

THE IMPORTANCE OF CREATIVITY IN HIGHER EDUCATION FOR THE DEVELOPMENT OF MODERN BUSINESS

DOI: 10.5937/EMC26138K

Dragana Kovač

University of Novi Sad, Technical Faculty “Mihajlo Pupin”, Zrenjanin, Republic of Serbia

E-mail: milosavljevd@yahoo.com

Edit Terek Stojanović

University of Novi Sad, Technical Faculty “Mihajlo Pupin”, Zrenjanin, Republic of Serbia

Stefan Ugrinov

University of Novi Sad, Technical Faculty “Mihajlo Pupin”, Zrenjanin, Republic of Serbia

Melita Čočkalović

High school “Laza Kostić”, Novi Sad, Republic of Serbia

Milovan Cvjetković

Higher educational institution "Economics Academy", Brčko District, Bosnia and Herzegovina

ABSTRACT

In contemporary business, creativity is increasingly viewed as a strategic competence that enables innovation, adaptation to change and the resolution of complex organisational problems. Starting from this premise, the paper examines the importance of creativity in higher education for the development of competences relevant to business practice. The theoretical part points to the relationship between creativity, interdisciplinary learning, innovation and the responsible application of artificial intelligence. The empirical part is based on a survey conducted among 55 students of the Engineering Management study programme at the Technical Faculty “Mihajlo Pupin” in Zrenjanin. The results show that students largely recognise their own creative potential, particularly in terms of connecting knowledge from different fields, seeking alternative approaches and improving ideas on the basis of feedback. At the same time, the findings indicate that assignments requiring original solutions are not sufficiently systematically represented. The paper concludes that higher education can contribute more strongly to the development of modern business if it more frequently includes interdisciplinary, problem-based and open-ended assignments.

Key words: creativity, higher education, modern business.

INTRODUCTION

In the context of an increasingly globalised economy, creativity is no longer merely an aesthetic or individual attribute, but an important driver of sustainable business performance and innovation (Mačerauskienė, 2020). Consequently, contemporary educational institutions are expected to move beyond traditional pedagogical models and develop the ability to solve complex problems, think originally and use artificial intelligence responsibly in rapidly changing market conditions (Gong et al., 2022; Knibbe et al., 2024). Nevertheless, institutional frameworks often find it difficult to move away from standardised assessment towards learning environments that genuinely foster dynamic and creative thinking (Kayyali, 2024). By introducing design thinking, interdisciplinary exercises and transdisciplinary learning, higher education institutions can strengthen the synergy between human originality, critical judgement and strategic innovation, which is particularly important for modern business (Eloranta et al., 2024; Selvalakshmi et al., 2021; Shaznay, 2024). In this process, artificial intelligence should be regarded as support for learning rather than a substitute for human intellect, since its real contribution depends on students' ability to evaluate, contextualise and ethically use generated content (Ma et al., 2025; Rana et al., 2025). Teachers therefore have an important role in guiding students from the passive use of digital tools towards active, critical and responsible

participation in a professional environment shaped by artificial intelligence (Ahmed, 2025; Bozkurt, 2023; Wang et al., 2025).

CREATIVITY IN HIGHER EDUCATION

Creativity is most commonly understood as the ability to create new, original and contextually appropriate solutions to complex problems, expressed across artistic, scientific, educational and business domains (Mahama, 2024). In contemporary conditions, it is increasingly viewed as a developable competence and a prerequisite for competitiveness, because it enables individuals and organisations to adapt to change and to find different ways of solving problems (Alshammari & Thomran, 2023).

In higher education, creativity has become one of the important prerequisites for academic and professional success, as the contemporary economy requires the ability to solve complex problems, connect knowledge and create new approaches (Kayyali, 2024). However, higher education institutions still often rely on disciplinary frameworks, the reproduction of knowledge and rigid assessment criteria, which can push originality and student innovation into the background (Papaleontiou-Louca et al., 2014). Therefore, contemporary pedagogical strategies should encourage inquiry, synthesis, collaborative learning and the use of digital tools rather than passive content acquisition (Hossain et al., 2026). The integration of creative and critical thinking enables students to question dominant patterns, develop autonomy and recognise education as a space for actively shaping knowledge (Bačová & McCrone, 2024; Glăveanu et al., 2023).

THE RELATIONSHIP BETWEEN CREATIVITY, INNOVATION AND MODERN BUSINESS

In modern business, creativity and innovation are related but not identical processes: creativity implies the generation of new ideas, while innovation refers to their implementation in practice. Their synergy represents an important driver of organisational growth, sustainability and competitive advantage (Francis & Rangasamy, 2024; Patil, 2024). Organisations that foster psychological safety, agility and cross-functional collaboration more easily develop new products, services and business models, because employees have space to propose solutions and learn through experimentation (Amora, 2025; Paonessa, 2025; Tariq, 2025). Therefore, leadership should institutionalise creative behaviours as part of business strategy, with the support of digital platforms, recognition systems and HR practices that develop employees' abilities, motivation and opportunities (D'Souza, 2026; Madanchian & Taherdoost, 2025; Westover, 2024; Westover, 2025).

STUDENTS' CREATIVITY AS A FUTURE BUSINESS RESOURCE

The integration of creative competences into management education is important because it facilitates students' transition from theoretical knowledge to the practical application of divergent and convergent thinking (Belur et al., 2022; Knibbe et al., 2024). In this way, academic institutions can better prepare future managers and employees to solve complex business problems, question assumptions and make decisions under uncertainty (Bierwisch & Schmitz, 2024; Bagley et al., 2019). Curricula should therefore be directed towards action-oriented and interdisciplinary approaches, such as case studies, simulations, studio-based work and design thinking, because such methods bring teaching closer to the real requirements of professional practice (Castro & Soledad, 2025; Ryan et al., 2025; Yu et al., 2025). The inclusion of artificial intelligence can further broaden students' creative potential, but only if it is used as support for strategic reasoning rather than as a substitute for independent thinking (Dubey et al., 2026; Simpson, 2026). A hybrid approach that combines human intuition and machine-assisted efficiency enables the development of competences required in a business environment in which innovation is increasingly based on the combination of creativity, analytics and responsible technology use (Bass & Pleggenkuhle-Miles, 2025; Chan & Hu, 2023; Thanh et al., 2023; Mårtensson & Mullins, 2024).

RESEARCH METHODOLOGY AND RESULTS

The research was conducted with the aim of examining the importance of creativity in higher education for the development of competences relevant to modern business. The subject of the research included students' self-assessment of creativity, their attitudes towards teaching practices that encourage original and problem-based thinking, and their perception of educational practices that may contribute to the development of creativity as a future business competence.

A quantitative approach was applied, and the survey was used as the basic research method. The research instrument was a structured anonymous questionnaire comprising several thematic sections: general data on respondents, the frequency of assignments requiring an original solution, self-assessment of creativity, teaching practices, assessment and feedback, and attitudes towards techniques for encouraging creativity. Most statements were measured using a five-point Likert scale, where 1 indicated complete disagreement and 5 complete agreement.

The research was conducted on a sample of 55 students of the Engineering Management study programme at the Technical Faculty “Mihajlo Pupin” in Zrenjanin. Female respondents were more represented in the sample (76.4%), while male respondents accounted for 23.6%. By year of study, third-year students were the most represented (32.7%), followed by second-year students (21.8%), first- and fourth-year students with 16.4% each, while master's students accounted for 14.5% of the sample. The data were processed using descriptive statistics, through frequencies and percentages of responses.

The results show that students recognise creativity as an important ability, but also that assignments requiring an original solution are not equally strongly represented in the teaching process. The largest share of respondents stated that they have such assignments “sometimes” (45.5%), while 34.5% have them “often” and only 3.6% “very often”. This finding indicates that creative assignments exist, but that they are still not a systematically dominant part of teaching practice.

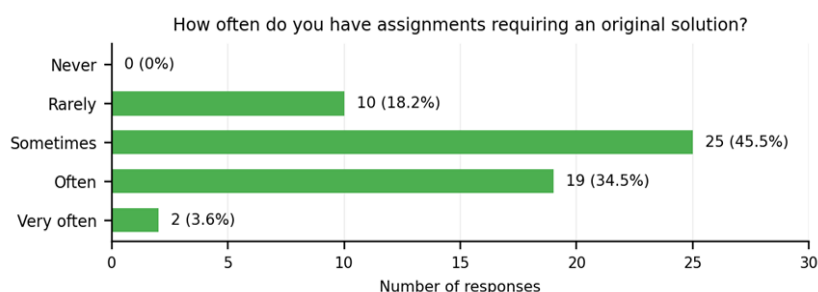


Figure 1: Frequency of assignments requiring an original solution

This result is significant because modern business requires not only the reproduction of existing knowledge, but also the ability to formulate new solutions under conditions of uncertainty. If creativity is viewed as the basis of innovation, then open-ended assignments, project work and the solving of real problems should be more strongly represented in higher education.

Regarding the self-assessment of creativity, the selected results indicate a high potential among students for interdisciplinary thinking (Figure 2.). A total of 76.4% of respondents agreed with the statement that they often connect knowledge from different fields. This is particularly important for the business context, because real organisational problems can rarely be solved from the perspective of a single discipline.

Students also show readiness for flexible problem-solving: 70.9% of respondents state that, when they encounter an obstacle, they usually devise an alternative approach. Such an ability represents an important basis for business innovation, because it enables the questioning of routine solutions and the development of different approaches to products, services, processes or organisational practices.

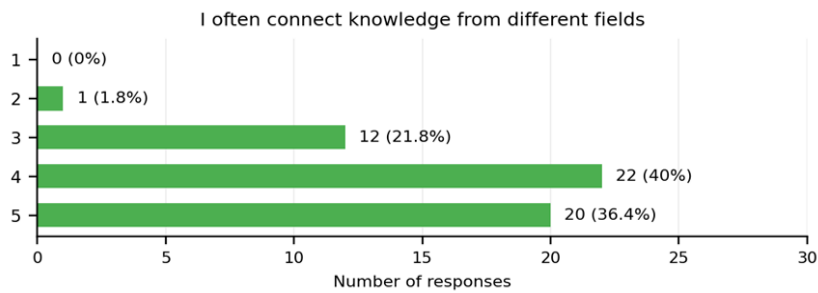


Figure 2: Connecting knowledge from different fields

A particularly positive finding refers to the role of feedback. A total of 87.3% of respondents state that they are able to improve an idea after receiving feedback. This shows that students do not perceive creativity only as spontaneous idea generation, but also as a process of development, correction and adaptation.

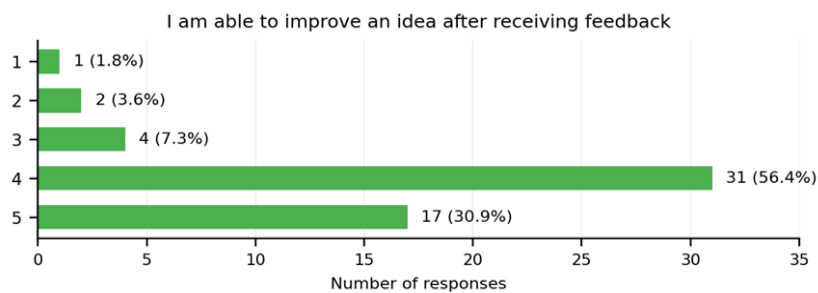


Figure 3: Improvement of an idea after feedback

This finding is important because, in a business environment, ideas rarely develop in isolation. They are tested, commented on, aligned with user needs and adapted to organisational goals. Therefore, the ability to accept feedback and transform it into a better solution represents a significant professional competence.

The results related to techniques for encouraging creativity further confirm the need for teaching that is closer to real business situations. The strongest support was recorded for interdisciplinary assignments: 78.2% of respondents believe that connecting subjects would increase their creativity.

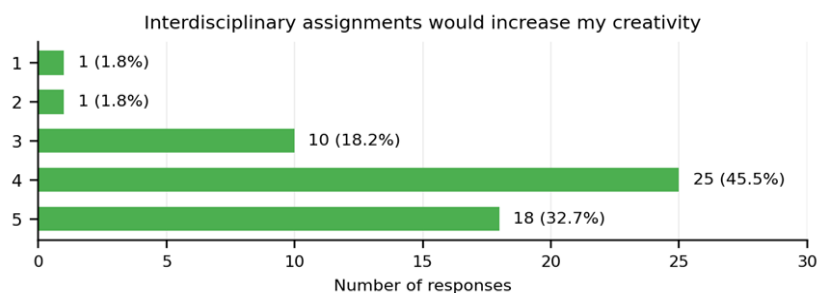


Figure 4: Attitude towards the importance of interdisciplinary assignments for creativity development

This result clearly indicates that students recognise the value of connecting different fields of knowledge. In the context of modern business, this is particularly important because innovations most often emerge at the intersection of different knowledge areas, functions and perspectives. Interdisciplinary assignments, case studies, simulations and practice-based projects can therefore contribute to developing students' creative potential as a concrete business competence.

Based on the selected findings, it can be concluded that students have a pronounced potential for creative and interdisciplinary thinking, but that the teaching process should be further directed towards assignments requiring originality, practical application of knowledge and the development of multiple possible solutions. In this way, higher education would more strongly connect academic learning with the requirements of modern business.

CONCLUSION

Creativity in higher education represents an important prerequisite for the development of competences required by modern business. The results of the research show that Engineering Management students largely recognise their own creative potential, particularly through the connection of knowledge from different fields, the search for alternative approaches and the readiness to improve ideas on the basis of feedback.

At the same time, the findings indicate that creative assignments are not sufficiently systematically represented. Although students occasionally work on assignments requiring original solutions, there is room for teaching to be further directed towards open-ended, interdisciplinary and problem-based activities. It is particularly significant that students recognise interdisciplinary assignments as a form of work that could increase their creativity, which is in line with the needs of a business environment in which problems are complex and multidimensional.

The development of creativity should therefore not be viewed solely as a pedagogical objective, but also as an important contribution to the development of future business resources. Higher education institutions can play a significant role in preparing students for innovative, flexible and responsible business if the teaching process is organised in a way that encourages independent thinking, the connection of knowledge, the reasoned presentation of ideas and the iterative improvement of solutions.

REFERENCES

- Ahmed, S. (2025). Reimagining education in the coming decade: What AI reveals about what really matters. *Frontiers in Education*, 10. <https://doi.org/10.3389/feduc.2025.1699106>
- Alshammari, A., & Thomran, M. (2023). Towards enhancing creativity and innovation in education system for youth in Hail region. *Advanced Education*, 10(22), 122–136. <https://doi.org/10.20535/2410-8286.279776>
- Amora, A. (2025). Innovation and creativity in management (pp. 298–312). <https://doi.org/10.51767/ic250223>
- Báčová, D., & McCrone, G. (2024). Creativity in education: International perspectives. *Educational Review*, 77(3), 1021–1022. <https://doi.org/10.1080/00131911.2024.2401730>
- Bagley, C. E., Sulkowski, A. J., Nelson, J. S., Waddock, S., & Shrivastava, P. (2019). A path to developing more insightful business school graduates: A systems-based, experimental approach to integrating law, strategy, and sustainability. *Academy of Management Learning & Education*, 19(4), 541–568. <https://doi.org/10.5465/amle.2018.0036>
- Bass, E., & Pleggenhule-Miles, E. G. (2025). The BIG activity: Using generative AI for hybrid strategic decision-making with business students. *Proceedings of the Annual Hawaii International Conference on System Sciences*. <https://doi.org/10.24251/hicss.2025.597>
- Belur, J., Patil, S. V., Mahantshetti, S., & Patil, S. (2022). The boosters that foster creativity competencies among MBA students: Identifying and modelling the relationships. *Higher Education for the Future*, 9(2), 216–233. <https://doi.org/10.1177/23476311221108228>
- Bierwisch, A., & Schmitz, M. (2024). Futures thinking: Fostering creativity for a sustainable world (pp. 117–139). <https://doi.org/10.1108/978-1-83549-464-620241008>
- Castro, M. P., & Soledad, M. (2025). Transformative economies and complex thinking: Enhancing sustainability competencies in business education. *The International Journal of Management Education*, 23(3), 101223. <https://doi.org/10.1016/j.ijme.2025.101223>
- Chan, C. K. Y., & Hu, W. (2023). Students' voices on generative AI: Perceptions, benefits, and challenges in higher education. *International Journal of Educational Technology in Higher Education*, 20(1). <https://doi.org/10.1186/s41239-023-00411-8>
- D'Souza, C. (2026). Navigating global turbulence in 2026: Turning volatility into opportunity. *The Journal of Applied Management Accounting Research*, 24(1), 13–22. <https://doi.org/10.52153/oaj0132124>
- Dubey, D. A., Baghel, D., Kalita, R., Sharma, D. M., & Lashkari, S. (2026). The AI co-founder: Fostering entrepreneurial and design-thinking mindsets in engineering and management education. *Journal of Engineering Education Transformations*, 39, 32–41. <https://doi.org/10.16920/jeet/2026/v39is3/26095>
- Eloranta, V., Hakanen, E., & Shaw, C. M. (2024). Teaching for paradigm shifts: Supporting the drivers of radical creativity in management education. *Educational Research Review*, 45, 100641. <https://doi.org/10.1016/j.edurev.2024.100641>
- Francis, S., & Rangasamy, S. (2024). Innovation journey. In *Advances in Business Information Systems and Analytics* (pp. 114–127). IGI Global. <https://doi.org/10.4018/979-8-3693-3354-9.ch006>

- Glăveanu, V. P., Ince, A., Brown, N., Ramlackhan, K., Bergström, S. E., Kühne, S., Lundgren, M., Schlick, M., Dalton-Puffer, C., McAllister, Á., Ahn, K., Ohn, J. D., Balbontín-Alvarado, R., Rivas-Morales, C., Swanson, C. J., Bullough, L., Souto, A.-M., Lappalainen, S., Niemi, A.-M., ... Rivas, C. (2023). *Creativity in education: International perspectives*. UCL Press. <https://doi.org/10.14324/111.9781800080638>
- Gong, Z., Soomro, S. A., Nanjappan, V., & Georgiev, G. V. (2022). The gap in design creativity education between China and developed countries. *Proceedings of the Design Society*, 2, 871–880. <https://doi.org/10.1017/pds.2022.89>
- Hossain, A., Khan, W. A., Roy, P., Bhattacharjee, S., & Ansari, M. S. H. (2026). How higher education students in West Bengal perceive creative thinking in their learning process: A theoretical exploration. *International Journal of Research and Innovation in Social Science*, 10(3), 1702–1712. <https://doi.org/10.47772/ijriss.2026.100300118>
- Kayyali, M. (2024). Understanding innovation in higher education. In *Advances in Educational Marketing, Administration, and Leadership* (pp. 117–138). IGI Global. <https://doi.org/10.4018/979-8-3693-6880-0.ch006>
- Knibbe, J., Peschl, R., & Osiyevskyy, O. (2024). Unleashing creative potential. In *Advances in Educational Technologies and Instructional Design* (pp. 405–428). IGI Global. <https://doi.org/10.4018/979-8-3693-2418-9.ch015>
- Ma, Y., Yufang, S., Ming-da, L., Zhang, Y., Chai, W., Huang, A., & Zhao, X. (2025). Preparing students for an AI-driven world: Generative AI and curriculum reform in higher education. *Frontiers of Digital Education*, 2(4). <https://doi.org/10.1007/s44366-025-0067-6>
- Mačerauskienė, N. (2020). Building a culture of creative thinking in business studies. *Society. Integration. Education. Proceedings of the International Scientific Conference*, 2, 15. <https://doi.org/10.17770/sie2020vol2.5023>
- Madanchian, M., & Taherdoost, H. (2025). Innovation leadership (pp. 153–173). <https://doi.org/10.1108/978-1-83708-046-520251008>
- Mahama, I. (2024). The role of culture and environment in shaping creative thinking. In *IntechOpen eBooks*. IntechOpen. <https://doi.org/10.5772/intechopen.1007481>
- Mårtensson, P., & Mullins, J. (2024). Generative AI and the roles of business school teachers. In *Routledge eBooks* (pp. 135–140). Informa. <https://doi.org/10.4324/9781003500629-23>
- Paonessa, M. (2025). How creativity unlocks innovation, collaboration, and mental agility. *Public Humanities*, 1. <https://doi.org/10.1017/pub.2025.3>
- Papaleontiou-Louca, E., Varnava-Marouchou, D., Mihai, S., & Konis, E. (2014). Teaching for creativity in universities. *Journal of Education and Human Development*, 3(4). <https://doi.org/10.15640/jehd.v3n4a13>
- Patil, R. (2024). Nurturing innovation and creativity for business success. *JCMM's Kaleidoscope Journal of Management Research*, 1(1). <https://doi.org/10.62801/jkjmrv1i1-12>
- Rana, V., Verhoeven, B., & Sharma, M. (2025). Generative AI in design thinking pedagogy: Enhancing creativity, critical thinking, and ethical reasoning in higher education. *Journal of University Teaching and Learning Practice*, 22(4). <https://doi.org/10.53761/tjse2f36>
- Ryan, A., Morel, C., Goodman, J., Hermes, J., Rehman, M. A., Louche, C., Keränen, A., & Juntunen, M. (2025). Learning to learn differently: Studio-based education for responsible management. *The International Journal of Management Education*, 23(3), 101177. <https://doi.org/10.1016/j.ijme.2025.101177>
- Selvalakshmi, M., Suresh, V., & Kolluru, M. (2021). Pedagogy innovation for management graduates: Application of design thinking. *International Journal of Innovation Science*, 14, 659–674. <https://doi.org/10.1108/IJIS-10-2020-0188>
- Shaznay, N. (2024). Bridging the industry–higher education gap with critical design futures thinking and GenAI for innovation (pp. 268–288). <https://doi.org/10.1201/9781003469551-11>
- Simpson, E. (2026). *Business school 2030: A manifesto for the AI operating environment*. Zenodo. <https://doi.org/10.5281/zenodo.18325925>
- Tariq, M. U. (2025). Innovation and agility: Adapting business strategies for sustainable growth in dynamic markets (pp. 113–140). <https://doi.org/10.4018/979-8-3373-2048-9.ch005>
- Thanh, B. N., Vo, D. T. H., Nhat, M. N., Pham, T. T. T., Thai, H., & Son, H. X. (2023). Race with the machines: Assessing the capability of generative AI in solving authentic assessments. *Australasian Journal of Educational Technology*, 39(5), 59–81. <https://doi.org/10.14742/ajet.8902>
- Wang, F., Li, N., Cheung, A., & Wong, G. K. W. (2025). In GenAI we trust: An investigation of university students' reliance on and resistance to generative AI in language learning. *International Journal of Educational Technology in Higher Education*, 22(1). <https://doi.org/10.1186/s41239-025-00547-9>
- Westover, J. (2024). Fostering an innovator's mindset: How leaders can cultivate creativity and drive change. *Human Capital Leadership*, 11(3). <https://doi.org/10.70175/hclreview.2020.11.3.4>
- Westover, J. (2025). How to tap into your creative genius at work. *Human Capital Leadership*, 18(4). <https://doi.org/10.70175/hclreview.2020.18.4.4>
- Yu, G., Ramayah, T., & Lin, Z. (2025). Toward understanding the role of generative AI in entrepreneurship education: A systematic review. *Computers and Education: Artificial Intelligence*, 9, 100470. <https://doi.org/10.1016/j.caeai.2025.100470>