

Exploring Student Engagement in Digitally Enhanced Economics Courses: Reflections from a Teaching Innovation Initiative

Róbert Mészáros

Abstract

This study explores the dynamics of student engagement in digitally enhanced economics courses by reflecting on a teaching innovation initiative implemented within a Slovak higher education context. In response to the growing demand for active learning and digital competencies in economics education, a structured pedagogical redesign was developed using blended instructional formats and digital tools. This paper presents a conceptual and experiential analysis of how the initiative was implemented across selected economics courses, including the design logic, technology integration, and pedagogical outcomes. Although the study does not employ empirical testing, it provides a grounded reflection on course development, tool selection, and student interaction within digitally mediated environments. The findings highlight the potential of well-integrated digital strategies to improve learner motivation, participation, and reflection, while also outlining the institutional and pedagogical challenges that emerged. This contribution extends the conversation on digital transformation in economics education by offering transferable insights for instructors and curriculum designers.

Keywords: student engagement, digital pedagogy, economics education, blended learning, teaching innovation

JEL classification: A20, A22, I23, O33

Róbert Mészáros

Department of Economics, Faculty of Economics and Finance

Bratislava University of Economics and Business

Dolnozemská cesta 1, 852 35 Bratislava, Slovak Republic

Email: robert.meszaros@euba.sk

* This article was prepared with the support of the KEGA project No. 016EU-4/2024,
„Ekonomické vzdelávanie prostredníctvom integrácie inovatívnych digitálne
zdokonalených stratégii výučby.“



1. Introduction

The digital transformation of higher education has brought renewed attention to the role of student engagement in shaping meaningful learning experiences. In economics education, where traditional modes of instruction often rely on passive knowledge transmission, the integration of digital tools presents an opportunity to revitalise pedagogy and better align instructional methods with 21st-century competencies. This study reflects on a teaching innovation initiative at the Bratislava University of Economics and Business aimed at increasing student engagement in economics courses through a redesigned approach that incorporates blended learning, interactive tools, and pedagogical scaffolding.

Rather than offering empirical evaluation, the paper contributes a reflective account of how digital technologies were introduced and adapted within the local institutional setting. The goal is to provide other educators with conceptual guidance and practice-based insights that can inform the design of digitally enhanced learning environments. The initiative forms part of the broader KEGA project 016EU-4/2024, which supports experimentation and innovation in economic instruction.

Literature Review

2.1 Student Engagement in Economics Education

Student engagement is widely recognised as a critical factor in academic success and knowledge retention. In economics, engagement is not only a matter of participation but also involves the development of analytical thinking, independent reasoning, and the ability to apply models to real-world problems. However, traditional formats such as lectures and summative exams often limit opportunities for interaction, collaboration, and reflection.

Recent studies have emphasised the importance of active learning techniques, including discussion-based learning, flipped classrooms, and peer instruction, in fostering deeper engagement. These approaches are particularly effective when combined with formative feedback and tasks that require students to articulate their reasoning and critique economic ideas.

2.2 Digital Pedagogy and Blended Learning

Digital pedagogy refers to the strategic use of digital tools to support teaching and learning. In economics education, digital tools such as simulations, polling apps, collaborative platforms, and interactive problem sets can foster engagement by providing students with agency and feedback.

Blended learning, which combines face-to-face instruction with online components, has been shown to increase flexibility and accessibility while maintaining instructional coherence. When carefully designed, blended environments can help students develop autonomy, digital literacy, and critical thinking. However, the success of such approaches depends on clear alignment between learning objectives, instructional activities, and technological choices.

2.3 Teaching Innovation and Institutional Constraints

Innovation in teaching is often constrained by institutional factors such as curriculum rigidity, assessment regulations, and digital infrastructure. Moreover, instructors must balance the introduction of new tools with concerns about cognitive load, technological reliability, and student readiness.

Effective teaching innovation therefore requires not only pedagogical creativity but also sensitivity to institutional culture and resource availability. Reflective practice and iterative design are essential for sustaining improvements and responding to feedback from both students and colleagues.



Methodology

3.1 Design-Based Reflective Approach

This study adopts a design-based and reflective methodology. It focuses on pedagogical reasoning, implementation strategies, and course-level adaptations rather than formal impact evaluation. The initiative involved redesigning three economics courses to incorporate digital strategies aimed at improving engagement. Each course revision followed an iterative process of planning, implementation, reflection, and adaptation.

3.2 Selection of Tools and Formats

A range of digital tools was selected based on accessibility, pedagogical alignment, and ease of use. Moodle forums and quizzes were used to encourage asynchronous engagement and to provide low-stakes opportunities for assessment. Padlet boards were introduced for collaborative brainstorming and for collecting peer feedback on student submissions. Mentimeter and Slido were applied for live polling during lectures to elicit real-time input and monitor class understanding. Google Docs supported group-based problem-solving and collaborative writing tasks. Annotated slides and voice-over videos were created to support flipped learning formats and to provide students with flexible access to lecture content.

These tools were embedded into weekly learning activities and were aligned with assessment rubrics to ensure that digital participation contributed meaningfully to course outcomes. A key objective was to encourage interaction and formative feedback while avoiding overloading students with excessive digital complexity.

3.3 Sources of Reflection and Documentation

The documentation of the initiative included formal course outlines, personal instructor journals, and feedback collected from students through anonymous surveys and informal discussions. Additional insights were gathered through observations noted during regular semester coordination meetings between course instructors. The reflections presented in this paper are synthesised from these sources and are used to highlight recurring patterns, implementation challenges, and pedagogical insights.

Results and Discussion

4.1 Impact on Engagement and Learning Atmosphere

The redesigned courses demonstrated several indicators of increased student engagement. Many students reported a higher sense of ownership over their learning, as they were required to participate more actively and prepare in advance. The integration of real-time polling and interactive slides helped increase the participation rate in discussions, particularly among students who were less likely to speak in traditional lecture environments.

Collaborative digital tasks, such as the use of shared whiteboards and group documents, allowed students to co-construct knowledge, express their ideas more clearly, and challenge the perspectives of their peers. These tasks were especially effective in courses with abstract content, where visualisation and dialogue were essential for conceptual understanding.

4.2 Instructor Perspective and Adaptation Challenges

Instructors observed that digital tools allowed them to identify student misconceptions earlier in the learning process and to provide ongoing formative feedback. At the same time, several challenges emerged. Students demonstrated varying levels of digital literacy, which affected their ability to engage with more advanced tools. Technical difficulties occasionally disrupted planned activities. Instructors also had to adjust course pacing and expectations, as interactive formats sometimes required more classroom time than anticipated.

Some students expressed initial resistance to the increased level of interactivity, perceiving it as additional workload. These concerns were addressed through transparent communication about the learning goals and by demonstrating how digital activities were directly linked to course assessments.

4.3 Sustainability and Institutional Support

Sustaining engagement through digital strategies required support beyond the individual instructor level. The continuation of such initiatives depended on institutional training opportunities, the availability of reliable digital infrastructure, and recognition of teaching innovation in staff evaluations.

The implementation experience revealed that small, incremental changes were more likely to be accepted by both students and faculty. Rather than attempting to replace traditional formats entirely, instructors achieved better results by embedding digital elements into familiar course structures. This strategy enhanced continuity while fostering innovation.

Concluding Remarks

This paper has presented a teaching innovation initiative aimed at enhancing student engagement in economics courses through the integration of digital tools and blended formats. While the findings are based on reflective analysis rather than empirical measurement, they provide valuable insights into the design logic, practical considerations, and pedagogical potential of digitally enhanced instruction.

The initiative demonstrated that meaningful engagement can be supported through relatively simple tools, provided they are used with clear intent and aligned with course objectives. The experiences documented here can inform instructors seeking to redesign their courses in ways that foster participation, motivation, and learning depth.

Acknowledgements

This study was supported by the KEGA project No. 016EU-4/2024, “Ekonomické vzdelávanie prostredníctvom integrácie inovatívnych digitálne zdokonalených stratégií výučby.”

References

Bryson, C., & Hand, L. (2007). The role of engagement in inspiring teaching and learning. *Innovations in Education and Teaching International*, 44(4), 349–362.

Chaka, C. (2020). Skills, competencies and literacies attributed to Industry 4.0: A scoping review. *IFLA Journal*, 46(4), 369–399. <https://doi.org/10.1177/0340035219896376>

González-Salamanca, J. C., Agudelo, O. L., & Salinas, J. (2020). Key competencies, education for sustainable development and strategies for the development of 21st century skills. *Sustainability*, 12(23), 10366. <https://doi.org/10.3390/su122310366>

Gorissen, P., Van Bruggen, J., & Jochems, W. (2012). Students' use of recorded lectures: A matter of relevance, transcript quality, and learner motivation. *British Journal of Educational Technology*, 43(1), 124–134.

Miranda, J., Navarrete, C., Noguez, J., Molina-Espinosa, J.-M., Ramírez-Montoya, M. S., Navarro-Tuch, S. A., Bustamante-Bello, M.-R., Rosas-Fernández, J.-B., & Molina, A. (2021). The core components of Education 4.0 in higher education. *Computers & Electrical Engineering*, 93, 107278. <https://doi.org/10.1016/j.compeleceng.2021.107278>

Rienties, B., & Rivers, B. A. (2014). Measuring and understanding learner emotions: Evidence and prospects. *Learning Analytics Review*, 1(1), 1–28.

van Laar, E., van Deursen, A. J. A. M., van Dijk, J. A. G. M., & de Haan, J. (2017). The relation between 21st-century skills and digital skills. *Computers in Human Behavior*, 72, 577–588. <https://doi.org/10.1016/j.chb.2017.03.010>