



The Influence of Artificial Intelligence (AI) on Teaching Practices

Cathia Papi, Marie-Hélène Hébert,
Serge Gérin-Lajoie, Amélie Beaudoin and Philippe Verville

TÉLUQ University, Québec



Context

- The advent of generative AI in 2022 impacted the education sector.
- It sparked concerns and questions in higher education (Audran, 2024).
- It caused fear of intellectual decline, overreliance on AI tools and diploma devaluation (Roy et al., 2025).
- It triggered a significant increase in academic dishonesty (Goodier, 2025).



Research Problem

**To what extent have AI
developments changed
assessment practices in higher
education?**

Methodology

Systematic literature review:

- **EPPI method** from the University of London (EPPI Centre, 2010)
- **Inclusion criteria:**
 - English, French, Spanish and Portuguese
 - Peer-reviewed scientific articles
 - Empirical studies
 - Years searched: before 2025
- **Bibliographic databases:**
 - Education Source, ERIC, Érudit and Cairn



Keywords and Search Query

Assessment and academic dishonesty

((assess* OR evaluation OR test OR screening OR exam*) **OR** (cheating OR plagiarism OR integrity OR fraud* OR dishonesty OR tricherie OR plagiat OR intégrité académique))

AND

Artificial intelligence

(ai OR artificial intelligence OR chatgpt OR chatbot OR conversational agent OR ia OR intelligence artificielle OR agent conversationnel)

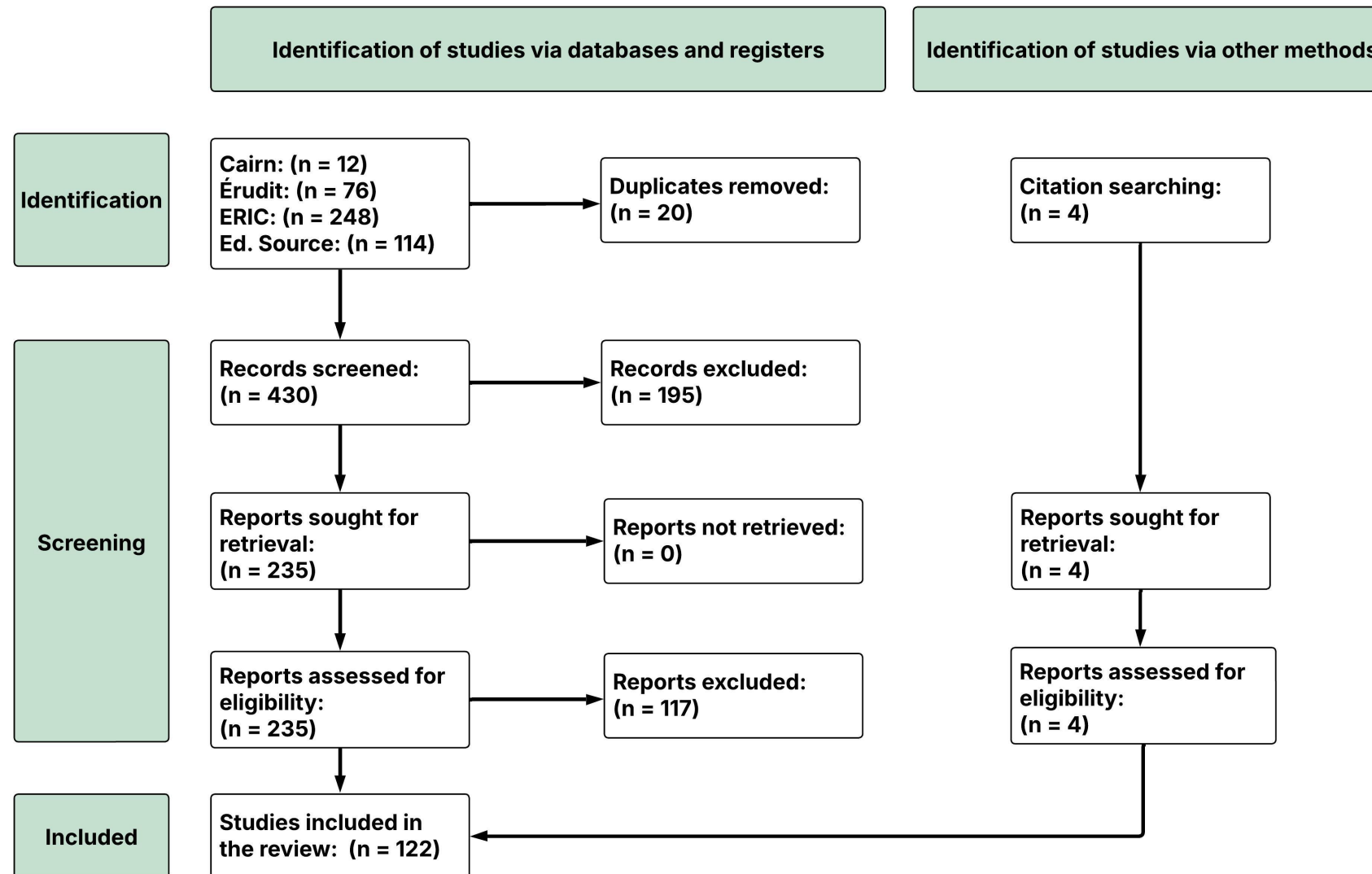
AND

Higher education

(higher education OR college OR universit* OR post secondary OR postsecondary OR undergraduate OR graduate OR enseignement supérieur OR cégep)



PRISMA Flow Diagram



AI in Formative Assessment

- ✓ **Personalization of learning materials** (Bhullar et al., 2024)
- ✓ **Performance prediction and targeted interventions** (Bertolini et al., 2021)
- ✓ **Immediate and tailored feedback**
- ✓ **Interactions comparable to peer feedback** (Kohnke, 2023)
- ✓ **Instant generation of study materials** (Hsu et al., 2023; Yang et al., 2023)
- ✗ **Resistance to change** (Bannister et al., 2023)
- ✗ **Confusing AI-related policies** (Bobula, 2024)
- ✗ **Unease and lack of affective dimension** (Belda-Medina and Kokošková, 2023; Çakmak, 2022)



AI in Summative Assessment

(design and grading)

- **Professors conflicted between tradition and innovation**

(Hyde et al., 2024; Khlaif et al., 2024; Xia t al., 2024)

- ✓ **AI can assist professors in designing assessments**

(Kanik, 2024; O, 2024; Onal and Kulavuz-Onal, 2024)

- ✓ **AI can help professors grade student work**

(Beseiso et al., 2021; Geçkin et al., 2023)

- ✗ **AI-based grading raise privacy concerns** (Kumar, 2023)

- ✗ **AI-based grading may underscore the need for human feedback** (Bhullar et al., 2024; Kortenmeyer, 2023)



AI in Summative Assessment

(cheating prevention)

- ✗ **AI encourages academic fraud** (Xia et al., 2024)
- ✗ **More than half of students cheat using AI** (Krecar et al., 2024)
- **Exams should be proctored** (Cotton et al., 2024; Kortenmeyer and Bauer, 2024)...
- ✗ **AI detection tools seem inaccurate and inefficient** (Jia and He, 2022; Oravec, 2022)
- **Authentic assessments can potentially favour deep thinking and knowledge mobilization** (Farrokhnia et al., 2024; Nguyen Thanh et al., 2023; Ulum, 2020)



Discussion and Conclusion

- While AI supports formative tasks, it can still produce inaccurate, biased or harmful content
- Standard assessments are increasingly outsmarted by students using AI
- Proctored exams, authentic assessments and oral presentations may be the key
- Effective institutional policies are needed
- Proper training is an imperative
- A careful consideration should be given to privacy and copyrights



Questions to the Audience

- How does AI influence your teaching practices?
- How do you address the challenges brought by AI in education?
- Should assessment practices be rethought entirely?
- To what extent will AI reshape the university model and redefine the role of certifications in society?



Contact and Acknowledgements

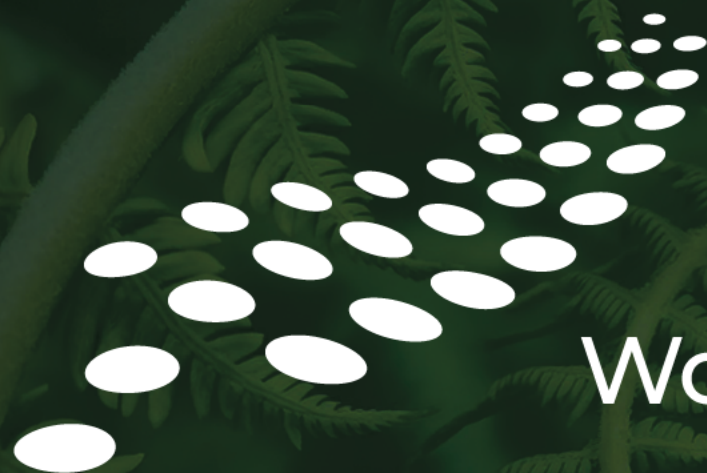


cathia.papi@teluq.ca



FAR1





30th ICDE

World Conference 2025



INTERNATIONAL
COUNCIL FOR OPEN AND
DISTANCE EDUCATION

Open Polytechnic
KURATINI TUWHERA



TE KUNENGA
KI PŪREHUROA
MASSEY
UNIVERSITY
UNIVERSITY OF NEW ZEALAND

References

- Ateeq, A., Alzoraiki, M., Milhem, M. and Ateeq, R. A. (2024). Artificial Intelligence in Education : Implications for Academic Integrity and the Shift Toward Holistic Assessment. *Frontiers in Education*, 01-11. <https://doi.org/10.3389/feduc.2024.1470979>
- Audran, J. (2024). Cinq enjeux d'évaluation face à l'émergence des IA génératives en éducation. *Mesure et évaluation en éducation*, 47(1), 6-26. <https://doi.org/10.7202/1114564ar>
- Bannister, P., Santamaría-Urbiet, A. and Alcalde-Peñalver, E. (2023). A Delphi Study on Generative Artificial Intelligence and English Medium Instruction Assessment : Implications for Social Justice. *Iranian Journal of Language Teaching Research*, 11(3), 53-80.
- Belda-Medina, J. and Kokošková, V. (2023). Integrating Chatbots in Education : Insights from the Chatbot-Human Interaction Satisfaction Model (CHISM). *International Journal of Educational Technology in Higher Education*, 20. <https://doi.org/10.1186/s41239-023-00432-3>
- Bertolini, R., Finch, S. J. and Nehm, R. H. (2021). Testing the Impact of Novel Assessment Sources and Machine Learning Methods on Predictive Outcome Modeling in Undergraduate Biology. *Journal of Science Education and Technology*, 30(2), 193-209. <https://doi.org/10.1007/s10956-020-09888-8>
- Beseiso, M., Alzubi, O. A. and Rashaideh, H. (2021). A Novel Automated Essay Scoring Approach for Reliable Higher Educational Assessments. *Journal of Computing in Higher Education*, 33(3), 727-746. <https://doi.org/10.1007/s12528-021-09283-1>
- Bhullar, P. S., Joshi, M. and Chugh, R. (2024). ChatGPT in Higher Education—A Synthesis of the Literature and a Future Research Agenda. *Education and Information Technologies*, 29(16), 21501-21522. <https://doi.org/10.1007/s10639-024-12723-x>
- Bobula, M. (2024). Generative Artificial Intelligence (AI) in Higher Education : A Comprehensive Review of Challenges, Opportunities, and Implications. *Journal of Learning Development in Higher Education*, 30.

References

Çakmak, F. (2022). Chatbot-Human Interaction and Its Effects on EFL Students' L2 Speaking Performance and Anxiety. *Novitas-ROYAL (Research on Youth and Language)*, 16(2), 113-131.

Chaudhry, I. S., Sarwary, S. A. M., El Refae, G. A. and Chabchoub, H. (2023). Time to Revisit Existing Student's Performance Evaluation Approach in Higher Education Sector in a New Era of ChatGPT — A Case Study. *Cogent Education*, 10(1), 1-30. <https://doi.org/10.1080/2331186X.2023.2210461>

Cotton, D. R. E., Cotton, P. A. and Shipway, J. R. (2024). Chatting and cheating : Ensuring academic integrity in the era of ChatGPT. *Innovations in Education & Teaching International*, 61(2), 228-239. <https://doi.org/10.1080/14703297.2023.2190148>

EPPI-Centre. (2010). EPPI-Centre Methods for Conducting Systematic Reviews.

Farrokhnia, M., Banihashem, S. K., Noroozi, O. and Wals, A. (2024). A SWOT Analysis of ChatGPT : Implications for Educational Practice and Research. *Innovations in Education and Teaching International*, 61(3), 460-474. <https://doi.org/10.1080/14703297.2023.2195846>

Geçkin, V., Kiziltas, E. and Çinar, Ç. (2023). Assessing Second-Language Academic Writing : AI vs. Human Raters. *Journal of Educational Technology and Online Learning*, 6(4), 1096-1108.

Goodier, M. (2025, June 15). Revealed : Thousands of UK university students caught cheating using AI. *The Guardian*. <https://www.theguardian.com/education/2025/jun/15/thousands-of-uk-university-students-caught-cheating-using-ai-artificial-intelligence-survey>

Hsu, H.-L., Chen, H. H.-J. and Todd, A. G. (2023). Investigating the Impact of the Amazon Alexa on the Development of L2 Listening and Speaking Skills. *Interactive Learning Environments*, 31(9), 5732-5745. <https://doi.org/10.1080/10494820.2021.2016864>

Hyde, S. J., Busby, A. and Bonner, R. L. (2024). Tools or Fools : Are We Educating Managers or Creating Tool-Dependent Robots? *Journal of Management Education*, 48(4), 708-734. <https://doi.org/10.1177/10525629241230357>

References

- Jia, J. and He, Y. (2022). The Design, Implementation and Pilot Application of an Intelligent Online Proctoring System for Online Exams. *Interactive Technology and Smart Education*, 19(1), 112-120. <https://doi.org/10.1108/ITSE-12-2020-0246>
- Kanik, M. (2024). The Use of ChatGPT in Assessment. *International Journal of Assessment Tools in Education*, 11(3), 608-621.
- Khlaif, Z. N., Ayyoub, A., Hamamra, B., Bensalem, E., Mitwally, M. A. A., Ayyoub, A., Hattab, M. K. and Shadid, F. (2024). University Teachers' Views on the Adoption and Integration of Generative AI Tools for Student Assessment in Higher Education. *Education Sciences*, 14(10), 1090. <https://doi.org/10.3390/educsci14101090>
- Kohnke, L. (2023). A Pedagogical Chatbot: A Supplemental Language Learning Tool. *RELC Journal: A Journal of Language Teaching and Research*, 54(3), 828-838. <https://doi.org/10.1177/00336882211067054>
- Kong, S.-C., Cheung, W. M.-Y. and Zhang, G. (2023). Evaluating an Artificial Intelligence Literacy Programme for Developing University Students' Conceptual Understanding, Literacy, Empowerment and Ethical Awareness. *Educational Technology & Society*, 26(1), 16-30.
- Kortemeyer, G. (2023). Could an Artificial-Intelligence Agent Pass an Introductory Physics Course? *Physical Review Physics Education Research*, 19(1). <https://doi.org/10.1103/PhysRevPhysEducRes.19.010132>
- Kortemeyer, G. and Bauer, W. (2024). Cheat Sites and Artificial Intelligence Usage in Online Introductory Physics Courses : What Is the Extent and What Effect Does It Have on Assessments? *Physical Review Physics Education Research*, 20(1). <https://doi.org/10.1103/PhysRevPhysEducRes.20.010145>
- Krecar, I. M., Kolega, M. and Jurcec, L. (2024). Perception of ChatGPT Usage for Homework Assignments : Students' and Professors' Perspectives. *IAFOR Journal of Education*, 12(2), 33-60.

References

- Nguyen Thanh, B., Vo, D. T. H., Nguyen Nhat, M., Pham, T. T. T., Thai Trung, H. and Ha Xuan, S. (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>
- O, K.-M. (2024). A comparative study of AI-human-made and human-made test forms for a university TESOL theory course. *Language Testing in Asia*, 14, 1-17. <https://doi.org/10.1186/s40468-024-00291-3>
- Onal, S. and Kulavuz-Onal, D. (2024). A Cross-Disciplinary Examination of the Instructional Uses of ChatGPT in Higher Education. *Journal of Educational Technology Systems*, 52(3), 301-324. <https://doi.org/10.1177/00472395231196532>
- Oravec, J. A. (2022). AI, Biometric Analysis, and Emerging Cheating Detection Systems : The Engineering of Academic Integrity?: IA, análisis biométrico y sistemas emergentes de detección de trampas: ¿La ingeniería de la integridad académica? *Education Policy Analysis Archives / Archivos Analíticos de Políticas Educativas / Arquivos Analíticos de Políticas Educativas*, 30(175-177), 1-18. <https://doi.org/10.14507/epaa.30.5765>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D. et al. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. 10.1136/bmj.n71
- Perkins, M. and Roe, J. (2024). Decoding Academic Integrity Policies : A Corpus Linguistics Investigation of AI and Other Technological Threats. *Higher Education Policy*, 37(3), 633-653. <https://doi.org/10.1057/s41307-023-00323-2>
- Roy, N., Proust-Androwkha, S., Gruslin, É., Vallerand, V. and Charles, É. (2025). L'intelligence artificielle au postsecondaire : Entre enthousiasme et méfiance – Introduction au numéro thématique. *Revue internationale des technologies en pédagogie universitaire*, 22(1). <https://doi.org/10.18162/ritpu-2025-v22n1-01>

References

- Ulum, Ö. G. (2020). A Critical Deconstruction of Computer-Based Test Application in Turkish State University. *Education and Information Technologies*, 25(6), 4883-4896. <https://doi.org/10.1007/s10639-020-10199-z>
- Wise, B., Emerson, L., Luyn, A. V., Dyson, B., Bjork, C. and Thomas, S. E. (2024). A Scholarly Dialogue : Writing Scholarship, Authorship, Academic Integrity and the Challenges of AI. *Higher Education Research and Development*, 43(3), 578-590. <https://doi.org/10.1080/07294360.2023.2280195>
- Xia, Q., Weng, X., Ouyang, F., Lin, T. J. and Chiu, T. K. F. (2024). A scoping review on how generative artificial intelligence transforms assessment in higher education. *International Journal of Educational Technology in Higher Education*, 21(1), 1-22. <https://doi.org/10.1186/s41239-024-00468-z>
- Yang, Y., van Schooten, K. S., McKay, H. A., Sims-Gould, J., Hoang, R. A. and Robinovitch, S. N. (2021). Recreational therapy to promote mobility in long-term care : A scoping review. *Journal of Aging and Physical Activity*, 29, 142-161.
- Yavich, R. and Davidovitch, N. (2024). Plagiarism among Higher Education Students. *Education Sciences*, 14(8), 908. <https://doi.org/10.3390/educsci14080908>
- Yusuf, A., Pervin, N. and Román-González, M. (2024). Generative AI and the future of higher education : A threat to academic integrity or reformation? Evidence from multicultural perspectives. *International Journal of Educational Technology in Higher Education*, 21(1), 1-29. <https://doi.org/10.1186/s41239-024-00453-6>