

Protecting Students from AI with Algorithmic Impact Assessments

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I would like to acknowledge that I live and work on the traditional, ancestral, and unceded territory of the Coast Salish Nations of Skwxwú7mesh (Squamish), səl'ílwətaʔɫ (Tsleil-Waututh), and xwməθkwəy'əm (Musqueam).

Today's Presentation

Slides with links will be shared in ETUG Mattermost (chat.opened.ca)
All the links from this presentation are at: <https://bit.ly/aialinks>

1. Lessons from AI Proctoring Debacle
2. McMaster Privacy Complaint
3. Commissioner Recommends Algorithmic Impact Assessment (AIA)
4. Hands-on with Canada's AIA Tool

Fall 2024 AIA Survey



1. Are you familiar with Algorithmic Impact Assessments?
2. Is your institution doing Algorithmic Impact Assessments?
3. OPTIONAL: Where do you work?

Link: <https://bit.ly/aiasurvey2024>

Doing no harm

- Can an algorithm be racist?
- How are we protecting students from discriminatory AI?
- How do we prevent the next Proctorio from causing harm?



Video by Mozilla: <https://www.youtube.com/watch?v=iELUtvhbukE>

AI Proctoring is Racially Biased

- "Imagine all you want to do is take a test, and the system your institution uses as a gateway to testing doesn't recognize you as a human being." - Dr. Chris Gilliard
- Respondus has a patent (US11645935B1) stating "For dark complexion persons, a racial detection feature may be provided so that a downward adjustment can be made to the final risk tally."
- **Beyond Surveillance: The Case Against AI Proctoring and AI Detection** <https://bccampus.ca/2024/10/16/beyond-surveillance-the-case-against-ai-proctoring-ai-detection/>

Suspicious Abnormalities

"One system, Proctorio, uses gaze-detection, face-detection and computer-monitoring software to flag students for any “abnormal” head movement, mouse movement, eye wandering, computer window resizing, tab opening, scrolling, clicking, typing, and copies and pastes. A student can be flagged for finishing the test too quickly, or too slowly, clicking too much, or not enough."

Source (Gift Link): <<https://wapo.st/4esCN33>> Cheating-detection companies made millions during the pandemic. Now students are fighting back (Drew Harwell)

The McMaster AI Proctoring Complaint

Two important sources of information include:

The Information and Privacy Commissioner of Ontario's Privacy Complaint Report (<https://decisions.ipc.on.ca/ipc-cipvp/privacy/en/item/521580/index.do>)

Dr. Teresa Scassa's "Investigation of AI-Enabled Remote Proctoring Software under Public Sector Privacy Law Leads to AI Recommendations"

(https://www.teresascassa.ca/index.php?option=com_k2&view=item&id=379:investigation-of-ai-enabled-remote-proctoring-software-under-public-sector-privacy-law-leads-to-ai-recommendations&Itemid=80)

The McMaster AI Proctoring Complaint

- McMaster University uses Respondus Lockdown Browser and Monitor.
- Student complained to Information and Privacy Commissioner of Ontario.
- Did not want to share identity with McMaster, so IPC initiated investigation.
- Vendor used video surveillance to "improve the services".
- IPC found that video recordings are personal information.
- Vendor use of PI did not fall under educational purpose..
- Students never consented and had no opportunity to opt out.
- IPC recommended that McMaster protect its students from the heightened risks of AI-enabled tools by conducting Algorithmic Impact Assessments.
- McMaster University is now conducting AIAs, having adapted the Canadian tool.

Canada's Algorithmic Impact Assessment Tool

- "The tool is a questionnaire that determines the impact level of an automated decision-system. It is composed of 51 risk and 34 mitigation questions."
- "Assessment scores are based on many factors, including the system's design, algorithm, decision type, impact and data."
- Helps assess and mitigate risks, ensure transparency, accountability, and fairness in automated decisions.
- Mandatory for federal departments and agencies.
- Similar to a Privacy Impact Assessment (see: www.privacylibrary.ca)
- What's stopping us? If we can prevent harm, why wouldn't we do it?

Source: <https://www.canada.ca/en/government/system/digital-government/digital-government-innovations/responsible-use-ai/algorithmic-impact-assessment.html>

Open AIAs

"Departments are responsible for releasing the final results of the AIA in an accessible format and in both official languages on the Open Government Portal".

Screenshot of
Canada's AIA Tool:

Start your assessment

Search completed assessments

Completed Assessments:

https://search.open.canada.ca/opendata/?collection=aia&page=1&sort=date_modified+desc

Open AIAs

21 Algorithmic Impact Assessments are publicly available from organizations including

- Immigration, Refugees and Citizenship Canada
- Public Health Agency of Canada

Source:

https://search.open.canada.ca/opendata/?collection=aia&page=1&sort=metadata_modified+desc&search_text=algorithmic+impact+assessment

Hands-on with the AIA Tool

<https://open.canada.ca/aia-eia-js/>

ChatGPT Search Demo

"How do I get started doing an
Algorithmic Impact Assessment in BC?"

ChatGPT Link: <https://bit.ly/aiaschat>

Let's have a Q&A and chat! 😊

THANK YOU

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