

#### **Remote Proctoring Through an Ethical Lens**

The Case Against Surveillance

lan Linkletter

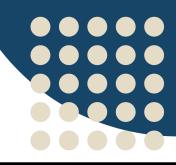
Emerging Technology and Open Education Librarian

Ian Linkletter@bcit.ca

October 17, 2025



Slides and links: https://bit.ly/againstproctoring



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), səlilwəta? (Tsleil-Waututh), and xwməθkwəyəm (Musqueam).



#### **Session Overview**

- The Case Against Remote Proctoring (30 minute presentation)
- Case study conversations (3 x 10 minutes, no breakout rooms)
  - O What would you say?
- Algorithmic Impact Assessments (15 minutes)
- Wrap-up discussion (15 minutes)

Slides and links: <a href="https://bit.ly/againstproctoring">https://bit.ly/againstproctoring</a>



#### **Participant Survey Results**

Administrator: 6.5%

Educational Developer, Instructional Designer, Faculty Developer, Learning Designer: 31.5% Educational Technologist, Media Developer,

Web Developer: 11.1%

Faculty, Associate Faculty, Instructor, Sessional

Instructor, Teaching Assistant: 29.6%

Librarian: 4.6%

Staff: 10.2%

Student: 2.8%

Other: 3.7%



#### My background

- The Evergreen State College, BA
- The University of Western Ontario, MLIS
- Educational technologist for 14 years
- UBC Faculty of Education for 10 years
- Emerging Technology and Open Education Librarian with BCIT Library since 2022
- Created the Canadian Privacy Library in 2024
- Member of Brock University's Inclusive Education Research Lab
- "Do no harm" is my fundamental principle



#### My fight against academic surveillance

- In 2020, I worked in UBC's Faculty of Education.
- When we shifted to emergency remote teaching, proctoring boomed.
- Over 50,000 UBC students were forced to use Proctorio.
- When Proctorio's CEO targeted students online, I defended them.
- On YouTube, I found help videos proving that the tech was harmful.
- I shared my concerns and cited the YouTube links as proof.
- On September 2, 2020, I was sued for copyright infringement.
- In March 2021, UBC banned Proctorio (with slim exceptions).
- The lawsuit continues to this day, over 5 years later. I will never be defeated.
- Learn more and follow my journey: https://linkletter.org



#### Academic surveillance software

- Academic surveillance software polices student behaviour
- It's *not* ed tech!
- Educational technology serves a pedagogical purpose
- Surveillance technology has no place in education
- We can work together against surveillance



Image source: Super Mario World





#### Examples of surveillance

- Screen monitoring (like GoGuardian)
- Online activity and communication monitoring (like Gaggle)
- Learning analytics? (often in the LMS)
- Quiz activity logging (like Canvas)
- Al detection (like Turnitin)
- Lockdown browsers (like Respondus)

Learn about harms of academic surveillance: <a href="https://www.eff.org/deeplinks/2024/09/school-monitoring-software-sacrifices-student-privacy-unproven-promises-safety">https://www.eff.org/deeplinks/2024/09/school-monitoring-software-sacrifices-student-privacy-unproven-promises-safety</a>



# Surveillance demonstrates values

Power and control over teaching and learning

A classroom without mutual trust is not a good place to be



Surveillance sends a message

- You are not trusted.
- We are watching you.
- You can be removed.



#### Types of remote proctoring

#### **Lockdown Control**

- Restricts switching apps or tabs
- Prevents copy-paste and other actions

#### **Live Proctor**

 Human watches a live video feed and can potentially interact and intervene

#### AI + Human

- Algorithms monitor and flag certain behaviours
- Human reviews flagged events

#### Al Decision-Making

- Al controls access
- Al calculates "suspicion score"
- Al can decide to remove student from exam with no human oversight



#### Common rationale for proctoring

- 1. Accreditation requirements
- 2. Ensuring exam security
- 3. Maintaining credential value





# Synthetic image depicting "Proctorio"



#### Remote Proctoring with Al

- Proctorio automates decision-making
- It monitors student behavior using AI
- It ranks students by "Suspicion Level"
- Surveils webcam, browser, and microphone
- Room scans, widely used, are <u>unconstitutional</u>

NPR. (2022, August 26). Scanning students' rooms during remote tests is unconstitutional, judge rules.

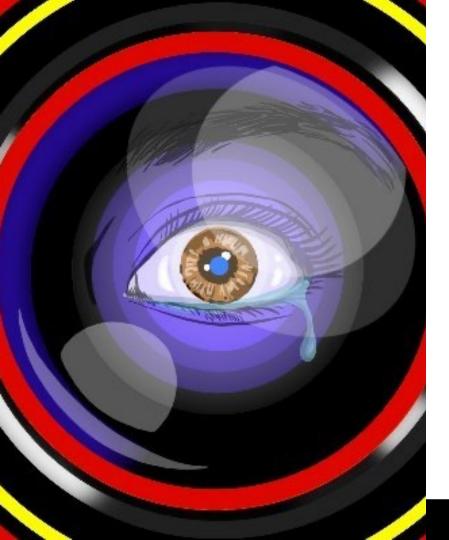
https://www.npr.org/2022/08/25/1119337956/test-proctoring-room-scans-unconstitutional-cleveland-state-university

### "Abnormalities"

"One system, Proctorio, uses gaze-detection, facedetection 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."

Harwell, D. (2020, November 12). Cheating-detection companies made millions during the pandemic. Now students are fighting back. The Washington Post. https://wapo.st/4esCN33





#### AI + Proctoring = Harm

- Discrimination against disabled students.
- Discrimination against students of colour.
- Unwarranted invasion of privacy.
- Causes emotional harm.

Art by Gabrielle Haynes <a href="https://gabriellehaynes.com">https://gabriellehaynes.com</a>

#### Proctoring is an accessibility barrier



# Access Denied

- Blocks access if it cannot detect a face
- Inaccessible to blind students
- Kicks you out if you step away from your computer (e.g. to use the bathroom or take medication)
- Kicks you out if it detects another face
- Eye and head movement tracking targets neurodiverse students
- Minimizing movement creates stress





# BC Post-Secondary Ethical Educational Technology Toolkit

The Toolkit provides guiding questions, resources, and tools for educators, administrators, and staff in B.C. post-secondary institutions to critically evaluate and adopt Educational Technologies. It outlines key considerations on a variety of topics, equipping users with a framework for ethical decision-making regarding Educational Technologies.

Source: <a href="https://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/institution-resources-administration/digital-learning-strategy">https://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/institution-resources-administration/digital-learning-strategy</a>





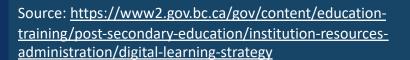
#### B.C. POST-SECONDARY ETHICAL EDUCATIONAL TECHNOLOGY TOOLKIT



- Considering inclusivity in Educational Technologies involves considering diverse backgrounds, contexts, and worldviews. An intersectional approach plays a key role in addressing the needs of various groups and includes analysis that considers how different aspects of a person's identity such as race, gender, socio-economic status, sexuality, disability, etc. intersect, overlap, and interact to influence a person's experience in the world.
- Inclusive decision-making involves engaging the diverse identities, cultures, and perspectives within your institution's community in decisions related to Educational Technology, such as procurement, the adoption of new tools, or policy development.











# B.C. POST-SECONDARY ETHICAL EDUCATIONAL TECHNOLOGY TOOLKIT

Source: <a href="https://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/institution-resources-administration/digital-learning-strategy">https://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/institution-resources-administration/digital-learning-strategy</a>





#### 7. UNDERSTANDING AND ADDRESSING BIAS

- Identifying and understanding potential biases that may be embedded within tools should be considered when implementing Educational Technology. The growing prevalence of AI technologies embedded within Educational Technology makes such risks more important to understand and consider.
- Examples of potential biases include algorithmic bias which can occur when technologies produce results that reflect prejudices present in the data used to train them, or when biases are introduced through design choices made during the development of Digital Tools.
- Various factors contribute to bias in Educational Technology, including a lack of diverse perspectives during technology development, bias in the data sets used for training, and deployment methods used.
- Carefully weighing the risks and consequences associated with these biases helps to foster equitable outcomes for all users.



"For educational technologies such as artificial intelligence applications that include automated functions, it is important to identify and consider algorithmic biases and to evaluate the risk not only to institutions and individuals but also the risk to groups and communities (e.g., persons with disabilities, BIPOC educators and students). With awareness of the protected grounds of the Ontario Human Rights Code, this includes ensuring that the hidden value judgments that are racist, ableist, or otherwise discriminatory are not baked into educational technologies.

Avoidable risk: Procuring a remote exam proctoring tool that disproportionately flags students with darker skin tones as cheating."

From Brock University's Ethical Framework for Educational Technologies: https://bit.ly/brockethicaledtech

# 8. INDIGENOUS INTELLECTUAL PROPERTY, INFORMATION GOVERNANCE, AND DATA SOVEREIGNTY

Consider incorporating the 5 Rs Model by **Dr**. **Jean-Paul Restoule** Relationships, Respect, Relevance, Responsibility, and Reciprocity - when using Educational Technology.







# B.C. POST-SECONDARY ETHICAL EDUCATIONAL TECHNOLOGY TOOLKIT



- Integrating Educational Technologies in post-secondary institutions in a human-centred way that considers the physical, emotional, and psychological safety of learners, educators, and staff can help create a safe and supportive environment. This involves consideration of digital well-being and fostering supportive online communities.
- **b** By considering inclusiveness, safety, and respect Educational Technologies can be used to help create an environment where people can thrive both academically and personally.





Source: <a href="https://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/institution-resources-administration/digital-learning-strategy">https://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/institution-resources-administration/digital-learning-strategy</a>





#### B.C. POST-SECONDARY ETHICAL EDUCATIONAL TECHNOLOGY TOOLKIT



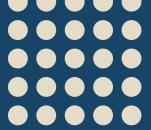


### 10. ENVIRONMENTAL SUSTAINABILITY



By assessing these technologies through the lenses of ecological, economic, and social sustainability, post-secondary institutions can align technological advancements with environmental responsibility and stewardship, supporting long-term ecological health and fostering a sustainable future.

Source: <a href="https://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/institution-resources-administration/digital-learning-strategy">https://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/institution-resources-administration/digital-learning-strategy</a>



"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 https://bsky.app/profile/hypervisible.bsky.social





#### Centering Student Voices: Robin Aisha Pocornie



Error 404: Face Not Found TedX Talk
Link: <a href="https://youtu.be/pVfvYYUkIcY">https://youtu.be/pVfvYYUkIcY</a>
Video licensed CC-BY-NC by TedX on YouTube



- After not being supported, Robin filed a complaint with the Dutch Institute for Human Rights.
- Hans de Zwart and Naomi Appelman of the Racism and Technology Center supported her journey.
- Robin is also a member of the Racism and Technology Center: <a href="https://racismandtechnology.center">https://racismandtechnology.center</a>
- The case set human rights precedent by affirming that technology itself can be racist.
- The Institute concluded that Proctorio didn't work because of her glasses, not her skin color.
- The Institute also found that VU had discriminated against her by not taking her seriously.



@BCcampus

#### Centering Student Voices: Amaya Ross



Video by Mozilla licensed CC-BY-NC on YouTube: https://www.youtube.com/watch?v=iELUtvhbukE



#### **Proctorio Error: Face Not Found**

#### **Webcam Image Test**











Past Attempts









Oh no! We're having a little trouble seeing you. Please adjust the camera so your face is centered and clearly visible. Tip #226 Make sure your face is centered and you're looking directly at the camera.

Learn more about our webcam image test.

Source: https://twitter.com/JaniceWyattRoss/status/1375439448582856711/photo/1

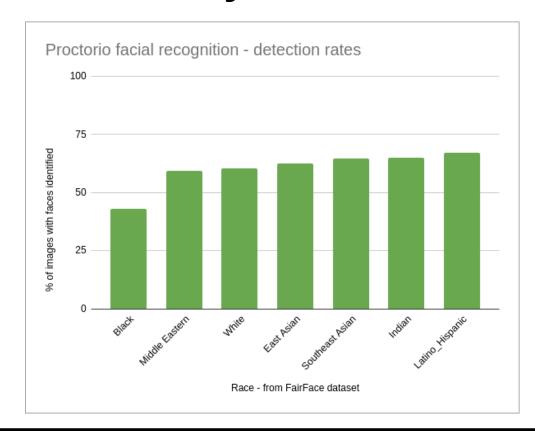


#### Centering Student Voices: Lucy Satheesan

Miami University student Lucy Satheesan analyzed public source code and found that Proctorio was using open source facial recognition software called OpenCV. She tested OpenCV against an open source image database of faces called FairFace and found it could detect Black faces less than half of the time. Proctorio claims, without evidence, that this finding has been "debunked".

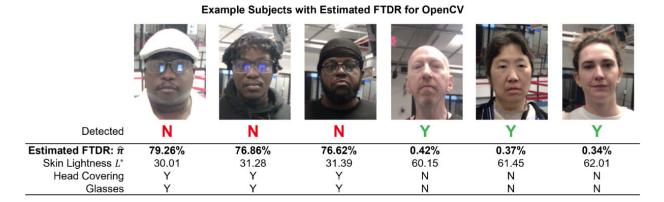
Satheesan, L. (March 18, 2021). Proctorio's facial recognition is racist.

https:/proctor.ninja/proctorios-facial-recognition-is-racist





#### New research confirms OpenCV is biased



From abstract: "Failure rates increased from just 0.28% for subjects with the lightest skin in our sample to 24.34% for subjects with the darkest, controlling for other factors."

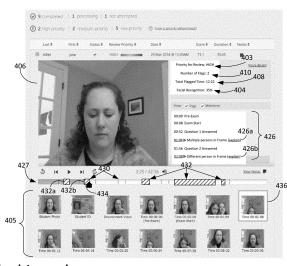
Cook, C. M., Cuffney, L., Howard, J. J., Sirotin, Y. B., Tipton, J. L., & Vemury, A. R. (2025). Performance differentials in deployed biometric systems caused by open-source face detectors. *In Proceedings of the 2025 ACM Conference on Fairness, Accountability, and Transparency, June 23–26, 2025, Athens, Greece*. https://doi.org/10.1145/3715275.3732171



#### This problem is known within the industry

- "Respondus, a vendor of online proctoring software, has been granted a patent for their "systems and methods for assessing data collected by automated proctoring." The patent shows that their example method for calculating a risk score is adjusted on the basis of people's skin colour.
- The "Adjustment to Final Tally" for dark skin is described as follows in the granted patent:

For dark complexion persons, a racial detection feature may be provided so that a downward adjustment can be made to the final risk tally."



De Zwart, H. (October 5, 2023). Proctoring software uses fudge-factor for dark skinned students to adjust their suspicion score. Racism and Technology Center. <a href="https://racismandtechnology.center/2023/10/05/proctoring-software-uses-fudge-factor-for-dark-skinned-students-to-adjust-their-suspicion-score/">https://racismandtechnology.center/2023/10/05/proctoring-software-uses-fudge-factor-for-dark-skinned-students-to-adjust-their-suspicion-score/</a>



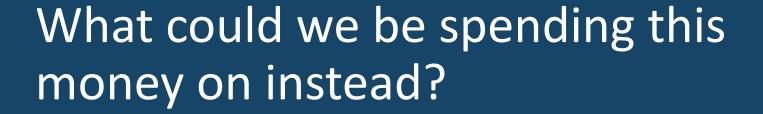
#### **Enough was enough for UBC**

# Message to the community regarding Senate vote on use of remote proctoring software

March 18, 2021

Last evening, the UBC Vancouver Senate voted in favour of a motion to direct UBCV Faculties to stop using remote invigilation tools that involve automated recording and algorithmic analysis of data captured during invigilation, except in cases where the use of such 'remote proctoring software' is required by external accreditation bodies. This motion, which is effective immediately, comes after much discussion and consultation with stakeholders across campus, including students and faculty.

Source: https://academic.ubc.ca/academic-community/news-announcements/news/senate-vote-remote-proctoring-software





#### Proctorio Spend at Ohio State University

#### **Purchase orders:**

03/19/2018: \$220,000

08/07/2018: \$9,000

03/05/2019: \$220,000

09/09/2020: \$170,000

07/01/2022: \$170,000

04/19/2023: \$125,000

Overall spend: \$465,531.25

Source: Personal Freedom of Information request



#### Proctorio Spend at University of Colorado Boulder

#### **Purchase orders:**

2015: \$50,000

2018: \$4,290

2019: \$4,896

2020: \$180,448

2021: \$180,448

2022: \$114,448

2023: \$66,732.52

2024: \$114,448

Total: \$722,491.50

Pricing: \$3.68 per user based on the institution's current full-time equivalent enrollment number.

5% of instructors used Proctorio when the institutional contract was discontinued.

Source: Personal Freedom of Information request and https://oit.colorado.edu/services/consulting-professional-services/academic-

technology-initiatives-team/needs-assessments/online-proctoring



#### Does this million dollar software actually stop academic dishonesty?



Geiger, G (March 5, 2021). Students Are Easily Cheating 'State-of-the-Art' Test Proctoring Tech. Vice. <a href="https://www.vice.com/en/article/students-are-easily-cheating-state-of-the-art-test-proctoring-tech/">https://www.vice.com/en/article/students-are-easily-cheating-state-of-the-art-test-proctoring-tech/</a>?

#### Does this million dollar software actually stop academic dishonesty?

#### On the Efficacy of Online Proctoring using Proctorio

Laura Bergmans, Nacir Bouali, Marloes Luttikhuis and Arend Rensink University of Twente, Enschede, The Netherlands

- "The experiment involved 30 students, 6 of which were asked to cheat in various ways, while 5 others were asked to behave nervously but make the test honestly...
- The most important findings were that none of the cheating students were flagged by Proctorio, whereas only one (out of 6) was caught out by an independent check by a human agent. The sensitivity of Proctorio, based on this experience, should therefore be put at very close to zero...
- The use of online proctoring is therefore best compared to taking a placebo: it has some positive influence, not because it works but because people believe that it works, or that it might work."

Bergmans, L., Bouali, N., Luttikhuis, M., & Rensink, A. (2021). On the Efficacy of Online Proctoring using Proctorio. In B. Csapó, & J. Uhomoibhi (Eds.), Proceedings of the 13th International Conference on Computer Supported Education (CSEDU 2021) (Vol. 1, pp. 279-290). SCITEPRESS. https://doi.org/10.5220/0010399602790290



#### What about lockdown browsers?

Technical issues abound

Compatibility issues with accessibility software and extensions

Use of second devices not prevented

Potential for data breaches

Opportunity for transparent open source tool



#### Listen to students

#### Read what they have to say:

- https://www.twitter.com/Procteario
- https://www.twitter.com/ProcterrorU

#### Read thousands of student reviews:

https://googlereviews.linkletter.org

Share these voices with people who may not otherwise know what students are experiencing. They contain evidence of harm.

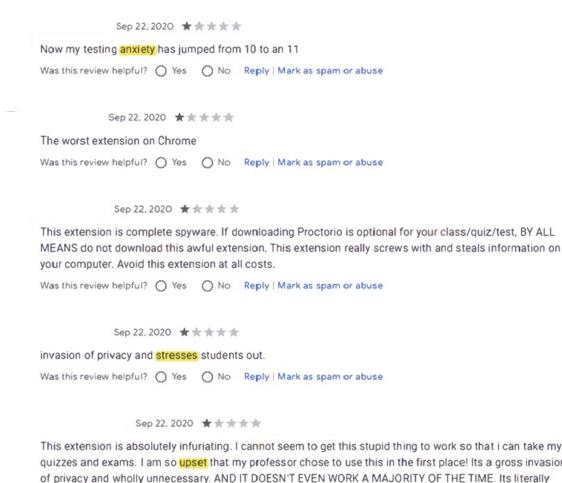


## **Centering Student Voices:** Google Reviews

- Proctorio and other remote proctoring extensions have the very worst ratings in the Google Chrome Web Store.
- Thousands of students have reviewed Proctorio as 1 star.
- In 2021, I flagged over 1600 instances of students reporting emotional harm, technical faults, and invasion of privacy.
- I sent a letter including all the flagged reviews to Senators investigating Proctorio.
- Read the flagged reviews at https://googlereviews.linkletter.org
- Read my letter to 10 US Senators at https://dearsenators.linkletter.org

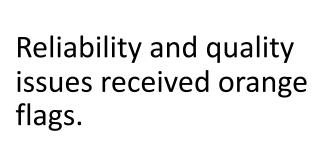


In yellow, I highlighted terms related to emotional harm: words such as "stress", "nightmare", "anxious", and "panic attack".

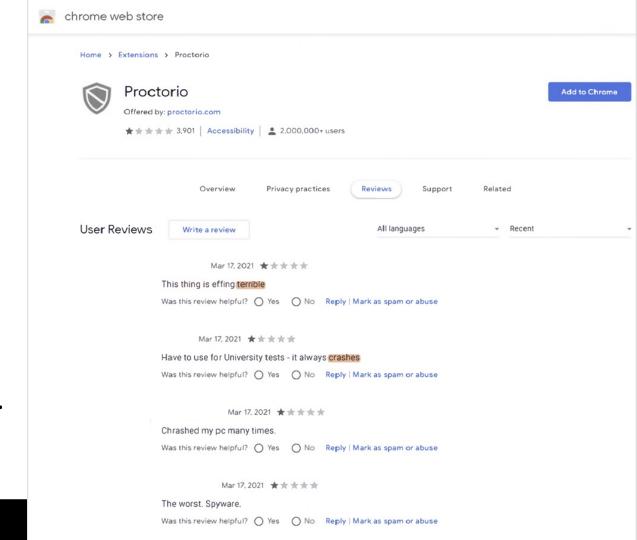




getting in the way of me succeeding in my class. This extension does more harm than good.



Bugs, crashes, glitches...





In red, I highlighted terms related to human rights like "invasion of privacy" and "violation of privacy.

IF YOUR PROFESSOR REQUIRES YOU TO DOWNLOAD THIS, DROP THE COURSE WHILE YOU IS NOT WORTH IT.

While it may provide some form of proctoring relief for professors and teachers, this is an abviolation of privacy of their students. Do note that it is configurable, however, so the teacher what specific things to spy on and record (webcam, search history, websites visited during s (and it notifies the student of what is being accessed/recorded) beforehand. At least the spy what it's looking at. But that doesn't help the fact that it's absolutely infringing on the student privacy. The only reasonable way for a teacher to use this application is for them to \*only\* trawebsites the student visits. While it's still infringing on the student's rights, it's not nearly as requiring the student to have a webcam on 24/7.

The ONLY reason this isn't a 1-star review is because Proctorio actually tells you what they're least it somewhat advertises itself as spyware.

Was this review helpful?  Yes  No R	Reply   Mark as spam or abuse
Apr 23, 2021 ★★★★	
invasion of privacy.	
Was this review helpful? O Yes O No R	Reply   Mark as spam or abuse
4-02 2024 * 4 4 4 4	
Apr 22. 2021 ★★★★	
terrible	
Was this review helpful? O Yes O No R	Reply   Mark as spam or abuse
Apr 22, 2021 ***	
Intrusive and the CEO doesn't care about s	

Was this review helpful? Yes

# Listen to students!

(please)



## Thank you for being here

Together we have considered trust, transparency, equity, and care as lenses through which to evaluate the ethics of remote proctoring.





# Thank you!

This concludes my presentation.

Please stick around for some wonderful guided conversation and information about BCIT's implementation of Algorithmic Impact Assessments to protect students.

Ian Linkletter@bcit.ca



- We are not using a breakout room, no need to vanish
- Please mention your name and area of expertise
- Let's give this a try and share space for all voices



You're attending a meeting of the Educational Technology Steering Committee at your institution. Due to scheduling challenges, there is no student representative that day. CreepAI has been invited to present their "academic integrity solution". The software costs \$200,000 per year and records students in 4K for AI analysis.

In the presentation, CreepAI claims that their product "eliminates bias" and catches "cheaters" with 99.999% accuracy. When asked about accessibility barriers, they claim it is an accessibility tool. You Google the company: yikes.

- With your expertise, what would you say?
- What should be resourced instead?



An instructor asks for your professional opinion on what they should do. Since 2020, they have used remote proctoring for online exams. Recently they saw a librarian's presentation about privacy, accessibility, and bias concerns with the technology. He shared hundreds of examples of students reporting harm. Overwhelmed with emotion, she is ready to make a change.

With your expertise, what would you say?

What supports are available to help this instructor?



You work in your institution's Teaching and Learning Centre. Many faculty have come to you with concerns about students using AI during online exams.

Academic leadership encourages the use of remote proctoring, which is already licensed and paid for. However, students and some faculty are protesting, arguing that proctoring is a discriminatory invasion of privacy and that it creates barriers for students with disabilities. Tensions are high.

At the next TLC meeting, your director asks everyone:

- Should the TLC stop promoting the use of remote proctoring?
- What would you say?





# Protecting Students from Al with Algorithmic Impact Assessments

How BCIT Did It!

#### lan Linkletter

Emerging Technology & Open Education Librarian October 17, 2025



BCcampus.ca

#### **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: <u>www.privacylibrary.ca</u>)
- What's stopping us? If we can prevent harm, why wouldn't we do it?

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



## The McMaster Al 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. Source: <a href="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">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</a>



#### **Open AlAs**

"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\_m odified+desc



#### **Open AlAs**

29 Algorithmic Impact Assessments are publicly available from organizations including

- Immigration, Refugees and Citizenship Canada
- Public Health Agency of Canada
- BCIT! Well, a BCIT librarian: https://bit.ly/bcitaia1

Source:

https://search.open.canada.ca/opendata/?collection=aia&page=1&sort=meta data modified+desc&search text=algorithmic+impact+assessment



## McMaster's Approach



- Met with McMaster University
- They shared documents with us:
- Privacy Risk Check for early-stage flagging
- Privacy Risk Assessment Tool combines AIAs with PIAs
- Contract language limiting vendor use of data
- Defines PII as including biometric info (voice, face, body)



System Algorithm Decision Impact Data Mitigation



## **BCIT's AIA Inititative**

The race to protect students





- Chose two automated decision systems we license
- Integrity Advocate: remote proctoring
- Turnitin: plagiarism detection (no Al detector)
- ETLDC subcommittee with LTC and ETS representation completed 2 AIAs
- ETLDC endorsed an AIA requirement for decisions around new ed tech tools

Education Council also endorsed AIAs – they are official.



Hands-on with the AIA Tool

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





# Thank you!

This concludes my second presentation.

Let's continue our conversations, open for questions, and enjoy the rest of our time together.

Ian\_Linkletter@bcit.ca

