



AN EXPLORATORY STUDY ON STUDENTS' PERCEPTIONS OF GENERATIVE ARTIFICIAL INTELLIGENCE IN HIGHER EDUCATION: POTENTIAL CONSEQUENCES FOR CREATIVITY AND CRITICAL THINKING

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Abstract. This study aims to examine Bachelor of Communication students' current perceptions, practices, and the scope of generative AI technologies in the university education process. In particular, perceptions, concerns, and insights into students' practices with generative AI systems in conducting graded assignments. Data were collected from 138 undergraduate students at a Lithuanian university using a survey. Findings revealed a generally positive attitude towards the use of generative AI in the study process. Students highlighted generative AI's ability to explain complicated concepts, produce ideas for creative assignments, and assist with writing. However, concerns about accuracy, ethical issues, and impact on personal development were also raised. Collected data and insights suggest an urgent need for educators and policymakers to act on generative AI to cultivate students' skills in using the technology effectively and ethically. Understanding students' perceptions, attitudes, and habits towards generative AI is vital to producing strategies that would enhance learning experiences in higher education.

Keywords: gen AI, artificial intelligence, AI literacy, education policy.

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1. Introduction

In recent years, many universities worldwide have already experimented with integrating various AI-based tools to support the overall educational process. However, the rapid adoption of generative AI technologies presents both opportunities and challenges for the academic community. While many aspects influenced by generative AI technology can only be fully assessed over time, researchers and educators have already identified urgent issues that need immediate attention. For example, concerns have been raised about the potential for academic dishonesty and the erosion of conditions within universities that are essential for fostering independent and critical thinking (Kim et al., 2024; Chan, 2023; Intelligent, 2023). Furthermore, although there is strong evidence that students already utilise generative AI for their assignments, the pedagogical community is still in the early stages of developing a unified perspective on this phenomenon (Segbenya et al., 2023; Amani et al., 2023; Intelligent, 2023; Chan, 2023).

The objective of this study is to investigate students' current perceptions, practices, and the scope of generative AI technologies in the educational process at a Lithuanian university. This study was inspired by the need in the local pedagogical community to have an

empirically based understanding of the overall situation within the student body in order to have tools to construct strategies that could help to mitigate potential risks of the technology and help to integrate ethical practices into higher education process (Holmes et al., 2021; Nguyen et al., 2023; 2024). The authors of this article hope that the insights gathered will help universities respond to and improve their strategic approach to implementing generative AI in the higher education study process.

2. Literature review

Recent empirical studies examining students' habits and attitudes toward generative AI during the academic year indicate that this technology has not only firmly established itself in higher education institutions (Segbenya et al., 2023; Amani et al., 2023; Intelligent, 2023; Chan, 2023) but has also fundamentally challenged traditional perceptions of the academic process (Lau & Guo, 2023; Chan, 2023). Today, there are numerous concerns about technology and its role in the educational process. As Jie and Kamrozzaman (2024) note, AI-based technology fundamentally threatens the survival of valuable academic paradigms such as evaluation, course design, and activities. And may bring many harmful consequences for the students (Chan, 2023; Abbas et al., 2024). Thus, AI's integration into the higher education sector will be challenging to say the least.

The first and arguably most uppermost challenge is maintaining academic integrity and preventing cheating (Cotton et al., 2023; Chan, 2023; Intelligent, 2023; Nguyen et al., 2024). Several studies that have already been implemented demonstrate that generative AI tools are becoming a severe problem. In January 2023, Intelligent.com surveyed 1,000 current U.S. 4-year college students and found that 30% had used ChatGPT to complete a written assignment (Intelligent, 2023). Thus, as Nguyen et al. (2024) notice, as the students increasingly rely on generative AI technology, there is a risk that it could facilitate academic dishonesty, making it difficult to ascertain whether work submitted is genuinely indicative of a student's understanding and effort.

As a result, educators are increasingly advocating for a re-evaluation of student assessment and examination processes (Chan, 2023; Amani et al., 2023; Fesenmaier & Wöber, 2023). This situation is compelling higher education institutions to require students to formally disclose the use of AI tools in completing written assignments (Gannon, 2023; Gonsalves, 2024; The University of Melbourne, 2025). Some universities have even declared that using generative AI for assignments constitutes academic misconduct (Chan, 2023), while others have mandated that assignments be completed entirely by hand (Cassidy, 2023; Cavendish, 2023).

Another important concern is that the use of AI may lead to a decline in students' writing and critical thinking skills (The Queen's Journal, 2023; Amani et al., 2023; Warschauer et al., 2023; Segbenya et al., 2023; Chan, 2023; Jie & Kamrozzaman, 2024). Furthermore, Amani et al. (2023) argue that an over-reliance on generative AI not only diminishes critical thinking but also stifles creativity. This reduction in creative capacity may ultimately hinder students' future job prospects (Ghotbi et al., 2022; Gong et al., 2019; Park et al., 2020) and compromise fundamental human values (Gillissen et al., 2022; Jha et al., 2022). Interestingly, many students participating in these studies acknowledge that the technology poses significant risks to their academic development (Jie & Kamrozzaman, 2024; Amani et al., 2023; Segbenya et al., 2023).

The strict punitive measures adopted by higher education institutions against students who use generative AI tools for graded assignments present an additional challenge: an intense fear of wrongful accusation (Selim, 2024). This fear is not without merit, as some institutions have already expelled students for misusing AI in assignments or exams (Šleivaitė, 2025; Ward, 2025), even while AI detection software continues to yield alarmingly high rates of false positives (Ward, 2025).

Addressing these challenges requires a thoughtful and informed approach, in which the adoption and integration of generative AI in higher education will be an ongoing negotiation among faculty, staff, students, and administrators (Juárez & Rudick, 2025). Spence et al. (2024) argue that relying on the wishful expectation that everything will eventually work out is not only poor policy but also indicative of a lack of strong leadership. In contrast, a well-organized, deliberate strategy for incorporating AI-based technologies into the educational process is essential to prevent the erosion of students' academic integrity (Chaudhry et al., 2023; The Queen's Journal, 2023; Amani et al., 2023; Warschauer et al., 2023; Segbenya et al., 2023; Chan, 2023; Jie & Kamrozzaman, 2024). Ultimately, failing to adopt a coordinated approach could damage the credibility of higher education institutions (Macfarlane et al., 2014).

3. Methodology

The semi-structured survey method was chosen to investigate Bachelor of Communication students' current perceptions, practices, and the scope of generative AI technologies in the university's education process for several reasons. First, a semi-structured survey allows for a balance between structured questions (which provide consistency) and open-ended questions (which allow for deeper insights). This flexibility is beneficial for studies that aim to explore and better understand the use and perception of generative AI technologies in higher education.

Initially, 150 third-year undergraduate students responded to the study survey conducted between January 12th and 14th, 2025. Of these students, 12 responses were removed during the data-cleaning process due to incomplete answers. Thus, after the data-cleaning process, the final sample included 138 participants. The sample consisted of more females ($n = 110$; 80%) than males ($n = 28$; 20%), with none of the participants identified as other. The average age was 21.3 years ($SD = 0.81$), with a range of 20–24.

The survey consisted of 12 closed-ended and 6 open-ended questions, and the introductory page contained all information related to the study and participants' rights (including the supervising researcher's contact details). Interested students were asked to read and acknowledge the informed consent form before completing the survey. Participation was voluntary, and confidentiality was guaranteed.

All questions were formulated with the insights and potential challenges identified during the literature review in mind. Particular attention is paid to literature that publishes results from surveys already implemented with students (see: Hamid et al., 2023; Amani et al., 2023; Segbenya et al., 2023; Lau & Guo, 2023; Spence et al., 2024; Intelligent, 2023). Descriptive analysis was utilised to examine the survey data, and thematic analysis was applied to the open-ended responses. As the total number of responses was manageable ($n = 138$), two coders manually generated codes.

4. Findings

The results revealed that 83% of students currently use generative AI to complete graded assessments (see Figure 1). However, the following questions in the survey (such as "If you use AI tools in your study process to complete graded assignments, how many assignments do you use them to complete?" and "If you use artificial intelligence tools in the study process when completing graded assignments, do you verify the accuracy of the information generated by AI tools using other sources?") suggest that the number is slightly more significant – 86%. 83% of respondents reported always double-checking every piece of information from generative AI by seeking confirmation from at least one other source.

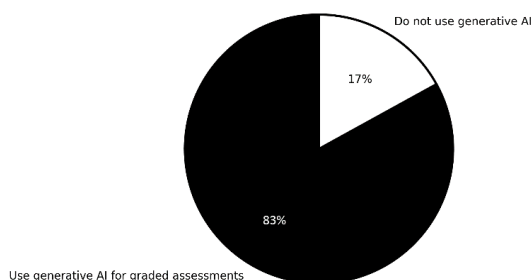


Figure 1. Proportion of students who report using generative AI to complete graded assessments (n = 138) (source: created by authors)

One of the most interesting insights emerged from the question asking students to provide three recent query formulations for generative AI. The qualitative data revealed that the most popular application of AI was to request explanations of phenomena, concepts, or theories (53%). The second most common use (45%) involved generating text to complete academic assignments – a task that could be accomplished by summarizing, expanding existing text, or by submitting the entire assignment for completion by the AI. Additionally, 23% of respondents used generative AI to generate ideas or writing topics. This diversity in inquiry reflects that all surveyed students are pursuing a Bachelor of Communication with the intention of working in the Creative Industries, and, as such, many of their queries relate to the analytical, productive, or distributional aspects of creative work. Examples include prompts like "Write the characters of the movie 'Fight Club' and describe them," "Help create the best concert ticket sales strategy based on the data provided," "Can you give me advice on how I can improve my modelling career?" and "Shorten my synopsis."

When asked about using generative AI tools to complete graded assignments, 35% of respondents stated that they consider it cheating. Furthermore, 51% indicated that they planned to use generative AI to write their bachelor's thesis (see Figure 2). Notably, 12% of students reported that they intend to employ generative AI for their thesis, even though they also believe that doing so constitutes cheating.

The subsequent two questions explored whether students believe that universities should permit the use of generative AI tools for graded assignments, and it invited them to elaborate on their views. Sixty-six percent of respondents supported the use of generative AI in

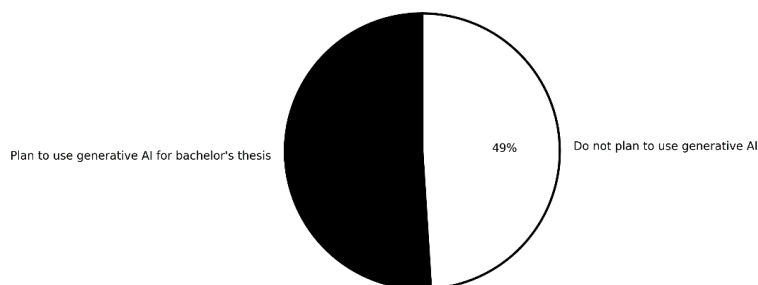


Figure 2. Proportion of students who reported planning to use generative AI when writing their bachelor's thesis (n = 138) (source: created by authors)

the academic process, while 4% were firmly opposed. The remaining students expressed no clear opinion on the matter. The most frequently cited arguments in favour of allowing generative AI can be categorized as follows: (i) AI is an inevitable development, (ii) the specific tool used is less important than the final result, and (iii) this technology enables students to complete tasks more quickly (and somewhat better). Notably, many proponents acknowledged concerns about potential academic fraud or adverse effects on student development, emphasising that AI should be used ethically and within certain limitations. In contrast, those opposed argued that reliance on such technology undermines the fundamental purpose of academic study process.

Students were invited to share any additional insights or concerns regarding the role of generative AI in higher education. Fifty-one per cent of respondents took this opportunity to provide further comments. Among these, 47% argued that integrating generative AI into the academic process would yield positive outcomes. However, nearly three-quarters of these respondents also acknowledged that generative AI could negatively impact student development, indicating the need for certain limitations on its use.

5. Discussion

This study investigated Lithuanian university undergraduates in the communication discipline to examine their usage, practices, and attitudes toward generative AI tools in the educational process. The results indicate that nine out of ten of these students currently employ generative AI to complete graded assessments. Although this proportion is higher than those reported in previous studies (Intelligent, 2023; Segbenya et al., 2023; Amani et al., 2023), it is important to note that these findings reflect the ongoing development of the technology and a subsequent increase in student familiarity. Consequently, the high usage rate may indicate a natural growth in popularity and acceptance of generative AI among students, mirroring broader technological advancements and integration trends in the higher education sector.

One of the most intriguing insights from this study came from a question that asked respondents to provide three recent query formulations for a generative AI chatbot. The data reveal that 53% of students most frequently use these chatbots to request explanations

of phenomena, concepts, or theories. Inquiries related to completing academic assignments constituted the second most common use at 45%. These findings align with other studies (Kim et al., 2024; Intelligent, 2023; Chan, 2023; Stöhr et al., 2024) that highlight generative AI's potential to offer personalised learning support and assistance – a key benefit of the technology in the higher education sector. Moreover, the technology's capacity to facilitate brainstorming is particularly advantageous for students whose studies involve creative assignments.

In this study, students exhibited a paradoxical attitude toward the use of generative AI in the academic process. While the majority of respondents acknowledged that the technology could negatively affect their academic development – and one out of three students even considered its use as tantamount to cheating – the findings nevertheless support its introduction in classroom settings (Segbenya et al., 2023; Amani et al., 2023; Intelligent, 2023; Chan, 2023; Harry & Sayudin, 2023). Moreover, over half of the respondents indicated plans to use generative AI for writing their bachelor's theses. These findings are particularly concerning because, in the absence of comprehensive and clear university policies on AI usage, there is a risk of reducing academic work to an exercise in merely producing AI-generated text. And in the worst-case scenario, students could submit work that violates academic ethics, potentially resulting in their expulsion. Therefore, the imperative to educate students on the ethical application of generative AI tools is not merely a theoretical concern but a pressing, real-world necessity.

Overall, the findings of this study lead to several recommendations. First, universities must tailor their AI policies to the specific needs of different academic disciplines. For example, disciplines that predominantly rely on writing-based assignments may face greater challenges in integrating AI than those that emphasise practice-based or project-oriented work. Adapting policies in a discipline-specific manner will help ensure that the implementation of AI technologies is both effective and equitable across the diverse landscape of higher education.

Secondly, there is compelling evidence that reevaluating assessment and examination formats is essential. This reform is necessary not only to foster critical thinking among students (The Queen's Journal, 2023; Amani et al., 2023; Warschauer et al., 2023; Segbenya et al., 2023; Chan, 2023; Jie & Kamrozzaman, 2024) but also to maintain academic integrity and prevent academic dishonesty (Cotton et al., 2023; Chan, 2023; Intelligent, 2023; Nguyen et al., 2024). Moreover, the authors of this article strongly recommend that higher education institutions require students to formally disclose any use of AI tools when completing written assignments.

6. Conclusions

The study provides valuable insights into Lithuanian students' usage of and attitudes towards generative AI in the educational process. The gathered insights show that generative AI has quickly become widespread and an integral part of the student study process. As a result, higher education institutions and teachers need to adapt quickly to the new, disruptive situation, as all evidence suggests this technology is likely to remain.

The findings and insights from this study contribute to the growing body of literature on the role and situation of generative AI in higher education and provide valuable data for pedagogues and policymakers on how best to approach this technology in order to achieve the best possible outcomes. It is important to note that, although the findings gathered support concerns about students' academic integrity and dishonesty when using this technology, this problem is unlikely to be solved by technological means.

Thus, the literature review and gathered data strongly suggest that the most effective approach to this educational challenge lies in the role of educators. This involves teaching students how to ethically engage with generative AI and restructuring grading systems to prioritise process-based assessment. Such approaches may include requiring students to demonstrate their thinking steps, as well as conducting oral examinations and presentations in which they must defend their ideas in real time.

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