

Memo

Brock University
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To: Christene Carpenter Cleland, Chair, T&LPC

From: Rajiv Jhangiani, Vice Provost, Teaching and Learning

Date: October 12, 2023

Subject: **Use of artificial intelligence (AI) detection tools**

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MOVED (/)

THAT T&LPC recommend to Senate that the University not support the use of AI detection tools to process student coursework in the pursuit of identifying academic integrity concerns.

Background

The advent of GPT4 and other similar technologies has catalyzed a robust debate within higher education about the implications of artificial intelligence for a range of academic activities, including teaching, learning, and scholarship. With a view to ensuring that operational decision-making at Brock benefits from our significant in-house expertise, the Provost and Vice-President, Academic constituted an Advisory Group on Artificial Intelligence earlier this year. The membership of this cross-disciplinary group, which includes 14 faculty members who enjoy expertise in different domains related to artificial intelligence, is listed at the end of this memo.

In line with the group's initial focus on the implications of generative AI for teaching and learning practice, members of the advisory group have helped shape the [guidance issued to Brock University instructors and learners from the Centre for Pedagogical Innovation](#). However, a more recent line of discussion within the advisory group has concerned the question of tools and technologies that purport to detect the use of AI in student coursework ("AI detection tools"). This is an emerging issue that has been identified as requiring clarification, especially to aid instructors who seek to evaluate student coursework for the possible unauthorized use of generative AI, with a view to upholding academic integrity.

Following discussions about AI detection tools within the Provost's advisory group, members of the advisory group attended the September 21, 2023 meeting of the Teaching & Learning Policy Committee where they outlined some of the rationale behind their strong recommendation to the Provost that Brock University not support the use of AI detection tools to process student coursework in the pursuit of identifying academic integrity concerns.

Following this discussion at last month's Teaching & Learning Policy Committee (as well as discussions at other relevant forums, such as the Provost's academic integrity advisory group), the Provost wishes to advance the group's recommendation for consideration as a formal motion (as outlined above). The rationale for this motion, as articulated by the advisory group members, is as follows:

Given the scant information available about the underlying processes utilized by emerging AI detection tools, there are serious concerns about their ethical, privacy, intellectual property, data usage implications, and open questions concerning their accuracy and efficacy (Elkhatat et al., 2023; Weber-Wulff et al., 2023). For example, it is already well understood that these tools have a higher rate of false positives and false negatives than initially thought and that these inaccurate reports disproportionately disadvantage learners for whom English is a second language (Liang et al., 2023). Relying on such tools would result in the coursework of several thousand Brock University students each year being misidentified as potentially AI-generated. Adopting these tools also institutionalizes and condones these algorithmic biases while creating the impression that these tools are reliable and valid, while they may be neither.

As a result, at the present time AI detection tools cannot be used as evidence in academic misconduct investigations at Brock University. Instructors, faculty, and all teaching staff are advised that submitting or sharing student work with any AI detection services, websites or apps is not institutionally condoned due to a range of ethical concerns with the technology. Instructors who suspect the use of unauthorized AI-generated content should instead use evolving best practices to inspect submitted academic work.

In providing this rationale, Brock chooses to clarify that although the university utilizes Turnitin.com functionality related to phrase matching, the university has *not* institutionally adopted any functionality related to AI detection.

Members of the Provost's Advisory Group on Artificial Intelligence

Ali Emami, Computer Science

Andrew Colgoni, Library

Anteneh Ayanso, Finance, Operations & Information Systems

Betty Ombuki-Berman, Computer Science

Blayne Haggart, Political Science

Dipanjan Chatterjee, Finance, Operations & Information Systems

Karen Louise Smith, Communications, Pop Culture & Film

Lauren Corman, Sociology

Michael Mindzak, Educational Studies

Mohammed Estaiteyeh, Educational Studies

Rahul Kumar, Educational Studies

Rebecca Raby, Social Sciences

Shahryar Rahnamayan, Engineering

Tanya Martini, Psychology

Yifeng Li, Computer Science

References

- Elkhatat, A.M., Elsaid, K., & Almeer, S. (2023). Evaluating the efficacy of AI content detection tools in differentiating between human and AI-generated text. *International Journal for Educational Integrity*, 19(17). <https://doi.org/10.1007/s40979-023-00140-5>
- Liang, W., Yuksekogonul, M., Mao, Y., Wu, E., & Zou, J. (2023). GPT detectors are biased against non-native English writers. *Patterns*, 4(7). <https://doi.org/10.1016/j.patter.2023.100779>
- Weber-Wulff, D., Anohina-Naumeca, A., Bjelobaba, S., Foltýnek, T., Guerrero-Dib, J., Popoola, O., Šigut, P., & Waddington, L. (2023). Testing of detection tools for AI-generated text. <https://doi.org/10.48550/arXiv.2306.15666>