WHY USE PRACTICAL TASKS AND LEARNING EXPERIENCES

KĀ PAPLAŠINĀT IEPRIEKŠĒJĀ PIEREDZĒ APGŪTO DARBĪBU KOPUMU SKOLĒNIEM AR SPECIĀLĀM VAJADZĪBĀM

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Abstract. *A review of current and past theories of cognitive development focusing on the role of experiential learning is linked to implications for practice as well as to current Latvian policies and national directions. As can be seen, learning through practice is made up of several phases of experiences which impact on the student's with disabilities motivation, skills and attitudes which lead to new learning. As well the subject, Home Economics and its Technologies is used as an example of an experiential learning structure which utilises previous experiences to enhance current and future learning.*
Keywords: *experiential learning, Home Economics and its Technologies, Individual Educational Programs, Special Education Curriculum, students with disabilities.*

Introduction

As students with disabilities come from a range of environments with a range of experiences, mediation of experiences is important. This mediation can take various forms such as deliberate practice (Vedins, 2008), the use of language (Vygotsky, 2002; Piaget, 2002), changing attitudes (Spona, 2001; Leont'ev, 1972), reflection (Broks, 2007; Boud et.al, 1985) and feedback (Hattie and Timperley, 2007).

Kolb (1984) identified a cycle of experiential learning which involves a concrete experience, reflective observation, abstract conceptualisation, active experimentation. Honey and Mumford (1992) preferred to identify the process as a spiral as the process involves constant development and Race (2010) as a series of ripples which impact on one another and which are driven by the student's wants or needs and impacted upon by feedback.

Liepina (2007) notes that students with disabilities need instruction, practical demonstration and the use of appropriate language i.e. precise and concise. Knowledge of fundamental concepts (e.g. size, shape, number) is a pre-requisite for students being able to use experiences, to identify similarities or differences and to move to further learning (Nyborg, 1993)

This process can be supported through the use of Individual Educational Plans (IEPs where teachers and parents can assess student needs, set goals, use specific prior experiences to promote new learning, use appropriate feedback to support the student's scaffolding of his/her learning in order to encourage active participation and further learning. This can be done in a regular setting, but specialist classes (C Level) are growing in popularity in Latvia.

The subject Home Economics and its Technologies is, by its very nature, a practical subject. It fits within the overall education area of Citizenship and Society and it aims to develop students into life-long and independent learners, with an understanding of the rights and obligations of citizenship in a democratic society, as well as developing skills in communication, interaction and community participation. It is divided into four units and each unit is designed to develop the students' knowledge, skills and attitudes through the completion of practical activities.

The aim of this paper is to analyse the literature and evaluate personal experience in order to promote by necessity to advance pedagogical integrity of students with disabilities. Individual work, that is inconceivable without personality uniformity investigation within its practical activity, help purposefully become acquainted with the students and their special needs. It is important to create practical activity experience, individually for each student.

Results

The pedagogue, Cirulis, a Latvian educator and expounder of "trade schools" and the most prodigious creator of systemic approaches for the use of activity-based learning in teaching of handicrafts in Latvia and Russia, stresses that the aim of teaching handicrafts is not to teach the student a trade but to aid the student's physical and emotional development. One subject in today's curriculum that includes activity-based learning through a range of topics or units, including the teaching of handicrafts, is Home Economics and Its Technologies (Цируль, 1890).

The subject of home economics has had many name and content changes over the years. If, originally, home science was viewed only as a practical subject with limited possibilities, then today it has become a man-faceted way of helping in the overall personal development of the student. This movement has been influenced by social and economic changes as well as the community's changed expectations of formal education. Home Economics and Its Technologies was associated with the preparation of the student for work, as well as teaching specific practical skills, neglecting the opportunity to use this subject to aid the overall development of the student. Today it is a complex subject with multiple directions, technologies and skills which also uses and tests the student's ability to generalise knowledge gained in other subjects. It is one of the subjects in today's curriculum where time is allocated to activity-based learning and experiences. By completing set activities the student becomes familiar with the major steps of the task, as well as becoming familiar with the tools or instruments that will allow him/her to complete the task effectively. It has moved from teaching and learning of practical tasks to promoting the overall personal development of the student.

Vygotsky discusses students with disabilities in terms of their "primary" and "secondary" disabilities and their interactions. The primary disability is the impairment due to biological factors but this is compounded by distortions to higher psychological functions due to social factors. Vygotsky sought to define a student with disabilities from a point of strength calling this "positive differentiation". He also argued that scaffolding of learning through the assistance of an adult supports the development of emerging abilities revealing the potential of the student. This process, the Zone of Proximal Development (ZPD), utilises appropriate assistance from an adult or more advanced peer to assist with learning as Vygotsky's theories place a strong emphasis on culture affecting cognitive development (Vygotsky, 1983).

In Latvia, the National Primary Education Standard sets the overall goals and requirements of education, but the Special Education Curriculum seeks to implement these through the development of Individual Educational Programs (IEPs) for students with disabilities. For students with moderate / severe disabilities these IEPs are developed jointly by the student's parents and teacher. The process focuses on the student's needs and abilities, taking into account the student's experiences, skills, cognitive development as well the National Primary Education Standard and the goals and objectives of each subject. This type of plan is viewed as a "remedial education program whose methodology and structure is appropriate for people of a mandatory schooling age who require additional support with their primary education" (General Education Law, 1999, 1.p.).

Home Economics and Its Technologies, together with subjects such as Latvian and World History, Social Science, Sport, Ethics and Religious (Christian) Education fall within the overall area of Citizenship and Society the major objectives of which are to:

- develop and understanding of emotional and physical development and the obligations of citizenship;
- develop an understanding of lifelong learning;
- develop expertise in understanding and expressing the student's own point of view about past and present events;
- develop communication and interaction skills;
- promote a proactive approach to life in the community and develop the citizenship skills for participation in a democratic society;
- develop independent learning skills (MK Regulations, No. 530, 2013).

The Special Education Curriculum Model for students with disabilities or multiple disabilities defines:

- the education program's goals and objectives;
- the content;
- the implementation plan;
- requirements relating to prior learning;

- the necessary human, financial and material resources for the implementation of the educational program based on the health and development needs of the student (Sample special primary education program for students with moderate / severe disabilities and severe developmental disorders, 2009).

This model aims to secure the implementation of IEPs to facilitate "practical skills development" for students with disabilities. In instances where the motor and cognitive skills development is extremely impeded, the school can develop a remedial program that is not tied to specific timetabled subjects (Sample special primary education program for students with moderate / severe disabilities and severe developmental disorders, 2009).

The Special Education Curriculum has, from the beginning of schooling, a greater emphasis on activity-based, practical subjects than the regular education curriculum because activity-based learning:

- encourages intellectual activity;
- promotes attending behaviours;
- is instrumental in strengthening the student's will;
- develops work skills and ethics (Liepina, 2008, 310).

Guidelines for programs for students with moderate / severe disabilities have been worked out for the following subjects: Latvian; mathematics; physical education (PE) and music, they have not been developed for Home Economics and its Technologies.

An individual approach is developed in conjunction with the specific student taking into account "the psychological, physical, intellectual, social and behavioural characteristics" and it places the student in the centre of the process, taking into account his/her needs and interests in order to foster development of an understanding of home economics and the social interaction process. Special schools (institutions) need to implement special education programs appropriate for the special needs of the students which comply with the demands of the educational institution (Liepina, 2008), taking into account the following operating principles:

- educational content which is practically orientated;
- a comprehensive review of the student and his/her needs;
- interaction between the teacher, year advisor and parents in developing the IEP so that the student can live as independently as possible;
- accessing opportunities for work and contributing to life in the community;
- development of work-related skills so the the student is able to find employment post-school;
- creation of a data base which details the student's development and his/her learning and health needs;

- preparation of all those involved in supporting the integration of the student into the life of the school (parents, teachers, health workers, other students);
- appropriate adaptations to enable students with severe physical disabilities to participate;
- co-operation with special education development centres.

All special education settings in Latvia work towards expanding the functions of the setting (Liepina, 2008) as is reflected by the enrolment numbers of students with moderate / severe disabilities (Level C) in special schools. "...As students with disabilities find it more difficult to develop work skills and competencies than their normal peers" (Liepina, 2008, 311) it is necessary to provide more opportunities for practice, more repetition. This is compounded language learning difficulties which impact on understanding oral instructions but even more so on the comprehension of written or diagrammatical instructions. Problems also arise when generalising skills to other situations (Liepina, 2008; Friend, 2005). Rubinstein emphasised that "for the development of all mental processes, help from the teacher is crucial" (Rubinstein, 1986). For this reason in C Level classes there is both a teacher and an assistant teacher (not a teacher's aide).

The first C Level classes were opened in Riga's 5th Primary Boarding School, and in Liepaja's and Daugavpils' special schools. They were the first step in integrating students with moderate / severe disabilities (C Level) into special schools. In the 1990/91 school year, there were 15 students with moderate / severe disabilities in C Level classes in 2 special schools. In the 1996/97 school year this had grown to 62 C Level classes in 27 special schools which provided education for 366 students. In 2001 this had risen to 703 students and in 2005 to 1125 students. By 2008/09 3476 students with moderate / severe disabilities were attending classes for students in Years 1 to 9. Transition to Work classes in 2010/11 had 312 students with moderate / severe disabilities.

The data shows that most special schools continue implementing IEPs for students with moderate / severe disabilities for another three years after they finish their primary education, which finishes in Year 9 in Latvia. Based on the student's needs, his/her health and the opportunities provided by each setting, the students are prepared for life and work in the community. In 2010/11 88 students studied in Year 12 C Level classes, 91 in Year 11 C Level classes and 133 in Year 10 ones (IZM Statistics and Data Analysis Division).

The subject Home Economics and Its Technologies combines learning at school with the students' everyday experiences and the skills required for life in the community. Information which has been learned by the students through experience and everyday interaction with their families is extended. This is an important period in the life of students with moderate / severe disabilities, as the opportunities provided by the school to develop skills, attitudes and knowledge cannot be replicated just through family interactions.

As can be seen from the diagram below, Home Economics and Its Technologies requires the systematic teaching of specific skills.
Within the abovementioned units the focus is on helping students to gain insights about the man-made environment, to develop work skills specific to each unit as well as skills related to maintaining and using leisure environments.
They acquire the skills to model and shape materials such as paper, natural materials, textiles, wire, and plasticine and other materials.
They learn: to be responsible for their work; to work individually or in a group; skills for working with pencils, rulers, scissors, needles; to observe rules for occupational safety; to master the technologies used in production (e.g. timber) as well as the basics of design; to use the tasks for self-expression; to assess their work and that of their peers and others; prepare for life and work in the community;
Each student, according to his/her state of health, abilities and level of development is ensured opportunities, to learn to live in a rapidly changing society while at the same time the student is provided with the pedagogical, psychological and medical support required. Students come to understand how they can achieve their full potential, which will ensure both their and society's welfare in the future.
The focus is on motor development, beginning with hand and finger exercises and then whole-body movement coordination (Пинский, 1985) as, even through these activities, through the mastery of elementary skills, it is possible to support the development of speech, the ability to think, to make purposeful movements, to develop emotions and willpower. The main aim of these activities is "for the child to comprehend the activity, no matter how basic or primitive" (Liepina, 2008 134).
The aims for Home Economics and Its Technologies are as follows:

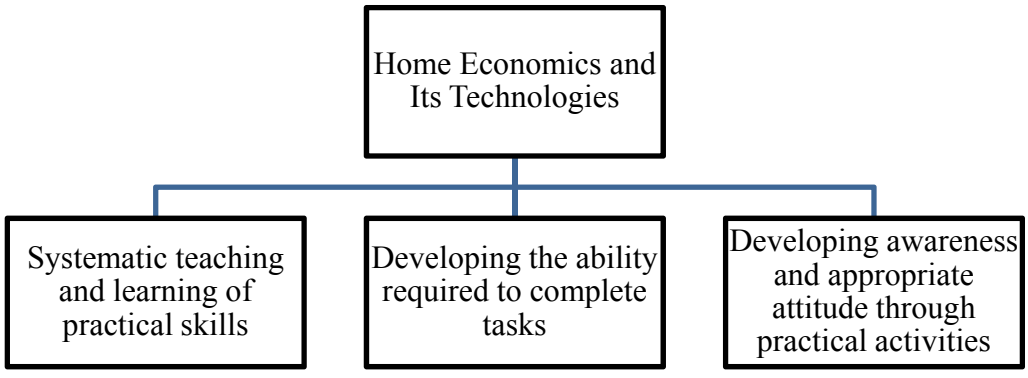

Figure 1. The goals of Home Economics and its Technologies (Prudnikova, 2012)

The needs of the student are paramount for the development of an IEP which addresses all subject areas including Home Economics and Its Technologies. This plan, based on the skills and abilities of the student, includes:

- developing an understanding of equipment, food, cleaning, cooking, and knowledge of the personal significance of these activities as well as the motivation to complete these practical activities (Home Science);
- developing an understanding of materials, tools, equipment, the use of equipment (technologies used) and materials, and knowledge of the personal significance of these activities as well as the motivation to complete these practical activities (handicrafts and visual arts);
- developing an understanding of working with textiles and the associated technology, the skills to use this technology, and knowledge of the personal significance of these activities as well as the motivation to complete these practical activities (Trade skills, Sewing);
- developing an understanding of wood working and the relevant tools, skills in using appropriate technology, and knowledge of the personal significance of these activities as well as the motivation to complete these practical activities (Trade skills, Woodwork).

It is important for students with moderate / severe disabilities, for the teaching Home Economics and Its Technologies to commence in the primary school building on prior learning and knowledge. Then, through the use of systematic and sequential teaching, to expand the student's interests and knowledge, so that the student is aware of his/her needs, goals and interests and can work towards achieving these in the future.

Conclusions

1. Attitudes need to change in schools and in the community towards people with special needs. An analysis of the pedagogical processes in a special education primary school; of the legislature; and an analysis of the experiences, past and present, in Latvia and overseas; as well as research findings from Latvia, reveal policy directions and actual practice which raise concern about securing appropriate support for students with disabilities.
2. The investigation of research literature on disabilities and the impact on the cognitive development of students with moderate / severe disabilities, leads to the conclusion that such students have a right to have their own learning systems, where the school's environment supports the students with disabilities to undertake purposeful learning tasks, ensuring that these are appropriate to their needs and which utilise sequential and multi-level activities and provide opportunities for learning through practice.
3. A student – centred approach is needed, not one which places a disorder or disability at the centre. What needs to be considered is the student, his/her

needs, strengths, personality and opportunities for development and which acknowledges the student's experiences as a foundation for the learning process.

4. Teachers need to support the student to scaffold his/her own learning and not dominate the process. They also need to be aware that their conceptions about the student will impact on the way they set learning tasks, provide feedback etc.
5. The nature of Home Economics and Its Technologies provides an opportunity for students with moderate / severe disabilities to learn through practical tasks in a special education boarding school. This learning builds on prior knowledge, asks that students reflect on their learning to develop new skills and attitudes. It also asks that students generalise their learning from other subjects and use this to build new meanings and new learning.

Kopsavilkums

Raksta mērķis ir analizēt pētījumus un autores personīgo pedagoģisko pieredzi, lai sekmētu skolēnu ar speciālajām vajadzībām pedagoģisko integrēšanos t. i., izglītošanu ne vien speciālās izglītības, bet arī vispārējās izglītības iestādēs, kas tiek uzskatīta par vienu no skolēnu ar speciālajām vajadzībām sociālās iekļaušanas fāzēm. Šī mērķa sasniegšanai skolēniem ir nepieciešams atbilstošs nodrošinājums un individuāls izglītības programmas apguves plāns. Atbildība par šo pasākumu īstenošanu tiek deleģēta izglītības iestādei (Vispārējās izglītības likums, 1999, 53. p). To var nodrošināt, izzinot skolēnu speciālās vajadzības, izstrādājot un ieviešot praksē veiksmīgu mācīšanās procesu.

Autore meklē risinājumus, kā atklāt un izmantot skolēnu spējas, lai skolēni ar vidēji smagiem un smagiem garīgās attīstības traucējumiem (GAT) skolas vidē mērķtiecīgā darbībā veidoto *praktiskās darbības pieredzi* – zināšanas, prasmes un attieksmes varētu lietot turpmākā dzīvesdarbībā. Tiek analizēta praktiskās darbības veidošana skolēniem ar vidēji smagiem un smagiem GAT pedagoģiskajā procesā, kas sākotnēji notiek mācību priekšmeta Mājturība un tehnoloģijas temata *Mājturība* ietvaros, kur tiek apgūti uzdevumi, kas ir iepriekšējā pieredzē apgūto tuvāko un nozīmīgo darbību kopums, pēc tam pakāpeniski paplašinot šo skolēnu intereses, kas dod iespēju apzināties viņam savas intereses, vajadzības un mērķus, lai tos realizētu tālāk dzīvē. Praktiskā darbībā šie skolēni ar pieaugušā nepieciešamo atbalstu tiek virzīti uz apzināti izvēlētu mērķi, tādējādi tā kļūst par viņu maksimāli iespējamās neatkarīgas dzīves sastāvdaļu.

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