A rapid scoping review on academic integrity and algorithmic writing technologies

Beatriz Antonieta Moya, University of Calgary
Sarah Elaine Eaton, University of Calgary
Helen Pethrick, University of Calgary
Robert Brennan, University of Calgary
Jason Wiens, University of Calgary
Brenda McDermott, University of Calgary
Jonathan Lesage, University of Calgary

Session type: Original research

Abstract

This presentation provides insight into the development and findings of a rapid scoping review centred on the intersections of academic integrity and artificial intelligence, with particular attention to algorithmic writing technologies (e.g., ChatGPT) involving faculty, students, teaching assistants, academic student support staff, and educational developers in higher education contexts. This rapid scoping review was developed by a transdisciplinary team including Communication studies, Education, Engineering, and English, and followed Joanna Briggs Institute’s (JBI) updated manual for scoping reviews and the Preferred Reporting Items for Systematic reviews Meta-Analysis (PRISMA) reporting standards. JBI provides a high-quality, trusted framework for conducting these kinds of studies. This inquiry’s study design includes qualitative, quantitative, mixed methods, theoretical and opinion studies; additionally, this inquiry did not restrict studies by geographic location and focused on sources written in English. This review's studies involved faculty, students, teaching assistants, academic support staff, and educational developers in higher education. It also included studies about artificial intelligence in the context of academic integrity, focusing on artificial intelligence tools that assist text generation and writing developed in Tertiary type A and B postsecondary education. Studies excluded from this review were related to primary and secondary education contexts, did not address the ethical implications of artificial intelligence, and focused on text plagiarism software. The protocol of this rapid review was published in the Canadian Perspectives on Academic Integrity Journal. Its implementation helped this team identify various ethical implications signalled by scholars between 2007 and 2022. Considering the expansive emergence of these
technologies and the multiple positionings derived from these new and unprecedented encounters with such technology, we believe that the implications identified in this rapid scoping review are particularly relevant to inform academic staff, administration, students, and academic integrity researchers’ ethical decision-making and practices when teaching, learning, designing, and implementing assessments, and doing research. The findings of this rapid scoping review encompass nuanced perspectives concerning the ethical and unethical uses of these emerging technologies and insights into equity, diversity, and inclusion issues.

References


Eaton, S. E. (2021). Plagiarism in higher education: Tackling tough topics in academic integrity. ABC-CLIO.


— urgent and emerging topics. https://taylorinstitute.ucalgary.ca/series-and-events/academic-integrity-urgent-emerging-topics


https://doi.org/10.1186/s12874-018-0611-x


https://doi.org/10.1136/bmj.n71


https://doi.org/10.1186/s41039-017-0062-8


Statistics Canada. (2022). Table 37-10-0076-01 number of full-time teaching staff at Canadian universities, by rank, sex, inactive.

https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710007601


https://doi.org/10.1186/s12916-015-0465-6


