

Editorial

Impact of generative AI on teacher-student interaction

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The use of generative AI in education is now being explored by various educational institutions. Experiments are increasingly taking place in universities as well as in schools.

However, what I find most interesting about this recent introduction is the fact that the first thought is generally that the machine could replace the human. Indeed, it seems to us that this could happen, while it is quite obvious that in most of the experiments the direct relationship between teacher and student remains in all interactions, sometimes supplemented by the support of the AI machine, sometimes guided by the logic of human-machine hybridization, or of the AI co-pilot helping the teacher to carry out his or her task with more information and suggestions than he or she may have had in previous years.

This kind of affirmation of the human-human/teacher-learner interaction leads me to understand which studies could provide interesting insights on this topic. Indeed, generative AI (GenAI) is increasingly influencing teacher-student interactions in higher education, presenting both opportunities and challenges.

Yeralan and Lee (2023) highlight its widespread use in creating assignments and enhancing self-directed learning, or it can be useful for tasks such as brainstorming and initial drafting. Moy and Feldstein (2024) emphasize the need for professional development workshops to help faculty and students effectively integrate GenAI into teaching and learning. The study also explores how rapid advances in AI are changing the way students and faculty interact with content and each other. McGill and McGill (n.d.) explore its role in engineering education, noting improved student performance when using AI tools for example generation. Following the professor's example conversations, students can ask the chatbot to generate more examples, and the chatbot also attempts to provide and explain solutions. Sekli et al. (2024) provide a comprehensive review of GenAI applications, highlighting their potential to improve engagement and personalized learning. Farrelly and Baker (2023) discuss concerns about academic integrity and bias, particularly for international students. They emphasize that in order to equip students with the skills, knowledge, and competencies that will allow them to thrive in the 21st century, we must rapidly adapt our programs to incorporate AI literacy and competence across disciplines. Lodge (2024) presents findings from interviews with students suggesting that the integration of GenAI into learning practices varies. Ilieva et al. (2023) propose a framework for using AI chatbots to enhance interactivity and feedback. The results of their study indicate that a significant number of students are aware of the educational potential of this emerging AI technology and have used it. In addition, a significant majority of students indicated an intention to use AI chatbots and reported satisfaction with generative AI technologies. Chiu (2024) calls for research into the transformative potential of GenAI in education.

In most of the papers, there are measures related to privacy and ethics. These may be a solution over time, if a common line is not developed in the development of AI tools dedicated to plagiarism detection and text development and revision.

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