

EMPOWERING TOMORROW: UNLOCKING STUDENTS POTENTIAL THROUGH SOFT SKILLS DEVELOPMENT *RĪTDIENAS IESPĒJAS: STUDENTU POTENCIĀLA APZINĀŠANA, IZMANTOJOT STARPNOZARU PRASMJU ATTĪSTĪBU*

Gintarė Žilinskienė

Kauno kolegija Higher Education institution, gintare.zilinskiene@go.kauko.lt, Kaunas,

Lithuania

Indrė Knyvienė

Kauno kolegija Higher Education institution, indre.knyviene@go.kauko.lt, Kaunas, Lithuania

Abstract. The development of soft skills is crucial for success in the modern workplace. Soft skills refer to a range of interpersonal, problem-solving, and communication abilities that are necessary for effective collaboration with others. Developing creativity, personal leadership, complex problem solving, and critical thinking skills among students in a real-life context with guidance from coaches and collaboration with companies. This article aims to address the following research questions: What is the theoretical perception of soft skills? How can soft skills be categorized based on theory and practice? Which categories of soft skills are distinguished from the students' point of view. First insights suggest that the problem-solving soft skill is the one that the students felt had enhanced the most during their studies, also it was the critical thinking the creativity that the students felt enhanced the most during their studies.

Keywords: creativity, critical thinking, leadership, problem solving, soft skills/

Introduction

Soft skills have gained an increased interest among scholars, working life and in general in society for quite some time now. One reason for this is the technological development and in other hand order to have a competent workforce in the future the fast-changing context has speeded up the learning of new work life skills which can be applied and used no matter what happens (*Deloitte, 2017; Bruce, 2017; Jääskelä et al., 2018; Hartikainen, 2014*). Soft skills are skills that are unique for humans and cannot be overtaken or easily learnt by a machine and because of this they have become very important (*Pölönen, 2021*). As trends such as globalization and advances in artificial intelligence (AI) change the demands of the labor market and the skills needed for workers to succeed, people need to rely even more on their uniquely (so far) human capacity for creativity, responsibility and the ability to "learn to learn" throughout their life. Social and emotional skills, such as empathy, self-awareness, respect for others and the ability to communicate, are becoming essential as classrooms and workplaces become more ethnically, culturally and linguistically diverse. Also, the need to be both economical and sustainable in the future is increasingly important (*OECD, 2018; Gray, 2016*).

Study subject: students' soft skills.

Aim of the study: determine students' views on the importance of soft skills. Objectives:

- 1. To analyse soft skills from a theoretical perspective;
- 2. To investigate students' views on the importance of soft skills for students.

Research methods: analysis of scientific literature, questionnaire survey, descriptive statistics.

The concept of soft skills from a theoretical perspective

Soft skills have gained an increased interest among scholars, working life and in general in society for quite some time now. One reason for this is technological development. As computer technologies have displaced labor in routine tasks, they have also created new employment opportunities for co-workers with non-routine cognitive skills. Top 10 skills for 2025 with added surveyed classification of skills.

- 1. Analytical thinking and innovation soft skills
- 2. Active learning and learning strategies soft skills
- 3. Complex problem solving soft skills
- 4. Critical thinking and analysis soft skills
- 5. Creativity, originality, and initiative soft skills
- 6. Leadership and social influence soft skills
- 7. Technology use, monitoring, and control digital skills
- 8. Technology design and programming digital skills
- 9. Resilience, stress tolerance, and flexibility soft skills
- 10. Reasoning, problem-solving and ideation soft skills (Zahidi, 2020).

Skills are the ability and capacity to carry out processes and be able to use one's knowledge in a responsible way to achieve a goal. As mentioned, skills are part of a holistic concept of competency, involving the mobilization of knowledge, skills, attitudes and values to meet complex demands. The Organisation for Economic Cooperation and Development (OECD) Learning Compass 2030 distinguishes between three different types of skills: cognitive and meta-cognitive skills, social and emotional skills, and physical and practical skills (*OECD*, 2018).

When authors examine the definition of soft skills, authors can see that they are linked to emotional intelligence, or the capacity to recognize ourselves in the context of others and how authors actions influence others (*Touloumakos, 2020; Da Silva et al., 2020*).

According to the researches, soft skills can be defined:

- Soft skills are skills often referred to as interpersonal, human, people, or behavioral skills, and place emphasis on personal behavior and managing relationships between people. SS are primarily afective or behavioral in nature (*Rainsbury et al.*, 2002).
- The interpersonal, human, people, or behavioral skills needed to apply technical skills and knowledge in the workplace (*Weber et al., 2009*).

Intrapersonal skills such as one's ability to manage oneself as well as interpersonal skills such as how one handles one's interactions with others (*Laker & Powell, 2011; Kechagias 2011*).

Categories of the Soft Skills

Personal qualities, personality characteristics, as well as communication ability are examples of soft skills that are required for work success. Soft skills are the characteristics of a person's interactions with others. The various kinds of soft skills are as follows (*Kumar et al., 2022*).

Leadership qualities. Employees who can oversee and guide others are sought after by employers. Employees that can build connections up, down, and across the business are in high demand. Leaders must evaluate, inspire, encourage, and punish employees, as well as form teams, handle problems, and create the desired culture of the company. Understanding how to influence others and meet their needs is an important part of becoming a leader. When someone with the highest technical skill is placed in a position of power, far too many firms disregard this. Leadership development often includes the development of soft skills.

Communications. Effective communication skills can help you succeed in the interview process and your job. Knowing how to talk to people in various contexts or places is part of communication competence. When working on a project with a group, for example, you may need to express when you feel a concept or procedure is unsuccessful. Employers respect employees who can disagree with others on the work in a considerate and competent manner without causing confrontation. The successful spoken or written methods you communicate

yourself in the job are known as communication skills. Communication is an important sales talent that can be used in a wide range of businesses, from human resources to management.

Teamwork. Employers are continuously on the lookout for applicants that excel at working as part of a team. Teamwork abilities enable you to work successfully in a group and complete things swiftly and efficiently. In reality, occupations in market research, event organizing, and software engineering all need cooperation. The majority of workers work as part of a team, department, or division, and even those who are not on an official team must work with others. It may prefer to work alone, but it's critical to show that you understand and respect the need for teamwork and collaboration to achieve the company's objectives. This demonstrates that you have the soft skills needed to collaborate effectively (*Rosen et al., 2018; Driskell et al., 2018)*.

Creativity. Creativity is a wide talent that encompasses a variety of skill sets, including both soft and technical abilities. Creative employees may come up with innovative methods to do jobs, enhance procedures, or even come up with new and interesting areas for the company to pursue. Creativity may be used in every situation and at any level. Creativity is a wide soft talent that may vary from assisting in the development of inventive ideas to being a skilled graphic designer. Some experts believe that creativity will be the most crucial soft talent in the future. While creativity is crucial in every sector, instructional designers, architects, and artists are particularly reliant on it.

Problem Solving. Issue solving requires not just analytical, creative, and critical thinking abilities, but also a specific attitude; individuals who can approach a problem with a calm, level head can typically arrive at a solution more quickly than those who cannot. This is a soft talent that often relies on excellent collaboration. Problems do not necessarily have to be solved by themselves. Knowing who can assist you in finding a solution and how they can do so may be beneficial. The capacity to solve problems relies on your ability to think analytically and creatively. Problem-solving abilities will always be important in some capacity, no matter what field you work in since every profession has challenges that must be addressed. Candidates that can solve challenges and come up with creative solutions will always be in demand. time Management The capacity to work effectively and successfully by managing your time is referred to as time management abilities. This soft ability is valued by most companies, but it's especially valuable if you're a project manager, level manager, or work in the loss prevention or legal professions.

Leadership. Self-leadership is often evaluated in terms of personal motivation to achieve higher goals and establish high self-standards. A person with self-leadership skills usually has a strong self-awareness and high self-esteem. Self-leadership is a development process, which is usually based on positive experience of different achievements. The development process includes the desire to have more control and responsibilities over own choices, and eagerness to take actions (*Ross, 2014*).

Literature review revealed that the most frequently mentioned soft skills addressed as highly demanded in the future are communication skills, problem solving, creativity, critical thinking, teamwork, and lifelong learning.

Methodology and research results

The focus is on four soft skills, namely creativity, leadership, complex problem solving, and critical thinking. In order to provide deeper understanding of those skills were divided into subskills. Creativity skill includes open mindedness, innovations, entrepreneurship, curiosity, and exploration. Leadership skills consists of collaboration, organization, communication, and initiative. Complex problem solving consists of information retrieval and integration, goal elaboration and balancing, action planning, decision making and self-management. Critical thinking contains explanation, reasoning, decision making, argumentation, and evaluation. It is

important to note that the division of subskills is made to increase clarity of examined skills rather than emphasize the differences between them. Moreover, presented subskills are evidently interrelated. The the research was carried out in May 2022. During the intesive week authors have been working with soft skills to evaluate students' (30 students) perceptions of their learning. Here authors analyze the daily diary data, The focus in the daily diary is on learning, skill development and teamwork. The four numerical questions aimed to find out how each participant collaborated with the team, how the tools and exercises were helping them to develop their soft skills. The numerical questions were on a 5-point Likert scale. The answers ranged from 1 (strongly disagree) to 5 (strongly agree). The 5-point Likert scale was chosen as it is simple to understand and takes participants little time to complete. The 5-point Likert scale can be interpreted as intervals but Likert scales with fewer responses are restricted to ordinal numbers. All data was coded and transferred from Google Sheets into Excel.

For the first question, what were the two most important things the participants of intensive week learned every day, the results show that the students most often mention that they perceived to have improved soft-skills or subskills. And the second question aimed to identify which two skills they had developed the most during each day. The results show how many times skills or sub-skills were mentioned. The results of the first day indicate the two most important things the students learned were: personal leadership and creativity. Students highlighted the understanding of foreign people and teamwork, good communication, listening to others and patience. Students stated that they needed to get out of their comfort zone, to communicate to others, and even highlighted the improvement of their English language.

From the second day had an equal spread when it comes to how the students perceived their softs skills improved: personal leadership, complex problem-solving, creativity, and critical thinking. Sub-skills mentioned during this day and related to personal leadership were the skill of listening, of sharing, the skill to do research and time management skills. The most frequently used words were teamwork and communication, both related to personal leadership.

During third day a midway pitch was performed to get feedback from the company. Students highlighted that they improved presenting and listening to feedback, all parts of the personal leadership soft skills. Creativity was the second most mentioned soft skill. Critical thinking was also quite often mentioned and students highlighted the importance of choosing the right idea not only to fit the client but also the final customers.

Forth day processing feedback and learning how to make decisions for a final solution for the company were in focus. The emphasis was on convergent creativity and critical thinking. Students reported they perceived improvement in the following way: personal leadership, critical thinking, creativity and complex problem-solving. Again, the most perceived improvement was in relation to personal leadership. The students reported that they learnt a lot about giving and receiving feedback, and about the importance of feedback in general.

The focus in fifth day was on personal leadership. Most students mentioned the importance of teamwork, trust, accountability, communication, the motivation of team, presentation and/or pithing, public speaking, etc. While creativity, complex problem-solving, and critical thinking were not so often mentioned.

Answering the question about what was learned every day, some of the participants had mentioned the methods or tools (concrete ones or in general) that were implementing that day (e.g.: day 1 -stinky fish, day 2 -six hats, KWHL chart, and others, day 3 -pains and gains, day 4 -six hats, how now wow, day 5 -canva tool). The data reveal intriguing insights into the temporally dynamics of skill acquisition across the different sprints and locations. Personal leadership consistently emerges as the most frequently cited skill throughout all three sprint weeks. This suggests a pervasive emphasis on personal leadership development, regardless of the case and geographical context. Creativity also exhibits notable mentions during the initial days of each sprint, suggesting an early focus on fostering creative thinking. However, its prominence diminishes as the sprint progresses, potentially indicating a shift in priorities or a

saturation of creative endeavors. Complex problem-solving garners sporadic mentions throughout the sprint weeks, with no consistent trend observed. This variability may reflect the contextual nature of complex problem-solving opportunities that arise during the sprint process.

Also, students can find it more difficult to identify this skill and mention it as improvement. Critical thinking, in contrast, exhibits a progressive increase in mentions as the sprint unfolds, suggesting its growing significance in the problem-solving and decision-making aspects of the projects. This is really connected with gradual development of sprint week – when processes get more sophisticated due to the growing amount of information and data. The "Other" category encompasses skills beyond the predefined categories, and it is notable for its mentions in various stages of the sprint weeks. Students mentioned framing, delegating, calming, reading, crafting, etc. Also, very technical skills related to both researching, writing and designing are mentioned. Students do also report that the knowledge related to the content, the challenge they are solving is strengthened. In summary, this analysis of daily diary entries illuminates the nuanced patterns of skill development or learning among participants in the intensive week. The prominence of personal leadership underscores its universal relevance in the learning context. Additionally, the evolving dynamics of creativity, complex problem solving, critical thinking, and the presence of other skills underscore the complexity of skill acquisition in dynamic, project-based learning environments.

Conclusions

Literature review revealed that the most frequently mentioned soft skills addressed as highly demanded in the future are communication skills, problem solving, creativity, critical thinking, teamwork, and lifelong learning.

The soft skill that students seemed to have learnt the most, during the week, was the Personal leadership. This skill had many sub-skills and students reported a variation of learnings related to the skill. Among these teamwork and collaboration were mentioned the most. It is reflected upon whether it can be more difficult to measure these: is it more complex to recognize the own learning when it comes to seeing the own progress in problem solving ability and the ability to think critically? Soft skills might vary a lot in how easy it is to recognize a change. Related to this is also the process or the activities that were introduced to enable the learning of a specific skill. A common tendency during a sprint is a stronger sense of chaos in the beginning and a more positive happy " authors did it" feeling during the last day. More research is needed in the field and authors specifically call for increased focus on how to assess the learning of problem Solving and Critical thinking since these two were the least reported learning in authors study.

The findings revealed that the soft skills related to critical thinking, problem-solving, creativity, the students felt that the soft skill personal leadership got enhanced the least. It is stressed that there is little analysis of employers' views on what soft skills are important from their point of view, which could be the subject of further research.

Bibliography

- 1. Bruce, J. (2017). *Why Soft Skills Matter and the Top 3 You Need*. https://www.forbes.com/sites/janbruce/2017/03/10/why-soft-skills-matter-and-the-top-3-you-need/
- 2. Da Silva, B. X. F., Neto, V. C., & Gritti, N. H. S. (2020). Soft skills: Rumo ao Sucesso no Mundo Profissional. *Revista Interface Tecnológica*, 17(1), 829-842. https://doi.org/10.31510/infa.v17i1.797
- 3. Deloitte. (2017). *Soft skills for business success*. https://www2.deloitte.com/au/en/pages/economics/articles/ soft-skills-business-success.html
- 4. Driskell, J. E., Salas, E., & Driskell, T. (2018). Foundations of Teamwork and Collaboration. *American Psychologist*, 73(4), 334–348. https://doi.org/10.1037/amp0000241

- 5. Gray, W. D. (2002). Simulated Task Environments: The Role of High-Fidelity Simulations, Scaled Worlds, Synthetic Environments, and Laboratory Tasks in Basic and Applied Cognitive Research. *Cognitive Science Quarterly*, 2, 205–227. https://ej.uz/hhpg
- 6. Hartikainen, E. (2014). *Sitra Trends: Skills will challenge information What will constitute general knowledge in the future?* https://www.sitra.fi/en/articles/sitra-trends-skills-will-challenge-information/
- 7. Jääskelä, P., Nykänen, S., & Tynjälä, P. (2018). Models for the development of generic skills in Finnish higher education. *Journal of Further and Higher Education*, 42(1), 130-142. https://doi.org/10.1080/0309877X.2016.1206858
- Kechagias, K. (ed.). (2011). Teaching and Assessing Soft Skills. MASS project. https://web.archive.org/web/ 20150807162639/http://mass.educational-innovation.org/attachments/396_MASS%20wp4%20final% 20report%20part-1.pdf
- 9. Kumar, A., Singh, P. N., Ansari, S. N., & Pandey, S. (2022). Importance of Soft Skills and Its Improving Factors. *World Journal of English Language*, 12(3), 220-227. https://doi.org/10.5430/wjel.v12n3p220
- Laker, D. R., & Powell, J. L. (2011). The Differences Between Hard and Soft Skills and Their Relative Impact on Training Transfer. *Human Resource Development Quarterly*, 22(1), 111-122. https://doi.org/10.1002/hrdq.20063
- 11. OECD. (2018). Future of Education and Skills 2030. www.oecd.org/education/2030-project
- 12. Pölönen, P. (2021). Future Skills. Simon and Schuster.
- 13. Rainsbury, E., Hodges, D., Burchell, N., & Lay, M. (2002). Ranking Workplace Competencies: Student and Graduate Perceptions. *Asia-Pacific Journal of Cooperative Education*, 3(2), 8-18. https://www.ijwil.org/files/APJCE_03_2_8_18.pdf
- Rosen, M. A., DiazGranados, D., Dietz, A. S., Benishek, L E., Thompson, D., Pronovost, P. J., & Weaver, S. J. (2018). Teamwork in Healthcare: Key Discoveries Enabling Safer, High-Quality Care. *American Psychologist*, 73(4), 433–450. https://doi.org/10.1037/amp0000298
- Ross, S. (2014). A Conceptual Model for Understanding the Process of Self-Leadership Development and Action-Steps to Promote Personal Leadership Development. *Journal of Management Development*, 33(4), 299-323. https://doi.org/10.1108/jmd-11-2012-0147
- 16. Touloumakos, A. K. (2020). Expanded Yet Restricted: A Mini Review of the Soft Skills Literature. *Frontiers in Psychology*, 11, 2207. https://doi.org/10.3389/fpsyg.2020.02207
- 17. Weber, M. R., Finley, D. A., Crowford, A., & Rivera, D. (2009). An Exploratory Study Identifying Soft Skill Competencies in Entry-Level Managers. *Tourism and Hospitality Research*, 9(4). https://doi.org/10.1057/thr.2009.22
- 18. Zahidi, S. (2020). The Jobs of Tomorrow: Some Jobs Disappear and Others Will Emerge as the World Faces a Dual Disruption. *Finance & Development*. https://ej.uz/kskm