

The impact of the activities carried out within the SKILLS4FUTURE¹ project on the satisfaction of the academic community within Cahul State University „Bogdan Petriceicu Hasdeu”

Irina TODOS

Cahul State University “Bogdan Petriceicu Hasdeu”, Cahul City, Republic of Moldova

ORCID ID: 0000-0003-1012-7809, e-mail address: todosirina@gmail.com

Liudmila ROȘCA-SADURSCHI

Cahul State University “Bogdan Petriceicu Hasdeu”, Cahul City, Republic of Moldova

ORCID ID: 0000-0003-1358-0019, e-mail address: liudmila.sadurschi@gmail.com

Abstract. *This paper explores the impact of the SKILLS4FUTURE project on the academic community in Cahul, focusing on student satisfaction and learning outcomes following the integration of theoretical and practical STEAM-based subjects. The growing demand for interdisciplinary and applied education has positioned STEAM (Science, Technology, Engineering, Arts and Mathematics) as a priority in higher education. Although the literature increasingly recognizes the benefits of STEAM in promoting critical thinking, creativity and employability, there is limited empirical evidence on its concrete effects on students' academic experience in real institutional contexts. The study uses a quantitative, questionnaire-based methodology, targeting students who participated in newly introduced STEAM - oriented subjects as part of the SKILLS4FUTURE project, as well as teachers who modernized the content, and beyond. This paper contributes to current educational research by providing empirical insights into the effectiveness of integrating STEAM through structured academic projects. The findings highlight the importance of aligning pedagogical innovations with students' existing skills and expectations. The conclusions can inform future curriculum design and policy development in universities, aiming to improve both theoretical understanding and practical skills required by the labor market.*

Keywords: STEAM education, STEAM knowledge, skills development, applied learning, organizational effectiveness

How to cite: TODOS, I., & ROȘCA-SADURSCHI, L. The impact of the activities carried out within the SKILLS4FUTURE project on the satisfaction of the academic community within Cahul State University “Bogdan Petriceicu Hasdeu”. *International Conference of Management and Industrial Engineering*, 12. <https://doi.org/10.56177/12icmie2025.139>

Introduction

The profound transformations of the contemporary economy, fueled by digitalization, environmental pressures and new social paradigms, call for an integrated approach to the skills needed by future professionals. In this context, higher education is called upon to rethink educational processes so as to provide students not only with theoretical knowledge, but also with the ability to integrate and apply skills specific to the scientific, technological, engineering, artistic and mathematical fields (STEAM), in correlation with the economic, ecological and social dimensions of sustainable development. The SKILLS4FUTURE project aligns itself with these challenges, having as its general objective the integration of STEAM skills in the curricula of the “Business and Administration” study program, the first cycle of the bachelor’s degree, through a transdisciplinary approach, relevant and anchored in the realities of the current labor market.

Within the Cahul State University “Bogdan Petriceicu Hasdeu” (USC), the project was implemented through a series of educational and extracurricular activities, designed to stimulate active learning and direct involvement of students. These included the modernization of the curricula of five subjects from the curriculum: Basics of Entrepreneurship, Production Management, Quality Management, Human Resources Management, Innovation Management. The curricula for internships were modernized and the topics and structure of bachelor’s theses were adjusted to include STEAM elements. In order to achieve these modernizations, two professional training sessions for teachers in the field of STEAM were organized.

¹ “Developing and improving the STEAM skills of students and teachers for curriculum innovation and sustainable development of higher education institutions and local businesses”, Project No. 101081787, ERASMUS-EDU-2022-CBHE-STRAND-2

The main mission of the University is to prepare qualified personnel competitive on the labor market, respectively, in carrying out the modernizations according to the provisions of the project, several actors from the economic, social, cultural environment, representatives of the LPA, NGOs of the region were involved, by organizing such events as: thematic workshops on the STEAM fields (economic, social, ecological); multiplication events; scientific conferences of students; the competition of innovative business plans and other inter-institutional collaborations.

All these activities had the role of supporting the development of essential skills such as critical thinking, the ability to work in a team, sensitivity to environmental issues and social responsibility [1].

The main objective of this study is to assess the impact of the activities carried out within the SKILLS4FUTURE project on the level of satisfaction of members of the academic community at USC. The research is structured around the research question: *"To what extent have the project activities influenced the perception of academic satisfaction and educational involvement of students and teachers?"*

The central hypothesis assumes that active participation in the project activities led to an increase in academic satisfaction, both by consolidating practical skills and by improving the perception of the relevance and adaptability of the educational experience to contemporary socio-economic requirements.

The analysis of the empirical data collected in the study aims to highlight the effectiveness of educational initiatives based on the integration of STEAM skills in the professional training process of students in the economic field.

The research results provide a substantiated perspective on the impact of the SKILLS4FUTURE project and can support the formulation of academic policies aligned with the realities of the labor market. In addition, the conclusions obtained can constitute a benchmark for the development and adaptation of the curriculum in higher education, both at the institutional and national level.

Literature review

In recent years, education based on interdisciplinary skills has become a central topic in higher education reform. The STEAM model (Science, Technology, Engineering, Arts, Mathematics) was developed as an extension of STEM education, by including the creative and cultural dimension, reflected in the artistic field. According to G. Yakman[2], the STEAM approach provides an integrated framework that allows students to develop both technical, social and creative skills, essential in a constantly changing economy. STEAM education is based on developing new ways of thinking and learning that will prepare them for the job market[3]. The new national educational requirements, regarding the development of skills necessary to be valued at a personal and professional level, from a young age and throughout life, are found in National Development Strategy "European Moldova 2030"[4] and the Development Strategy "Education 2030"[5].

Integrating the sustainability dimension into university education is another important pillar in the specialized literature. UNESCO[6] argues that educational systems must train citizens capable of actively contributing to a sustainable society, by developing a specific set of ecological, economic and social competences. Wiek et al. [7] propose a classification of competences for sustainability, which include systems thinking, anticipation and interdisciplinary collaboration.

Academic satisfaction has become an essential criterion in evaluating the effectiveness of educational programs. According to the Expectancy-Value Model[8], motivation and satisfaction with learning are influenced by the perceived relevance of the content and the student's confidence in their own abilities. In addition, student-centered approaches, such as project-based learning or the integration of skills applicable to professional life, can significantly contribute to increasing satisfaction.

Although the literature provides a solid framework for understanding the components of STEAM and the principles of sustainable education, there are few studies that explore the integration of these dimensions into the economics curriculum, especially in the Business and Administration specialization. Furthermore, there is limited empirical research on the impact of these approaches on student academic satisfaction, which justifies the investigative approach presented in this paper.

Methodology

The present study uses a quantitative approach, with descriptive and explanatory elements, aiming to assess the perceived impact of the activities within the SKILLS4FUTURE project on the academic satisfaction of members of the university community. The chosen method allowed a systematic analysis of the opinions and experiences of the participants, in a controlled setting, with the possibility of extracting relevant trends and correlations.

The target group of the research was composed of students and teaching staff from the Cahul State University “Bogdan Petriceicu Hasdeu” (USC), who participated, directly or indirectly, in the activities carried out within the project. The main data collection tool was the digital questionnaire administered through the Google Forms tool, adapted according to the profile of each category of respondents. The data were collected during the period May 2024 - March 2025, by distributing the questionnaire online. Participation was anonymous and voluntary, in compliance with the principles of research ethics.

To answer the question - "To what extent did the activities of the SKILLS4FUTURE project influence academic satisfaction?" - two structured questionnaires were used. The first questionnaire was dedicated to students who studied modernized disciplines with STEAM subjects, the second questionnaire was for teachers who directly contributed to the modernization of the curricula in the study disciplines and internships, as well as to the organization of other didactic and extracurricular activities.

The student questionnaire was structured in two sections. The first section included basic demographic information (gender, major, year of study, form of education, email address), and the second included items regarding the perception of the skills acquired through participation in the project, as well as the level of academic satisfaction. Students completed the questionnaires at the end of the semester, after completing the course. About 50 students participated in this survey. 58 students were surveyed.

The questionnaire applied to teachers was also structured in two sections. After completing demographic data, respondents were invited to evaluate their level of satisfaction with the project, then with a series of key areas (STEAM skills development, professional career development, technical/academic performance, communication skills), as well as to express their perception of the impact of the changes generated by the project in their educational practice. 13 teachers participated in this questionnaire.

Results and further discussions

In the current context, characterized by rapid changes and emerging technologies, the fields of Science, Technology, Engineering, Art and Mathematics (STEAM) have become fundamental in shaping contemporary society. The innovations generated in these areas – from artificial intelligence to advanced biomedical technologies – profoundly influence social, economic and cultural processes, thus underlining the importance of integrating interdisciplinary approaches in higher education.

STEAM learning at the university level involves the development of complex and multidisciplinary skills necessary to train specialists capable of interconnecting scientific and technological knowledge with artistic creativity, facilitating innovation and solving complex contemporary problems. STEAM educational programs aim not only to transmit in-depth technical knowledge, but also to stimulate critical thinking, practical skills and interdisciplinary collaboration skills.

Thus, the development of STEAM skills among students is an essential component of the university educational strategy, having a direct impact on the formation of a qualified workforce and on technological and scientific progress[9].

In this context, this chapter analyzes the results obtained from two surveys addressed to both students and academic staff. The data analysis aims to identify the impact of the activities carried out within the SKILLS4FUTURE project on the level of satisfaction, involvement and professional development felt in the academic community of the “Bogdan Petriceicu Hasdeu” State University of Cahul. The results are presented differentiated according to the category of respondents and interpreted in relation to the project objectives and the current university context.

1. Results of questionnaires obtained from students. The questionnaire was applied to students who studied modernized disciplines with STEAM elements: quality management, production management, human resources management, innovation management, foundations of entrepreneurship.

The **Production Management** course was evaluated by 14 students from the Business and Administration study program, year 2, full-time. The evaluation focused on three main dimensions: organizational aspects, study materials and practical applications, and learning outcomes.

Regarding *organizational aspects*, students expressed a high degree of satisfaction: 75% rated the course content, the quality of teaching, and the interaction with the teacher as excellent or good. Also, elements such as the course structure, clarity of explanations, workload, and degree of difficulty were well rated by most respondents.

Regarding *teaching materials and practical applications*, 50% of students rated the new theoretical topics as good and 37.5% as excellent. Topics that integrated the concepts of sustainable development and circular economy received an even higher level of satisfaction: 87.5% good and 25% excellent. These were perceived as relevant and applicable in practical work and seminars.

Regarding *learning outcomes*, 87% of students stated that they had significantly developed both their theoretical knowledge and practical skills, thanks to the integration of STEAM elements within the subject. This confirms the effectiveness of curricular modernization and the relevance of interdisciplinary approaches in increasing involvement and developing transversal skills.

The **Quality Management** course was evaluated by 8 students from the third year of the Business and Administration study program, in a full-time education regime. The evaluation followed the degree of satisfaction of the students with the organizational aspects of the course, the teaching materials and the practical activities, as well as the achievement of the learning outcomes, especially in the context of the integration of STEAM elements.

The organizational aspects of the course were positively assessed by the majority of respondents, with a percentage between 75% and 100% of the ratings "excellent" and between 12.5% and 25% "good". Students highlighted a clear organization of the course, effective teaching methods, adequate resources and effective communication. The level of difficulty of the content was perceived as well-balanced, with 62.5% of the students considering this aspect "excellent".

The study materials and practical applications also enjoyed a high degree of satisfaction. Topics such as Quality Management Systems, Social Responsibility and Environmental Protection were rated as "excellent" by 75% of students. Other lessons, such as Correlation between Quality and Competitiveness or Integrated Management Systems, received 62.5% "excellent" and 37.5% "good". Practical applications — including case studies and STEAM-themed activities — were considered relevant and well-designed, although some difficulties were encountered due to the limited practical experience of the students. This indicates the opportunity to provide more applied examples and clear guidance.

In terms of *learning outcomes*, students stated that they had acquired theoretical knowledge and practical skills in a proportion of 50%–75%, especially in the areas of quality management, sustainability and the application of STEAM principles. Skills such as analytical thinking, interdisciplinary application and problem solving in real contexts were developed. However, the results also indicate the need to strengthen the applied component of the course for more complete training.

The **Basics of Entrepreneurship** course was evaluated by students from the Business and Administration (47.05%) and Engineering and Management (52.95%) undergraduate programs. The sample included first and second year students, all enrolled full-time, with a gender distribution of 70.6% women and 29.4% men.

The majority of students expressed a high level of satisfaction with the organizational aspects of the course (between 88.23% and 100%), regarding the organization of the course, including structure, scheduling, communication and clarity of requirements. These results indicate a good management of the educational process and an efficient organization that supported active learning.

The evaluation of the newly integrated content showed a very high degree of satisfaction with the teaching materials and practical applications:

- Green Business – 94.11% satisfaction
- Sustainable Development Goals in SMEs – 100% satisfaction
- Resource Efficiency and Collaborative Economy – 94.11% satisfaction

These results reflect the increased relevance of the topics, especially in the context of sustainable development and modern entrepreneurship.

Overall assessment of learning outcomes: Students reported a theoretical knowledge acquisition rate between 70.58% and 94.11%, especially on topics such as sustainability, green business models and innovation in the STEAM context. Practical skills – such as critical thinking, collaboration and applying theory in real contexts – were developed in a proportion ranging from 70.58% to 88.23%.

The integration of STEAM content into the Basics of Entrepreneurship discipline was well received and contributed significantly to the development of students' knowledge and skills.

In the **Human Resources Management** discipline, the evaluation was carried out by 10 students, of which 40% came from the Business & Administration bachelor's program and 60% from Engineering and Management in Food Industry, all of whom were enrolled in the full-time education form.

- Satisfaction with organizational aspects: Students expressed a high level of satisfaction with the organization of the course, appreciating the structure, teaching methodology and the availability of materials on the e-learning platform. The most frequent ratings were "good" and "excellent".
- Evaluation of theoretical materials (STEAM): Topics in the new curriculum, such as resource efficiency through the collaborative economy, sustainable employment and occupational health and safety, were well received. Topics such as Social and labor protection received balanced ratings between "good" and "excellent".
- Evaluation of practical activities: The applied activities were overwhelmingly rated as "excellent":

- Sustainable employment – 70% “excellent”;
- Resource efficiency and occupational health – 60% “excellent”;
- Environmental compliance – 50% “excellent”;
- Social protection – 40% “excellent”;
- Appreciation of learning outcomes (STEAM knowledge & skills): All targeted learning outcomes were achieved at “achieved” and “fully achieved” levels. Student appreciation was distributed as follows:
- K20. To know the importance of empowering individuals and organizations to work collaboratively: achieved – 60%, fully achieved – 40%.
- K21. To know that preventive action should be taken when certain action/inaction may damage human health and all life forms (precautionary principle): achieved – 70%, fully achieved – 30%.
- K19. To know the main sustainability stakeholders in the community and how to contact them: achieved – 60%, fully achieved – 40%.
- K21. To know that preventive action should be taken when certain action/inaction may damage human health and all life forms (precautionary principle): achieved – 60%, fully achieved – 40%.
- K1. To know the main values and principles underpinning socioeconomic models and their relation to sustainability: achieved – 50%, fully achieved – 50%.
- S14: adapting to local circumstances in sustainability issues – 70% achieved, 30% fully achieved;
- S15: synthesizing interdisciplinary information on sustainability – 60% achieved, 40% fully achieved;
- S17: analyzing the influence of power structures and political systems – 70% achieved, 30% fully achieved;
- S22: acting promptly in conditions of uncertainty, respecting the precautionary principle – 50% achieved, 50% fully achieved;
- S4: careful evaluation and management of resources for long-term objectives – 60% achieved, 40% fully achieved.

In the **Innovation Management** discipline, the evaluation was carried out by 9 third-year students. All the interviewed students are part of the Business and Administration study program, in a full-time education regime.

➤ Satisfaction with organizational aspects: Students expressed a high level of satisfaction with the course, particularly appreciating the quality of the materials, the clarity of teaching and the accessibility on the e-learning platform.

➤ Evaluation of theoretical materials (STEAM): The modernized theoretical themes were very well received:

- Sustainable Lifestyle and Education – 88.9% “excellent”.
- Innovation & Product Responsibility, Environmental Compliance – 77.8% “excellent”.

➤ Evaluation of practical activities: The application aspects of the improved themes were evaluated as “excellent” by 88.9% of the students. Only one student (11.1%) gave a “satisfactory” rating.

➤ Appreciation of the learning results (STEAM knowledge & skills): The results show a high level of knowledge and skills developed. Regarding the “knowledge” dimension, the students’ level of appreciation can be ordered in descending order as follows: 88.9% “fully achieved” for K13 (understanding that complex socio-economic problems do not have a unique solution, but time- and context-dependent alternatives); 66.7% for K12 (recognition of the dynamic nature of sustainability problems, which require periodic redefinition and reframing); respectively 55.6% for K16 (knowledge of the concept of sustainability, its origins and developments, the main actors and the implications for society and the environment, including environmental protection, restoration and regeneration).

Regarding “skills”, the results are as follows: S6 (ability to identify processes or actions that reduce the consumption of natural resources) – 66.7% “fully achieved”, 22.2% “achieved” and 11.1% “somewhat extent”; S13 (ability to identify and adapt to different contexts) – 33.3% “achieved” and 11.1% “somewhat extent”; and S1 (evaluating problems and actions through the lens of sustainability values and principles) – 66.7% “fully achieved”, 22.2% “achieved” and 11.1% “somewhat extent”.

II. Results obtained from teachers. The feedback collected from academic and associated staff within the SKILLS4FUTURE project reflects the diversity of roles involved in the educational process and its implementation. The sample size consisted of 13 responses, with the following distribution of respondents: 61.5% – teaching staff and researchers, 15.4% – administrative staff, 7.7% – academic staff with leadership roles in university management, 15.4% – practitioners or local business representatives from project partner institutions. This composition demonstrates a balanced representation of both academic and professional stakeholders engaged in the project, allowing for a comprehensive evaluation of its impact. The inclusion of practitioners and administrative staff also provides valuable insights into the practical applicability and institutional integration of STEAM-based teaching strategies promoted through the project.

➤ *Overall degree of satisfaction of direct beneficiaries of the project*

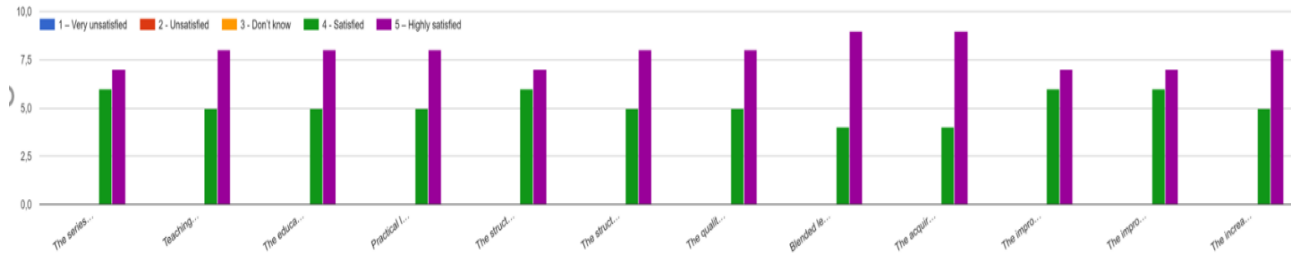


Figure 1. The analysis of the overall degree of satisfaction of direct beneficiaries from USC

Source: Authors' own research results/contribution

The analysis of the responses highlights a high level of overall satisfaction, with most participants declaring themselves “very satisfied” or “satisfied”, with over 50% in the first category and approximately 30% in the second. This distribution confirms the positive perception of the project implementation, especially through the relevance and quality of the academic components. The updating of teaching and learning activities, which integrated innovative theoretical themes and applicative exercises oriented towards the development of STEAM skills, was appreciated as an effective interdisciplinary approach, capable of supporting both theoretical understanding and practical applicability.

➡ Impact assessment on direct beneficiaries.

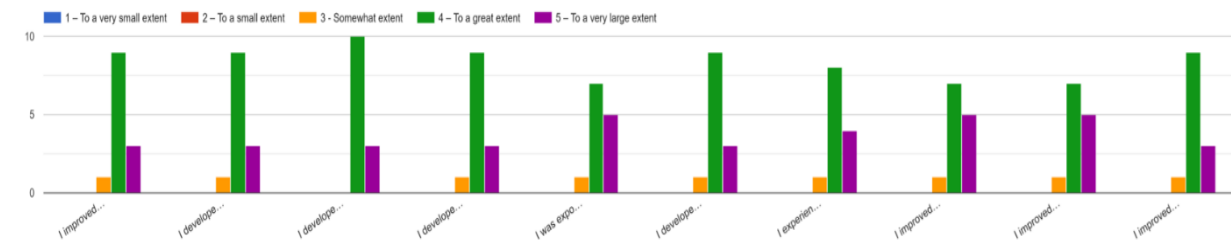


Figure 2. The analysis of perceptions about STEAM skills development for USC direct beneficiaries

Source: Authors' own research results/contribution

STEAM skills development: the analysis of the results illustrates the level of satisfaction regarding the development of STEAM skills among direct beneficiaries. Approximately 75% of respondents stated that their skills improved to a great or very large extent as a result of the project. The highest ratings were observed in areas such as digital skills, technology readiness, and the ability to cooperate with business sectors promoting innovation and entrepreneurship. Only 1.5% of respondents felt that improvements occurred to a somewhat extent, indicating a minimal perception of limited benefit. These findings highlight the effectiveness of the project's approach in promoting interdisciplinary, innovation-driven skill development.

Professional Career Development: The majority of respondents reported a significant positive impact of the project on their professional careers, mentioning important improvements. The project provided them with practical experience, developing skills in various fields and the opportunity to apply theoretical knowledge in real-world contexts. This process contributed to increased confidence, employability and professional competence, and was perceived, overall, as a transformative professional development experience.

Technical/academic performance: This section evaluates how beneficiaries perceived their technical and academic progress during the implementation of the project. The findings indicate a generally positive perception, particularly regarding the influence of project activities on practical learning, research engagement, and academic outcomes. Many respondents acknowledged that the project supported their growth in academic performance and technical proficiency. However, it also revealed areas for future improvement, particularly in enhancing academic rigor and aligning project-based learning with institutional objectives.

Communication skills: The analysis of the development of communication skills highlights that the majority of respondents have registered significant improvements in this area. They reported an increased ability to express their ideas in a clear and structured way, which facilitates the effective transmission of messages in academic and professional contexts. An increase in active participation in discussions and debates was also observed, an essential factor for strengthening critical thinking and for the exchange of substantiated opinions. In addition, collaboration skills were considerably developed, contributing to better cooperation in interdisciplinary teams and improving interpersonal relationships, crucial aspects in modern academic and work environments. Thus, the development of

communication skills has a direct impact on the overall performance of students, supporting their academic and professional success.

The feedback suggests that the SKILLS4FUTURE project provided an environment that encouraged active communication, peer interaction, and public speaking opportunities. These elements contributed to strengthening both verbal and written communication skills, with most participants indicating improvements to a very large extent.

Conclusion

The study conducted within the SKILLS4FUTURE project highlights the positive impact of integrating STEAM education on academic satisfaction and skills development of students at the Cahul State University „Bogdan Petriceicu Hasdeu”. The results show that the modernized disciplines with STEAM elements significantly contributed to increasing students’ interest and motivation, improving both theoretical understanding and practical applicability of knowledge. Participants particularly appreciated the lessons that addressed issues of real and interdisciplinary relevance, highlighting the continuous need to integrate practical components into the educational process.

Based on the data collected, it can be concluded that STEAM education represents an effective tool for developing complex skills, adapted to the current demands of the labor market and the socio-economic context. Greater attention should be paid to the balance between theoretical and applied content, so as to maximize the formative impact and support a continuous adaptation to the needs of students.

The data collected via questionnaires were integrated into the broader research analysis, offering a complementary perspective focused on the strategic and organizational dimensions of the project’s impact. These insights enabled a comprehensive evaluation of how SKILLS4FUTURE has contributed to the systemic transformation of the university, moving towards a competence-based education model aligned with innovation, sustainability, and collaboration with the socio-economic environment.

The study demonstrates that project-based STEAM initiatives can effectively support the development of digital, technical, and communication skills, thus enhancing the employability and career readiness of students. This has practical implications for curriculum design, institutional strategy, and the implementation of future academic programs[10].

Another motivational factor for the development of STEAM skills in students is the high degree of student satisfaction from the involvement in practical activities, in group activities and the participation of students in business idea competitions carried out within this project. According to institutional regulations and the provisions of the Education Code[11], at the end of each year of study, a survey is carried out at the institution level on the “Degree of satisfaction of students and student life”. Students from the study programs involved in this project were “very satisfied” with the methods applied by the teaching staff in teaching and assessment, as well as their involvement in practical activities at the university level, but also outside it.

These findings support the need to expand and deepen STEAM educational programs in higher education, as well as to develop policies and strategies that facilitate a coherent and effective integration of these interdisciplinary approaches across various fields of study. Thus, projects like SKILLS4FUTURE significantly contribute to improving the quality of education and to training graduates prepared for the challenges of a constantly changing economy and society.

ACKNOWLEDGEMENTS

The research was carried out within the project: *ERASMUS-EDU-2022-CBHE-STRAND-2. „Developing and improving the STEAM skills of students and teachers for curriculum innovation and sustainable development of higher education institutions and local businesses”*. Project No. 101081787 – “skills4future”.

References

- [1] Global Skills Trends, Training Needs and Lifelong Learning Strategies for the Future of Work Report prepared by the ILO and OECD for the G20 Employment Working Group. Available: https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@dgreports/@inst/documents/publication/wcms_646038.pdf
- [2]Yakman, G. (2008). STEAM education: An overview of creating a model of integrative education. *P-12 STEM Education Conference*. Available: https://www.researchgate.net/publication/327351326_STEAM_Education_an_overview_of_creating_a_model_of_integrative_education
- [3] Todos, I., Roșca-Sadurschi, L., Ceclu, L. (2024). The development of students’ skills from the perspective of the evolution of Industry 4.0. *The 6th Economic International Conference "Competitiveness and sustainable development"*, 7th-8th November 2024, DOI: [10.52326/csd2024.23](https://doi.org/10.52326/csd2024.23)

- [4] Law of the Republic of Moldova No. 315 of 17-11-2022 for the approval of the National Development Strategy "European Moldova 2030" [online]. Available from: https://www.legis.md/cautare/getResults?doc_id=134582&lang=ro Accessed: 2025.10.06
- [5] Government Decision No. 114 of 07-03-2023 on the approval of the Development Strategy "Education 2030" and its Implementation Program for the years 2023-2025 [online]. Available from: https://www.legis.md/cautare/getResults?doc_id=136600&lang=ro Accessed: 2025.10.06
- [6] UNESCO. (2017). *Education for Sustainable Development Goals: Learning Objectives*. UNESCO. Available: https://www.unesco.at/fileadmin/Redaktion/Publikationen/Publikations-Dokumente/2017_Education_for_SDG.pdf
- [7] Wiek, A., Withycombe, L., Redman, C. L. (2011). Key competencies in sustainability: A reference framework for academic program development. *Sustainability Science*, 6(2), p.203–218. <https://doi.org/10.1007/s11625-011-0132-6>
- [8] Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53, 109–132. Available: https://www.researchgate.net/publication/281345525_Motivational_Beliefs_Values_and_Goals
- [9] What is STEAM? And why is it important in education? <https://www.harowhongkong.hk/his/what-is-steam-and-why-is-it-important-in-education/>
- [10] WILLIAMS, T., BROWN, S. Enhancing teamwork skills through experiential learning in technology internships. *Journal of Workplace Learning*, 30(6), 2018, ISBN 978-3-319-75165-8. <https://doi.org/10.1007/978-3-319-75166-5>
- [11] Education Code of the Republic of Moldova. Published in the Official Gazette Nr. 319-324 art. 634 la 24-10-2014. https://www.legis.md/cautare/getResults?doc_id=110112&lang=ro