S. (2014). *Arodbiedrību loma sociālajā partnerībā publiskās pārvaldes lēmumu pieņemšanā* (Doktora disertācija). Pieejams <https://dspace.lu.lv/dspace/handle/7/4945>
- Šūmane, S. (2010). *Lauku inovācija: jaunu attīstības prakšu veidošana. Bioloģiskās lauksaimniecības piemērs*. (Doktora disertācija). Pieejams https://www.szf.lu.lv/fileadmin/user_upload/szf_faili/Petnieciba/promocijas_darbi/Sumane_Sandra_2010.pdf

GLOBAL CITIZENSHIP EDUCATION: PARENTS' REFLECTIONS

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Abstract. *The paper aims to contribute to the understanding of the concept global citizenship education. Global citizenship education is defined as democratic and sustainable education that pursues to educate a global citizen who is able to perceive the processes of the modern society, to demonstrate a positive attitude and to adapt to the global environment.*

It is emphasised that global citizenship is a factor ensuring development of a global citizen and his/her functioning within the global context. The analysis of the European and Lithuanian documents revealed that global citizenship education has to be initiated at the pre-primary school because children aged 5- to 7-years are capable to form/construct new global skills. Thus, to have global citizenship education integrated into the pre-primary school education is a must, but still gaps and obstacles exist.

The objectives of the research are to investigate how the parents of pre-primary school aged children perceive the concept global citizenship. Data for this research were collected using the qualitative method - an interview. A major advantage of an interview is that this method allows to investigate parents' individual perception of global citizenship education.

The most interesting aspect of the data gathered is that parents do not demonstrate complete understanding of global citizenship education and majority of them are not completely familiar with this phenomenon. They relate global citizenship education to travelling and living abroad, to knowledge of other countries/cultures and specific social issues such as pollution, discrimination, poverty. Taking into consideration the complexity of this process the parents' perception is insufficient. Therefore, further study has to be initiated regarding teachers' attitude to initiation and implementation of global citizenship education into the curriculum of the pre-primary school.

Keywords: *global citizenship education, pre-primary school age, education, parent's perception.*

Introduction

In the constantly developing global life of society a new trend of global citizenship became the main concern of the education system. It is important due to a rapid change in the educational needs and wishes of learners despite their age. There is a growing number of the European and Lithuanian documents regulating the education policy that acknowledges the great significance of global education and its specific aspect - global citizenship education. (Maastricht Global Education Declaration, 2002; Statement on Development Education and

Awareness Raising, 2004; Strategy for Education for Sustainable Development 2005; White Paper on Intercultural Dialogue, 2008, Conception of Global Education, 2015; Lietuva ir globalusis švietimas, 2017; Resolution on the implementation of the sustainable development goals of the united nations in Lithuania, 2018; Innovation strategy for education and training, 2018). Having reviewed the situation in the international and national contexts and having analysed the definitions and in-depth explanations of the concept global citizenship, it has been admitted that global citizenship education is widely discussed by the educators, practitioners and scholars. Initiation and implementation of global citizenship education is recommended to be started at the pre-primary school (5- to 7-years old children) (Chaput & Arnold, 2010; Jorgenson, 2010; Symeonidis, 2015; Augustinienė & Pocienė, 2016; Hainsworth, 2017; Sy, 2017; Tarozzi, 2016).

The scope of global citizenship education includes various scientific, personal and professional fields of the modern life. Thus, it leads to the necessity to acquire new knowledge, develop/construct new skills and strengthen inner motivation to become and act as a global citizen. The specific issue will be addressed focusing on the complexity of global citizenship education: Do parents, of the of 5- to 7-years old children understand the essence and integral dimensions of global citizenship education? This research seeks to investigate the parents' perception of global citizenship education.

The article employs the methods of content analysis that allows to review the most important documents of the EU and the Republic of Lithuania concerning the definition and dimensions of global citizenship education; synthesis and generalization will be used for provision of detailed overview of the concept and its complexity. The qualitative research design and the method of interview are applied to investigate parents' perception of global citizenship education.

Theoretical Analysis of the concept *Global Citizenship Education*

In the era of constant globalization and internationalization modernized humanity has been raising questions and expressing concerns regarding global education and meaningful citizenship as well as about its global dimensions. Empowering learners to become active global citizens is a key issue of many international institutions and organizations that take measures concerning implementation of the global education throughout the whole world. Global citizenship education is an integral part of global education and a specific type of education enabling a learner to become a global citizen. It equips learners with the necessary knowledge, values, attitudes and skills to understand, create and sustain people's lives locally, nationally and globally (UNESCO, 2013, 2014a, 2014b, 2015, 2017).

The twenty-first century schools must cope with new questions related to internationalization of curriculum and meeting new demands of the young learners and to revisit their thinking and action frameworks. As the European documents emphasize global citizenship education is based on the belief that globalization is a new world paradigm; it functions as an interconnected system that influences how citizenship operates. The global frame does not replace attention to national and local issues. Rather this frame re-orientates citizenship education so that learners become aware of the issues and the factors at many levels that shape the world around them. Global citizenship refers to a sense of belonging to a broader community and common humanity and aims to be transformative, building the knowledge, skills, values and attitudes that learners need to be able to contribute to a more inclusive and peaceful world. This process of education takes a multifaceted approach, employing concepts and methodologies including human rights education, peace education, education for sustainable development and education for international understanding and aims to advance their common objectives (CONCORD, 2004; UNESCO, 2013, 2014a, 2014b; IBE-UNESCO, 2018; OECD, 2018).

Global citizenship education should be started to be implemented beginning from early childhood and continuing through all levels of education and into adulthood, requiring both 'formal and informal approaches, curricular and extracurricular interventions, and conventional and unconventional pathways to participation (UNESCO, 2017). As K. Mundy (2007) notes very young age children are enculturated into their local culture, but nowadays this process might be combined with the opposite process of acculturation. Children's thinking, worldview, norms, values beliefs etc. are shaped in a different way due to globalization. These interconnected processes direct young learners to a global living style and children tend to be more open for the global society (Mundy, 2007). Great thinkers such as Vygotsky (1991), Piaget (2007) and Dewey (2011) all agree that children's social experiences are highly influential and offer transformational opportunities. Precisely speaking, the result of becoming a global citizen may be achieved just through a social interaction. Thus communicating (interacting) to each other and making influence on knowledge acquisition (construction), interpretation and combination with previous experience enable a pre-primary aged child to become a proactive citizen of the world (Dewey, 2011).

In an attempt to develop a precise definition for global citizenship education, OXFAM (2007) suggested that a 'global citizen' is someone who:

- is aware of the wider world and has a sense of their own role as a world citizen;
- respects and values diversity;

- has an understanding of how the world works economically, politically, socially, culturally, technologically and environmentally;
- is outraged by social injustice;
- is willing to act to make the world a more equitable and sustainable place;
- participates in and contributes to the community at a range of levels from the local to the global (Oxfam, 2015, 5).

Constructions of childhood, early childhood education practices, and approaches to early childhood education all lead to understandings about a 'child as a citizen.' Children in classrooms around the world are engaged in learning which focuses on civic responsibility, environment protection, human rights, norms and values, willingness to help and participate in various social activities, etc., including many of the aforementioned characteristics of a global citizen, from a very young age (Twigg, Pendergast, & Twigg, 2015, 79).

To sum up, early childhood is an important period in which personality is shaped and universal morality is structured. It has to become a necessity to educate individuals in terms of the freedoms and responsibility in societies which are not limited only to themselves. It would be possible to achieve such an aim via the integration of global citizenship with early childhood education. Global citizenship aims to structure the world for living in peace through love, respect, understanding and justice. In the world in which inequality is on the stage, creating awareness and sensitivity in terms of an individual's part in the whole world from their early years can be the key.

Research Design

The methodological approach taken in this research is a qualitative research methodology. The method of interview was used for gathering information. The interview was initiated aiming to talk to the participants (parents) about the main object – global citizenship education. The aim was to investigate how the parents of pre-primary school aged children perceive the mentioned concept and what they think means to be a global citizen. The method of interview was used intentionally, as K. Kardelis (2007) notes the qualitative methods provide a researcher with a possibility to penetrate into the essence of the phenomena. An interview creates favorable circumstances to analyze individuals' expressed ideas when they act in the natural setting and the phenomena is interpreted using daily individuals' language. When an interview is organized and initiated the information can be obtained in a pleasant environment, the participants can freely express their concerns, talk about own experience, values and beliefs.

The research used semi-structured purposeful interview (Patton, 1990) where questions and their sequence were foreseen in advance, but a researcher could ask additional questions not included into the list of pre-prepared questions aiming to reveal the essential points of the research object. Such interview is called purposeful (Patton, 1990), a researcher has a possibility to be more flexible with questions to be asked and words to be used. L. Rupšienė (2007) emphasizes importance to be an active listener and to probe participants. The negative aspect might be getting sidetracked from the main topic, when a participant does not follow the desired course of the questions and skips the direct answers.

Preparation. The basic questions have been foreseen and prepared by the researcher such as How do you understand the concept global citizenship education? What main ideas come to your mind when you think about this concept? What dimensions may be discussed talking about global citizenship education? Such questions may reveal the parents' perception of global citizenship education, or at least the integral dimensions of this process. Other questions might be asked to gather additional information: How do you understand the concept global citizen? Is your child capable to be and/or act as a global citizen? Does your child behave like a global citizen? The questions allowing to acquire more precise information on different aspects of the topic can be asked such as How do you understand...?, Do you see that as?, Are these concepts similar or different? etc.

Sample. Three (3) informants have been recruited for this research. The sample of the qualitative research can be with few informants as noted by L. Rupšienė (2007). V. Žydžiūnaitė and S. Sabaliauskas (2017) demonstrated the same approach stating that the size of sample of qualitative research is not so relevant, but the main focus is on the interview content, the information recorded and gathered, the essential elements of the object to be revealed by the participants. It is proposed by the same scholars that it is significantly important to select unique participants and to disclose remarkable points. The participants were selected by the criteria as follows:

- have a 5- to 7-years-old child (children);
- are interested in educational innovations related to this age group;
- have a degree of higher education.

The first participant (P1) lives in Vilnius (Lithuania), has acquired the Bachelor degree (English Philology), has established a school of non-formal education for 5- to 7-years-old children; has a 5-years-old child.

The second participant (P2) lives abroad, migrated from Lithuania 4 years ago, has acquired the professional Bachelor degree (Food Processing), has a 7-years-old child.

The third participant (P3) lives in Klaipėda (Lithuania), has acquired the Bachelor degree (Education), has a 6-years-old child.

Research Results

The interviews were recorded, transcribed, divided into segments and labeled. The main themes and topic related to the concept of global citizenship have been distinguished (see Table 1 and Table 2).

Table 1 Main themes and topics of the interview

Interview questions	Main themes	Topics
How do you understand the concept global citizenship? What are the main elements (dimensions) of global citizenship? What main ideas come to your mind when you think about this concept? Does your child behave like a global citizen?	Knowledge Values Motivation	World Culture Tolerance Equality Respect Willingness to help

Table 2 Reflection of main themes/topics of the interviews

Main theme	Topic	Citation
Knowledge	World Culture	<p><...> different global activities (<i>įvairios veiklos globaliu mastu</i>).<...> (P1)</p> <p><...> <i>Knowledge of various cultures (žinios apie skirtingas pasaulio kultūras), <...> countries, as I saw myself, it is very interesting for my child to see something new during our trips (šalis, nes pati mačiau, kaip vaikui įdomu pamatyti kažką naujo per mūsų keliones); <...> 'cause we live abroad, I think it can be close to other culture and living there (o kadangi ir patys gyvename kitoje šalyje, tai tikriausiai tai būtų artima kitai kultūrai ir gyvenimu joje) <...> (P2)</i></p> <p><...> <i>(she) speaks, plays with friends in English, but... oh, it's OK for me, more languages she can speak more opportunities I see (kalba, žaidžia su draugais angliškai, bet ..., ai, man tai gerai, daugiau kalbų mokės, daugiau galimybių) <...> (P2)</i></p> <p><i>I think ... globality may be interconnected to the world in common... and maybe knowledge of the world, different people, mmm..., their lifestyle, ...and probably their differences...(Manau, ... globalumas gali būti siejamas su pasauliu..., na ir, ... gal žiniomis apie pasaulį, kitokius žmones, ...mmm..., jų gyvenimą, ...tikriausiai skirtumus...)</i> (P3)</p>

<p>Values</p>	<p>Tolerance Respect Care</p>	<p><...> citizenship is an understanding of a bit different child ... that is not just responsibility for own nation but the globe in general as well (pilietišķumas, tai kitokio vaiko supratimas, ... tai žmogaus atsakomybė ne tik savo tautai, bet ir pasauliui). (P1) <...> tolerance (tolerancija) <...>;</p> <p><...> responsibility for own parents, grandparents, and obviously, the group mates and a group teacher (atsakingumas prieš savo tėvelius, senelius ir ... aišku, grupės vaikus, auklėtoją) <...> (P1)</p> <p><...> 'cause we live abroad not in Lithuania, we shouldn't forget the mother tongue and understand that you are a citizen of Lithuania (kadangi gyvename ne Lietuvoje, aišku reikia neužmiršti gimtos šalies, kalbos, suprasti, kad esi lietuvis), <...>, but it's clear that children think they are English people (bet aišku jau, vaikai save laiko anglais,) <...> (P2)</p> <p>Values are propagated widely everywhere nowadays, such as for instance tolerance, non-discrimination, not to mock and jeer at others (Vertybės, dabar plačiai minimos visur, tolerancija, nediskriminuoti kitų, nesišaipyti, nesityčioti,)</p> <p><...>, I guess that it is similar situation in the whole world. I think it is very important to know that you are Lithuanian and just then to look around. (manau visame pasaulyje vienodai. Aš manau, kad svarbiausia žinoti, kad esi lietuvis, o po to jau žvalgyti aplinkui) <...> (P3)</p>
<p>Motivation</p>	<p>Willingness to help</p>	<p><...> ensuring welfare of the country (šalies gerovės užtikrinimas) <...></p> <p>Learning to be responsible for own actions (Mokymasis jaustis atsakingu už savo veiksmus). (P1)</p> <p><...> to take care of animals because we have a dog at home, so that's a reason to learn to be more responsible, oh ... and to take care of it (<...> prižiūrėti gyvūnus, nes auginame šunį, tai mokomės atsakomybės, ai ..., kur dar priežiūra) <...> (P1).</p> <p>As I remember the child was shocked when he saw these homeless people with covers in the streets..., so I had to explain what people they are, maybe they are lazy and don't want to work <...> talked about how a country, that is people can help such poor people <...> (Kiek prisimenu, vaikui buvo šokas, kai pamatė tuos "bomžus", su "kaldrom" gatvėse..., nu ką, aiškinau, kokie čia gyvena, tingi dirbti, <...> kalbėjom kaip šalis, na ... kiti žmonės, gali jiems padėti <...>) (P2)</p> <p><...> need to live healthy, to do some sport, tell others not to throw garbage everywhere <...> learned how to keep house clean and tidy after different activities <...>; we talk about empathy when see homeless people <...> (<...> reikia sveikai gyventi, sportuoti, pasakyti kitiems, kad nešiūkšlintų, <...> mokomės tvarkytis po įvairios veiklos <...>; kalbame apie gailestį, kai pamatome kokį benamį <...>) (P3)</p>

The current research found that parents of 5- to 7-years-old children demonstrate incomplete understanding of the concept global citizenship relating that to knowledge of other cultures (*Knowledge of various cultures...*), lifestyles and people (*I think ... globality may be interconnected to the world in common... and maybe knowledge of the world, different people, mmm..., their lifestyle, ...and probably their differences...*) and/or travelling (*..., it is very interesting for my child to see something new during our trips.*) Some of them emphasized necessity to acknowledge that firstly a child is a citizen of Lithuania (his/her native country) (*...ensuring welfare of the country...*) and just then (s)he may (*...look around...*) and think or behave globally. Basically, the explanations of global citizenship were provided in the form of examples from children's behavior related to their daily activities outside the pre-primary school. Global citizenship was interpreted as familiarization with differences, different people existing in the world and dealing with the global social issues (homeless, poor people, unemployability) (*...homeless people with covers in the streets...; need to live healthy, to do some sport, tell others not to throw garbage everywhere.*); furthermore, that concept was related to care, help and responsibility for own actions and for other people (parents, grandparents, groupmates, and a group teacher) or animals (*... to take care of animals because we have a dog at home, so that's a reason to learn to be more responsible, oh ... and to take care of it.*) Parents' tend to discuss their role and actions taken as *I had to explain..., we discussed..., we talked....*

Surprisingly, one important finding was that beside parents' insights about complexity and possible dimensions of global citizenship a role of pre-primary school and teachers was not taken into consideration. Possible explanation might be that parents see themselves as the primary educators of children and the origin of global citizenship is based on the family background and interaction with parents, friends or relatives.

The research and interpretation of data leads to general assumption that the field of global citizenship education needs more precise analysis from different perspectives. Cooperation between school educators and parents is undeniable and it has to be initiated in both types of educational settings formal and non-formal. To develop a full picture of global citizenship education additional research will be needed to conduct with the pre-primary school educators.

Conclusions

The purpose of the current study was to determine the essential dimensions of global citizenship education taking into consideration the specific age group of learners. The evidence based on the theoretical analysis of the European and Lithuanian documents revealed the complexity of this concept and necessity to

educate 5- to 7-years old children not as the citizens of their native country, but global citizen education has to be implemented in parallels.

Global citizenship education has to be an integral part of pre-primary school education curriculum aiming to develop a personality who is able to think critically, to understand the global aspect of global environment, to perceive personal role in the close and further surroundings and to be motivated to act in national and international context.

Returning to the question posed at the beginning of this research, it is now possible to state that global citizenship education is not appropriately understood by the parents of pre-primary school aged children. There are some gaps and obstacles for proper education at formal and non-formal settings. Basically, parents' perception and interpretation of this concept is based on daily life situations and there were no relations with the education at school. The findings clearly indicate that global citizenship education and being as a global citizen is just non-formal familiarization with the existing social issues, travelling, discussions with parents, taking care of friends, relatives and pets.

The research has also shown that firstly the parents see their children as the citizens of their native country (Lithuania) and secondly, children's knowledge may be expanded globally.

The results of this research support the idea that parents' perception of global citizenship is incomplete, this concept is more closely related to family background and the importance of the teachers' role was not considered. Due to these insights the further research of global citizenship education has to be initiated.

References

- Augustinienė, A., & Pocienė, T. (2016). *Priešmokyklinio amžiaus vaikų žodyno turpinimo, taikant skaitmeninius mokymosi objektus, galimybes*. Retrieved from https://vdu.lt/cris/bitstream/20.500.12259/35166/1/ISSN2351-7409_2016_N_2.PG_43-58.pdf
- Chaput, C., O'Sullivan, M., & Arnold, C. (2010). Neoliberal world: The potential of transformative education during a short-term study abroad course in Cuba. *International Journal of Development Education and Global Learning*, 2(3), 25-43. London: IOE Press.
- Conception of Global Education. (2015) (Globaliojo švietimo koncepcija) Retrieved from <https://www.upc.smm.lt/ugdymas/dokumentai/svarstomi/globalus>
- CONCORD. (2004). Statement on Development Education and Awareness Raising. Retrieved from https://ec.europa.eu/europeaid/sites/devco/files/publication-development-education-for-the-european-consensus-200806_en.pdf
- Dewey, J. (2011). *Democracy and education*. Simon & Brown.
- Europe Council. (2008). *White Paper on Intercultural Dialogue*. Retrieved from https://www.coe.int/t/dg4/intercultural/source/white%20paper_final_revised_en.pdf
- Europe Parliament. (2012). *Declaration of the European Parliament of 5 July 2012 on development education and active global citizenship*. Retrieved from

- <http://www.europarl.europa.eu/sides/getDoc.do?type=TA&language=EN&reference=P7-TA-2012-302>
- Hainsworth, J. (2017). The weight of children's opinion should be respected. *Report on the State of Citizenship and Human Rights Education in Europe*. Council of Europe, 43. Retrieved from <https://rm.coe.int/the-state-of-citizenship-in-europe-e-publication/168072b3cd>
- IBE-UNESCO. (2018). *Training Tools for Curriculum Development: A Resource Pack for Global Citizenship Education (GCED)*. The International Bureau of Education- United Nations Educational, Scientific and Cultural Organization: Switzerland. Retrieved from http://www.ibe.unesco.org/fileadmin/user_upload/Publications/Training_tools/IBE-CRP-2014_eng.pdf
- Jorgenson, S. (2010). De-centering and Re-visioning Global Citizenship Education Abroad Programs. *International Journal of Development Education and Global Learning*, 3(1), 23-38.
- Kardelis, K. (2016). *Mokslinių tyrimų metodologija ir metodai*. Vilnius: Mokslo ir enciklopedijų leidybos centras.
- Mundy, K. (2007). *Charting global education in Canada's elementary schools: Provincial, district and school level perspectives*, 9. Retrieved from https://www.unicef.ca/sites/default/files/imce_uploads/UTILITY%20NAV/TEACHERS/DOCS/GC/ChartingGlobalEducationinElementarySchools.pdf
- Maastricht Global Education Declaration*, (2002). Retrieved from <https://rm.coe.int/168070e540>
- OECD. (2018). *Innovation strategy for education and training*. Paris, France. Retrieved from https://www.oecd.org/education/ceri/IS_Project_Brochure.pdf
- Oxfam. (2015). *Education for Global Citizenship. A Guide for schools*. Retrieved from <https://www.oxfam.org.uk/education/resources/education-for-global-citizenship-a-guide-for-schools>
- Patton, M. (1990). *Qualitative evaluation and research methods*. SAGE Publications. Newbury Park London New Delhi.
- Piaget, J. (2007). *The child's conception of the world: a 20th century classic of child psychology*. Rowman & Littlefield publishers.
- Resolution on the implementation of the sustainable development goals of the United Nations in Lithuania. (2018). Retrieved from <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/ad987682d21011e8a82fc67610e51066?jfwid=-35aaxip3i>
- Rupšienė, L. (2007). *Kokybinio tyrimo duomenų rinkimo metodologija: metodinė knyga*. Klaipėda: Klaipėdos universiteto leidykla.
- Symeonidis, V. (2015). *Towards Global Citizenship Education*. Retrieved from https://www.researchgate.net/publication/305947018_Towards_Global_Citizenship_Education_A_comparative_case_study_of_primary_school_policy_and_practice_between_Greece_and_Sweden
- Sy, A.E. (2017). *Connecting citizenship and human rights education to everyday life*. Report on the State of Citizenship and Human Rights Education in Europe. Council of Europe, 43. Retrieved from <https://rm.coe.int/learning-to-live-together-council-of-europe-report-on-the-state-of-cit/1680727be5>
- Tarozzi, M. (Ed.) (2016). *Global Citizenship Education in Europe*. A Comparative Study on Education Policies across 10 EU Countries. Research deliverable issued within the European project "Global Schools", Trento, Italy: Provincia Autonoma di Trento.

- The United Nations Secretary-General. (2012). The United Nations Global Education. First Initiative (2012-2016). *To build a better future for all*. Retrieved from <http://www.unesco.org/new/en/gefi/about/>
- Twigg, D., Pendergast, D., & Twigg, J. (2015). Growing global citizens: Young children's lived experiences with the development of their own social world. *International Research in Early Childhood Education*, 6(1), 79.
- UNESCO. (2013). *Global Citizenship Education. An emerging perspective. Outcome document of the Technical Consultation on Global Citizenship Education*. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000224115>
- UNESCO. (2014a). *Education Strategy 2014 – 2021*, 46. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000231288>
- UNESCO. (2014b). Global citizenship education: Preparing learners for the challenges of the 21st century. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000227729?posInSet=1&queryId=36cccc9a-72ad-4fae-86f8-d718798fc515>
- UNESCO. (2015). Global Citizenship Education. Topics and Learning Objectives. France: Paris. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000227729?posInSet=2&queryId=22c96697-9630-403c-b4212c4d05550866>
- UNESCO. (2017). *ESD and GCED in national curriculum frameworks*. Retrieved from <http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Nairobi/esdgeden.pdf>
- Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Žydžiūnaitė, V., & Sabaliauskas, S. (2017). *Kokybiniai tyrimai. Principai ir metodai*. Vilnius: Vaga.

