

THE FUTURE OF SOFT SKILLS TRAINING: INNOVATIONS IN THE HIGHER EDUCATION SYSTEM

O FUTURO DA FORMAÇÃO EM COMPETÊNCIAS TRANSVERSAIS: INOVAÇÕES NO SISTEMA DE ENSINO SUPERIOR

Tetiana Rozhnova

ORCID 0000-0002-3608-8943

State Institution of Higher Education
"University of Education Management"
Kyiv, Ukraine
[Rognova TE65@ukr.net](mailto:Rognova_TE65@ukr.net)

Olena Sholokh

ORCID 0000-0003-0024-0904

Educational and Scientific Institute of History and
Socio-Humanitarian Disciplines named after O.M.
Lazarevsky National University "Chernihiv
Collegium" named after T. G. Shevchenko
Chernihiv, Ukraine
osholoh72@gmail.com

Hanna Tymoshko

ORCID 0000-0003-0996-6138

Educational and Scientific Institute of History and
Socio-Humanitarian Disciplines named after O.M.
Lazarevsky National University "Chernihiv
Collegium" named after T. G. Shevchenko
Chernihiv, Ukraine
tymoshko49@gmail.com

Svitlana Yakymenko

ORCID 0000-0003-4230-9586

V.O. Sukhomlynskyi National University of Mykolaiv
Mykolaiv, Ukraine
yakymenkosi@gmail.com

Tetiana Volotovska

ORCID 0000-0003-0381-3261

"University of Education Management"
Kyiv, Ukraine,
volotovskayatanya79@gmail.com

Abstract. The purpose of the article is to highlight the transformation of the status of soft skills in the higher education system based on the analysis of research on the scientific and pedagogical discourse on the concept of sustainable development education. Modern educational strategies are formed considering the dynamics of socio-cultural progress, which determines the priority areas of higher education development. The objectives of the article are focused on highlighting the benefits of introducing soft skills in the institutional, content, functional, and methodological dimensions. The methodological basis of the work is a literature review of works that describe the process of integrating soft skills into the higher education paradigm. The article analyses the implementation strategies and specifics of the integration of soft skills in the university education system. The results of the study identify several options for positioning soft skills in the educational process in relation to fundamental skills: complementation, correlation, synergy, autonomy. The study proposes a dynamic approach to determining the status of soft skills in the higher education paradigm, in order to take into account external influences on the educational space. Thus, soft skills are gradually gaining a clearly defined status in the higher education paradigm and ensure the formation of relevant competencies in students. Prospects for further research are to improve the process of interaction between flexible and fundamental skills in the context of sustainable development of higher education.

Keywords: soft skills, higher education system; educational process; professional competence; educational innovations; quality of education; professional development of higher education students.

Resumo. O objetivo do artigo é realçar a transformação do estatuto das competências flexíveis no sistema de ensino superior com base na análise da investigação sobre o discurso científico e pedagógico relativo ao conceito de educação para o desenvolvimento sustentável. As estratégias educativas modernas são formadas tendo em conta a dinâmica do progresso sociocultural, que determina as áreas prioritárias do desenvolvimento do ensino superior. Os objetivos do artigo centram-se em destacar os benefícios da introdução de competências flexíveis nas dimensões institucional, de conteúdo, funcional e metodológica. A base metodológica do trabalho é uma revisão da literatura de trabalhos que descrevem o processo de integração das competências flexíveis no paradigma do ensino superior. O artigo analisa as estratégias de implementação e as especificidades da integração das competências flexíveis no sistema de ensino universitário. Os resultados do estudo identificam várias opções de posicionamento das competências flexíveis no processo educativo em relação às competências fundamentais: complementação, correlação, sinergia, autonomia. O estudo propõe uma abordagem dinâmica para determinar o estatuto das competências flexíveis no paradigma do ensino superior, a fim de ter em conta as influências externas no espaço



educativo. Assim, as competências flexíveis estão gradualmente a ganhar um estatuto claramente definido no paradigma do ensino superior e asseguram a formação de competências relevantes nos estudantes. As perspectivas de investigação futura consistem em melhorar o processo de interação entre as competências flexíveis e fundamentais no contexto do desenvolvimento sustentável do ensino superior.

Palavras-chave: competências transversais; sistema de ensino superior; processo educativo; competência profissional; inovações educativas; qualidade do ensino; desenvolvimento profissional dos estudantes do ensino superior.

1. INTRODUCTION

Soft skills are gradually transforming in the educational space. Given that the process of distinguishing between fundamental skills and socio-cultural skills has become relevant at all educational levels, the separation of soft skills into a separate cluster in the higher education system is gaining systemic and strategic importance. The period of no alternative to fundamental skills is gradually turning into a stage of transformation, during which the professionalism of a specialist is determined not only by the level of his/her professional competences. The competitive environment requires universal competences that combine fundamental professional knowledge with the socio-humanitarian dimension. The reason for the growing demand for soft skills is the realities of civilisational development, which involve the dynamism of human life and activity and society. Under such conditions, skills that allow a specialist to respond quickly to external changes and understand the specifics of internal changes become a litmus test for development and progress.

The purpose of the article is to highlight the problem of transforming the positioning of the soft skills cluster in the higher education system. Based on the analysis of research on the establishment and development of soft skills, prospects for further expansion of their status in higher education development strategies are formed. The objectives of the article are to correlate the potential of soft skills with the principles of sustainable development education, which involves the active involvement of socio-humanitarian, innovative, and technological elements in the set of competencies of a higher education student.

The scientific hypothesis of the study defines a new format for the relationship between fundamental and soft skills in the context of the transition from coexistence to synergy and interaction for the universalisation of professional competences in the context of interdisciplinarity, pluralism, and multiculturalism of the modern scientific worldview.

2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

In the modern scientific and pedagogical discourse, the problem of soft skills has been studied for a long time in various contexts. However, in recent years, the process of promoting soft skills has been replaced by the process of systematising these elements in the system of higher education. Skakun (2022) proposes to integrate the potential of educational skills into a synergistic world view, which will strengthen the interaction of the fundamental and flexible cluster of educational outcomes.

The positioning of soft skills in the higher education system is influenced by many factors of social activity, including the following:

- social orientation of soft skills (Bhandari, 2023);
- educational and legal support for professional training of specialists (Buriak, Skaletska, Rezvorovych, & Gigin, 2023);
- focus on the use of innovative tools in the educational process (Sofilkanych et al., 2023);
- ensuring the interaction of the humanitarian component and the natural science paradigm of knowledge (Hasiuk et al., 2022);
- a communicative element of educational training Leleka and Moskalenko (2023);

- technological support of the educational process (Yuhan, 2017).

For a holistic understanding of the status of soft skills in the higher education system, it is worth focusing on the peculiarities of their use in innovative learning formats: the model of problem-based learning (Deep et al., 2020), the format of macro design of educational activity (Dolce, Emanuel, Cisi, & Ghislieri, 2020), the system of behavioural education and emotional intelligence (Touloumakos, 2020), the technological and digital culture of education 4.0 (Asbary, Purwanto, Ong, Mustikasiwi, Maesaroh, Mustofa, Hutagalung, and Andriyani (2020), non-formal education paradigm (Boiko, 2021).

3. RESEARCH DESIGN AND METHODS

The article focuses on the analysis of the relationship between soft skills and other components of educational activity, primarily the cluster of fundamental skills. To achieve the research objectives, a set of general scientific, scientific-pedagogical, and philosophical-scientific methods was used.

The research paper offers a qualitative study based on a literature review of the realities and prospects of soft skills in the training of specialists in various fields of activity. The methodological arsenal of the current study is focused on the analysis of studies on the implementation and development of soft skills in the higher education system, which have been conducted in the last 5 years. This time period is relevant because during this period, studies of the status of soft skills were specified, and not only this segment of professional competences was popularised.

When selecting sources relevant to the current study, resources from the following scientometric databases were used: Google Scholar, ResearchGate, Taylor & Francis, Springer. The sources were selected using the following keywords and phrases: soft skills, higher education, competences, professionalism. There were no regional restrictions and localisation of the study of the features of soft skills in the higher education system in the current study.

4. RESULTS

In order to understand the transformation of the status of soft skills in the higher education paradigm, it is important to understand their essence and conceptual dimensions in the educational sense. The generally accepted way of positioning soft skills is socio-humanitarian. In accordance with this orientation, the purpose of this segment of competences of higher education students was formed. The modern socio-cultural space dictates new realities for the socio-humanitarian dimension of professional activity. On the one hand, the emphasis is on traditional humanitarian and socially-oriented issues; on the other hand, the concept of innovation is being actualised, which is expressed in the formation of a new type of soft skills: creative, heuristic, digital, technological. Therefore, in the modern paradigm of soft skills, a versatile format of their classification is proposed (Fig. 1), which will be expanded both quantitatively and qualitatively in the short term.

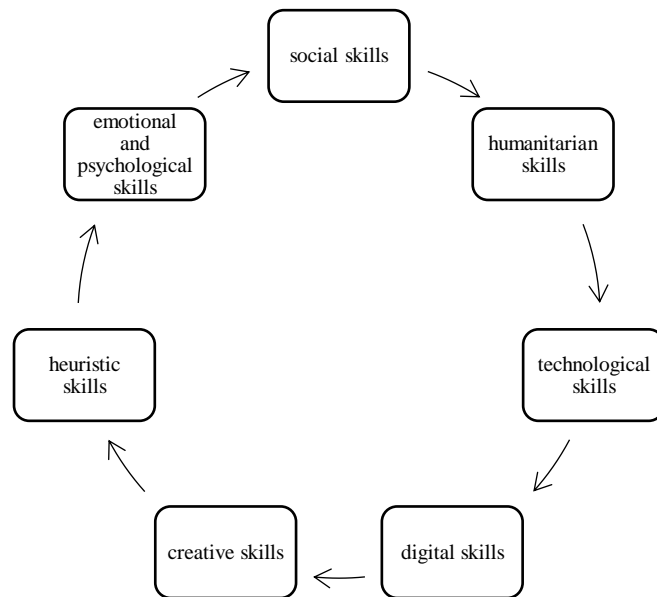


Figure 1. A set of soft skills in the modern higher education system.
Source: authors' own development

Modern society is guided by the principles of information and communication and technological and digital dimensions. In view of this, soft skills should form a specialist's awareness of new realities and the ability to adapt to the professional activities of new conditions. T (2108) defines communication between participants in social activity as a determining factor of effectiveness. These skills are formed based on the example of communication in the educational space, where the realities of future professional life are modelled. Therefore, sustainability and diversity Fernandes, Jardim, and Lopes (2021) in communication allows a specialist to implement work plans in any field of activity more quickly. Communication is a dimension of soft skills, as it is used in the context of supporting the main professional activity (Shwetha and Sureshramana, 2022).

Soft skills in the modern professional dimension consist of a number of socio-cultural manifestations:

- mental readiness for professional activity (Otermans, Aditya, & Pereira, 2023);
- Reducing the gap between education and the labour market in terms of individual responsibility, initiative, and employability (De Campos, De Resende, & Fagundes, 2020);
- continuity of education and training through the principles of self-organisation and self-education (Sydorenko, 2020);
- the dynamism of the socio-cultural environment (Succi & Canovi, 2020);
- format for assessing the level of soft skills (Emanuel, Ricchiardi, Sanseverino, & Ghislieri, 2021).

The results of the study indicate a gradual transformation of the status of soft skills in the education system in general and in the higher education cluster in particular. If at the beginning of the actualisation of the concept of socio-humanitarian skills, they were positioned as a kind of part of the general skills that students acquire in the course of higher education, then in the process of their establishment, their autonomy in the paradigm of knowledge, skills, and abilities is increasing. In the modern scientific and educational discourse, several formats of

positioning soft skills in the higher education system in relation to the general arsenal of skills acquired by students can be distinguished (Table 1).

Table 1. Formats of interconnection between fundamental and soft skills in the higher education system

| Format of interconnection with fundamental skills | Interaction results |
|--|--|
| addendum | the initial format of updating soft skills, in which they were assigned the role of reinforcing or supporting the fundamental cluster |
| correlation | a period of coordination of the areas of responsibility of fundamental and soft skills in the formation of integral, general, professional, and special competences of higher education students |
| synergy | the process of interaction of various elements of skills acquired in the educational and scientific-cognitive process in order to form a versatile professional and socio-humanitarian development of a professional specialist |
| autonomy | the effect of allocating soft skills into an independent institutional unit as a set of universal professional competences that have a unified interdisciplinary character and can be used as an educational component for acquiring a profession, advanced training, self-education |

Source: authors' own development

Magano, Silva, Figueiredo, Vitória, Nogueira, and Pimenta Dinis (2022) emphasise the formation of a new generation of students and, accordingly, specialists with higher education who are able to differentiate between individual potential and project-based collective activity. This understanding allows us to optimise the organisational aspects of professional activity. Given that such skills are the result of the flexibility of educational training and the ability to self-organise, their demand is constantly growing. This necessitates appropriate training of the scientific and pedagogical community, which should develop relevant mechanisms for the acquisition of soft skills and their assessment (Mailool et al., 2020). This positioning of soft skills is a prerequisite for the formation of universities as institutions that holistically develop human capital at the national and global level (Abdul Aziz & Noah, 2020; Tang, 2020).

It is noted that the classical model of knowledge in a particular speciality (or even in several related specialities) is losing its demand in the labour market. The concept of professional intelligence is now being updated (Karimova, 2020), which implies both the availability of knowledge and the ability to adapt professionally (retrain, improve, self-organise) to socio-cultural conditions. Increasing the role of soft skills is accompanied by the expansion of their characteristics in the context of human potential. In particular, the psychometric dimensions of soft skills are being studied Jardim, Pereira, Vagos, Direito, and Galinha (2022), which allows to differentiate the level of students' ability to master them.

An important factor in the relevance and effectiveness of flexible skills in the educational process of higher education is the achievement of value and goal orientations. The value and goal component is theoretical and practically oriented, which involves determining the role of soft skills in two key educational characteristics:

- flexible skills contribute to the development of critical, analytical, creative and innovative thinking, which is accumulated in improving the success and quality of the educational process;
- flexible skills form guidelines for the full implementation of knowledge and skills in professional activities, which is reflected in a significant increase in the level of synergy in the workplace.

The value-oriented characteristic of flexible skills is confirmed by the statistics obtained in the study by Ibrahim, Boerhannoeddin and Bakare (2017), which indicate that “employee performance in the companies studied increased by 14.5 per cent due to the acquisition of soft communication skills by their employees, and a 27.9 per cent increase in employee productivity was based on the methodology of learning in space and time”. These figures are quite a high rate of performance growth for learning-oriented elements and, in fact, are on par with innovative technological and digital factors.

The level of development of soft skills has reached the point where a clear and understandable system for assessing these skills is being developed. Previously, the level of fundamental skills was assessed, which was the basis for determining the level of training or professionalism of a specialist. Now, a system for checking mental preparation for professional activity has been formed. That is, criteria for determining the level of soft skills, which affects the competitiveness of a specialist, have been formed.

5. DISCUSSION

The results of the study show that the period of introduction and popularisation of soft skills in the higher education system did not cause significant debate among the scientific community, as almost all participants in the educational process positively perceived the inclusion of the socio-humanitarian component in the individual arsenal of competences. However, over time, the perception of soft skills has undergone certain transformations (Berry & Routon, 2020), as they have begun to provoke certain contradictions with the fundamental cluster of knowledge, skills, and abilities.

The analysis of the results of the implementation of soft skills confirmed the general expectations of the role of soft skills, as they allowed the participants of the educational process to adapt to the permanent changes in the socio-cultural environment. Thus, the targeted purpose for soft skills was clearly formulated and demonstrated effectiveness and efficiency. At the same time, the popularisation of soft skills contributed to a rather significant increase in their status in the system of training higher education students, which required appropriate regulation in the educational and methodological dimension.

The obtained results contradict the position of Arli Rusandi, Ahman, Ipah, and Deasy Yunika Khairun (2023), which defines critical thinking as an achievement of the innovation segment (for example, artificial intelligence), and not as a result of the coordination of soft skills. Also, the lack of a unified view of the process of forming soft skills is observed in comparison with the study by Noah & Aziz (2020), in which this problem is narrowed exclusively to the learning process with unfocused models of application in professional activities.

At the same time, the results of scientific research coincide with the opinion of Tsirkas, Chytiri, and Bouranta (2020) regarding the positioning of soft-skills as basic elements of professional competencies that become the key to success and demand in a competitive environment. The results and conclusions of Tadjer et al. (2022), which note an increase in labour productivity when a specialist has developed soft skills, confirm the findings. These findings are confirmed by the study by Byrne, Weston, and Cave (2020), which notes that university graduates in engineering showed significantly better results with soft skills that are not directly related to their professional competencies. Similar findings are reported by Lyu and Liu (2021), who emphasise the relevance of soft skills in the traditionally fundamentally oriented field of engineering.

Considering the existing results of the scientific and educational community, a new perspective on the prospects of soft skills in higher education is analysed. Innovative and technological (Singh Dubey & Tiwari, 2020), biomedical Goldman and Wong (2020), and socio-humanitarian Feraco, Resnati, Fregonese, Spoto, & Meneghetti (2022) components are

becoming integral elements of human life, so skills in these areas are relevant in various professional dimensions. The results obtained can be useful in planning strategies for the development of higher education, as understanding the status of soft skills allows to balance the training system in accordance with the learning objectives.

Potential limitations in the current study include the turbulence of the educational and methodological support of the educational process associated with the active use of innovative potential. The scale and intensity of information and communication, technological and digital elements in the educational paradigm sometimes blur the line between hard and soft skills. The content of work-related curricula is not actually updated in the context of socio-cultural trends that uncompromisingly give flexible skills the status of fundamental and life skills. Such realities create a delay in the process of transforming the format of the educational process, while at the same time introducing a certain chaos into the conceptual status of soft-skills.

In the context of these contradictions, it is worth reflecting on the correlation algorithm of all skills acquired by higher education students. If we look at the standards of higher education in a particular speciality or the standard working curriculum for a discipline taught in a higher education institution, we can see the structuring of a set of skills: a cluster of fundamental competences (general, professional, and special) and a cluster of interdisciplinary competences (flexible, digital, socio-cultural skills).

The inclusion of the concept of interdisciplinarity is crucial for synchronising the arsenal of academic skills of a higher education student. The interdisciplinary approach allows to respond to the blurred boundaries between fundamental and flexible skills, making them relevant, depending on the need and demand. Interdisciplinarity becomes a real guideline for the development of a system of flexible skills in the educational process of higher education, as in this context the conceptuality of soft skills and their correlation with institutional guidelines are preserved.

For the current study, the limitations related to the selection of literature were relevant. Since the issues raised in the article are focused on the prospects of positioning soft skills in the higher education system, research focused on the consideration of these skills in the context of their popularisation was not considered, as they are valuable in the context of establishing and establishing their status.

Proposals for improving the flexible skills cluster in higher education standards are not traditionally focused on quantitative indicators. It is obvious that the formal addition of soft skills to the competences and objectives of the educational process will not have the expected effect. The reason for this is the heterogeneity of specialities and the specifics of training specialists in different fields. Uniformity of flexible skills is unjustified in the paradigm of higher education development. Instead, the principle of using an interdisciplinary approach that will be dynamic and facilitate the inclusion of relevant and sought-after soft skills in educational activities, their change in accordance with the requirements of time, variable characteristics, and correlation with the cluster of fundamental skills is relevant. Therefore, a practical recommendation for positioning the soft-skills cluster in the educational and methodological paradigm of higher education is to overcome the formal approach to attracting the potential of flexible skills and prioritise a transformational approach that will ensure the pragmatism and dynamism of soft-skills in the higher education system.

6. CONCLUSION

There are two strategies for positioning soft skills in the future paradigm of sustainable development education that are being discussed among the scientific and educational community. On the one hand, it is proposed to leave the format of soft skills as part of the general skills in the chosen speciality of training. The other way involves the creation of an autonomous cluster of socio-humanitarian, innovative, and technological training, which will



be universal in nature and can be used in further education or training in accordance with the specialisation.

The positioning of soft skills will be one of the most important factors in shaping the development strategy of higher education in the short and long term. Rapid and unpredictable socio-cultural development creates effects of instability, which should be overcome by the appropriate arsenal in the professional training of specialists. Creativity, socio-humanitarian systematicity, heuristics, criticality, and innovation (technology and digitalisation) can ensure a balance of knowledge, skills, and abilities required by a specialist to conduct effective professional activities.

REFERENCES

- Abdul Aziz, A., & Noah, J. B. (2020). A systematic review on soft skills development among university graduates. *EDUCATUM Journal of Social Sciences*, 6(1), 53–68. <https://doi.org/10.37134/ejoss.vol6.1.6.2020>
- Arli Rusandi, M., Ahman, Ipah, S., & Deasy Yunika Khairun, M. (2023). No worries with ChatGPT: Building bridges between artificial intelligence and education with critical thinking soft skills. *Journal of Public Health*, 45(3), e602–e603. <https://doi.org/10.1093/pubmed/fdad049>
- Asbari, M., Purwanto, A., Ong, F., Mustikasiwi, A., Maesaroh, S., Mustofa, M., Hutagalung, D., & Andriyani, Y. (2020). Impact of hard skills, soft skills and organizational culture: Lecturer innovation competencies as mediating. *EduPsyCouns: Journal of Education, Psychology and Counseling*, 2(1), 101–121. <https://ummaspul.e-journal.id/Edupsyscouns/article/view/419>
- Berry, R., & Routon, W. (2020). Soft skill change perceptions of accounting majors: Current practitioner views versus their own reality. *Journal of Accounting Education*, 53. <https://doi.org/10.1016/j.jaccedu.2020.100691>
- Bhandari, M. P. (2023). Past and present of social inequality: Analysing structure and future trends. *Futurity of Social Sciences*, 1(3), 47–60. <https://doi.org/10.57125/FS.2023.09.20.04>
- Boiko, A. (2021). Innovative development of non-formal education in Ukraine: Definition of soft skills. *Theoretical and Methodical Problems of Children and Youth Education*, 25(1), 22–33. <https://doi.org/10.32405/2308-3778-2021-25-1-22-33>
- Buriak, I., Skaletska, Z., Rezvorovych, K., & Gigin, O. (2023). Future legal culture as an element of the legal system. *Futurity Economics & Law*, 3(2), 39–47. <https://doi.org/10.57125/FEL.2023.06.25.03>
- Byrne, Z. S., Weston, J. W., & Cave, K. (2020). Development of a scale for measuring students' attitudes towards learning professional (i.e., soft) skills. *Research in Science Education*, 50, 1417–1433. <https://doi.org/10.1007/s11165-018-9738-3>
- De Campos, D. B., De Resende, L. M. M., & Fagundes, A. B. (2020). The importance of soft skills for the engineering. *Creative Education*, 11, 1504–1520. <https://doi.org/10.4236/ce.2020.118109>
- Deep, S., Ahmed, A., Suleman, N., Abbas, M., Naza, U., Shaheen, H., & Razzaq, A. (2020). The problem-based learning approach towards developing soft skills: A systematic review. *The Qualitative Report*, 25(11), 4029–4054. <https://nsuworks.nova.edu/tqr/vol25/iss11/13>
- Dolce, V., Emanuel, F., Cisi, M., & Ghislieri, C. (2020). The soft skills of accounting graduates: Perceptions versus expectations. *Accounting Education*, 29(1), 57–76. <https://doi.org/10.1080/09639284.2019.1697937>
- Emanuel, F., Ricchiardi, P., Sanseverino, D., & Ghislieri, C. (2021). Make soft skills stronger? An online enhancement platform for higher education. *International Journal of Educational Research Open*, 2. <https://doi.org/10.1016/j.ijedro.2021.100096>

- Feraco, T., Resnati, D., Fregonese, D., Spoto, A., & Meneghetti, C. (2022). Soft skills and extracurricular activities sustain motivation and self-regulated learning at school. *The Journal of Experimental Education*, 90(3), 550–569. <https://doi.org/10.1080/00220973.2021.1873090>
- Fernandes, P. R., Jardim, J., & Lopes, M. C. (2021). The soft skills of special education teachers: Evidence from the literature. *Education Sciences*, 11(3). <https://doi.org/10.3390/educsci11030125>
- Goldman, J., & Wong, B. M. (2020). Nothing soft about ‘soft skills’: Core competencies in quality improvement and patient safety education and practice. *BMJ*, 1–4. <https://doi.org/10.1136/bmjqs-2019-010512>
- Hasiuk, I., Medynskiy, S., Saienko, V., Biriukova, T., Ivanikiv, N., & Yakovliv, V. (2022). Correlation of physical indices with the subjective physiological and neurophysiological parameters of health. *Revista Românească pentru Educație Multidimensională*, 14(4), 159–179. <https://doi.org/10.18662/rrem/14.4/635>
- Ibrahim, R., Boerhannoeddin, A., & Bakare, K. (2017). The effect of soft skills and training methodology on employee performance. *European Journal of Training and Development*, 41(4), 388–406. <https://doi.org/10.1108/EJTD-08-2016-0066>
- Jardim, J., Pereira, A., Vagos, P., Direito, I., & Galinha, S. (2022). The Soft Skills Inventory: Developmental procedures and psychometric analysis. *Psychological Reports*, 125(1), 620–648. <https://doi.org/10.1177/0033294120979933>
- Karimova, N. U. Q. (2020). Soft Skills Development in Higher Education. *Universal Journal of Educational Research*, 8(5), 1916–1925. <https://doi.org/10.13189/ujer.2020.080528>
- Leleka, T., & Moskalenko, O. (2023). The Psycholinguistic Aspects of Global Bilingualism Against the Background of the Society Digitalization Process in Ukraine and Slovak Republic. *Psycholinguistics*, 33(2). <https://psycholing-journal.com/index.php/journal/issue/view/48>
- Lyu, W., & Liu, J. (2021). Soft skills, hard skills: What matters most? Evidence from job postings. *Applied Energy*, 300. <https://doi.org/10.1016/j.apenergy.2021.117307>
- Magano, J., Silva, C., Figueiredo, C., Vitória, A., Nogueira, T., & Pimenta Dinis, M. A. (2022). Generation Z: Fitting project management soft skills competencies – A mixed-method approach. *Education Sciences*, 10(7). <https://doi.org/10.3390/educsci10070187>
- Mailool, J., Retnawati, H., Arifin, S., Kesuma, A. T., & Putranta, H. (2020). Lecturers’ experiences in teaching soft skills in teacher profession education program (TPEP) in Indonesia. *Problems of Education in the 21st Century*, 78, 215–234. <https://doi.org/10.33225/pec/20.78.215>
- Noah, J. B., & Aziz, A. B. A. (2020). A case study on the development of soft skills among TESL graduates in a university. *Universal Journal of Educational Research*, 8(10), 4610–4617. <https://doi.org/10.13189/ujer.2020.081029>
- Otermans, P. C. J., Aditya, D., & Pereira, M. (2023). A study exploring soft skills in higher education. *Journal of Teaching and Learning for Graduate Employability*, 14(1), 136–153. <https://files.eric.ed.gov/fulltext/EJ1396516.pdf>
- Shwetha, P., & Sureshramana, M. (2022). A systematic literature review on training higher education students for soft skills. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 7(2), 97–142. <https://doi.org/10.47992/IJMTS.2581.6012.0213>
- Singh Dubey, R., & Tiwari, V. (2020). Operationalisation of soft skill attributes and determining the existing gap in novice ICT professionals. *International Journal of Information Management*, 50, 375–386. <https://doi.org/10.1016/j.ijinfomgt.2019.09.006>
- Skakun, I. (2022). Philosophical and methodological prospects for the future of synergetics in the scientific picture of the world. *Futurity Philosophy*, 1(4), 42–53. <https://doi.org/10.57125/FP.2022.12.30.04>

- Sofilkanych, N., Vesova, O., Kaminsky, V., & Kryvosheieva, A. (2023). The impact of artificial intelligence on Ukrainian medicine: Benefits and challenges for the future. *Futurity Medicine*, 2(4), 28–39. <https://doi.org/10.57125/FEM.2023.12.30.04>
- Succi, C., & Canovi, M. (2020). Soft skills to enhance graduate employability: Comparing students and employers' perceptions. *Studies in Higher Education*, 45(9), 1834–1847. <https://doi.org/10.1080/03075079.2019.1585420>
- Sydorenko, V. (2020). Soft skills as an educational trend and a necessary development component for a vocational lifelong education teacher. *Fundamental and Applied Researches in Practice of Leading Scientific Schools*, 38(2), 127–134. <https://doi.org/10.33531/farplss.2020.2.23>
- Tadjer, H., Lafifi, Y., Seridi-Bouchelaghem, H., & Gülseçen, S. (2022). Improving soft skills based on students' traces in problem-based learning environments. *Interactive Learning Environments*, 30(10), 1879–1896. <https://doi.org/10.1080/10494820.2020.1753215>
- Tang, K. N. (2020). The importance of soft skills acquisition by teachers in higher education institutions. *Kasetsart Journal of Social Sciences*, 41(1), 22–27. <https://so04.tci-thaijo.org/index.php/kjss/article/view/234867>
- Touloumakos, A. K. (2020). Expanded yet restricted: A mini review of the soft skills literature. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.02207>
- Tsirakas, K., Chytiri, A. P., & Bouranta, N. (2020). The gap in soft skills perceptions: A dyadic analysis. *Education + Training*, 62(4), 357–377. <https://doi.org/10.1108/ET-03-2019-0060>
- Yuhan, N. L. (2017). Multimedia technologies of teaching «Russian language» to foreign students at the initial stage. *Science and Education*, 5, 27–32. Retrieved from https://scienceandeducation.pdpu.edu.ua/doc/2017/5_2017/6.pdf