



Call for Papers

Artificial intelligence in post-secondary education: between enthusiasm and mistrust

Coordinator

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Background

Artificial intelligence (AI) is defined as “a machine-based system designed to operate with varying levels of autonomy and that, for explicit or implicit objectives, can generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments” (European Parliament, 2023). AI appeared in the late 1940s in the wake of cybernetics. Its application in the field of education was at first limited to specific uses such as adaptive learning or analytical dashboards (Lepage and Roy, 2023). These initial applications, while promising, were more the subject of speculation, rather than actual practical implementations (Giannini, 2023). Intelligent tutoring systems, introduced in the 1980s, really marked the first stage of implementation in the educational field (Lepage and Roy, 2023). These systems, designed to support learning with technology, used programmed rules and simple models to adapt to the learners responses, suggest exercises or adjust the level of difficulty.

Recent developments in generative AI, notably those initiated by OpenAI with ChatGPT and Dall-E, represent a new milestone and place AI at the centre of debates about its role in education. These discussions cover a broad spectrum, from ethical implications (Collin and Marceau, 2023) to the management of personal data (Holmes et al., 2023) by way of the impact of these technologies on educational practices (Poellhuber et al., 2024).

In this context, AI offers exciting prospects, especially at the post-secondary level, where learners have greater autonomy and a wide range of needs. AI could support inclusiveness by meeting the special needs of certain students with disabilities, learning or adjustment issues, and by making education practitioners more aware of the reality of these students, as with Autism VR, for example (UNICEF, 2020). This technology, thanks in particular to dashboards and predictive models (Gaudreault and Lemieux, 2020), can also prevent dropping out at the post-secondary level. AI could even support teaching staff in the completion of administrative and pedagogical tasks (Celik et al., 2022).

However, great vigilance would also seem necessary on the part of the education community, since these advances are accompanied by significant challenges. Beyond the ethical issues associated with AI, such as lack of transparency, intellectual property, privacy protection or the reinforcement of biases, a number of other issues directly in line with the world of education have emerged in the past few years. In particular,

using AI to automate certain tasks could reduce the agency of educational practitioners (Collin et al., 2023). The use of this technology can also create a digital distance between teaching staff and students (Guilherme, 2019). Many of the AI systems in education have also been developed for lucrative, rather than pedagogical, purposes (Collin and Marceau, 2023).

Call for papers

This themed issue aims to explore questions about artificial intelligence (predictive, adaptive or generative) in higher education and the related issues such as ethical challenges, academic possibilities, the development of digital competencies, the transformation of the teaching role, professional development, academic integrity, student services, etc. The goal is to adopt a realistic, critical and forward-looking perspective, given the unprecedented emergence of AI in education.

We therefore invite authors to present scientific research (3,000 to 6,000 words) and pedagogical reflections (3,000 to 6,000 words), as well as experience or practice reports (1,500 to 2,500 words).

Please send your notice of intention by email to sonia.proust-androwkha@umontreal.ca no later than June 1, 2024.

Production schedule

- June 1, 2024: Deadline to submit notice of intention
- June 30, 2024: Response from special issue editors (authorization to submit or rejection)
- October 30, 2024: Deadline to submit full article
- November 2024: Start of double-blind peer review
- March 2025: Peer review results sent to authors
- June 2025: Submit final version of article
- Issue scheduled for release in summer 2025

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