The American University in Cairo

On the Use of AI Detectors: Would you use a calculator that gives you the *wrong* answer *more than half* the time?

Four Reasons Not to Use AI Detectors

1. Unreliable

Based on extensive research and testing AI detectors have been proven to be unreliable (evidence from multiple research studies and CLT testing). All of the AI detectors give false positives and false negatives. One of the very well known AI detection tools is reportedly accurate only 26% of the time. This means it is wrong 74% of the time - it is wrong most of the time!
Note: Putting student work through multiple detectors isn't proof because many of those tools have been trained in similar ways and none of them are reliable.

2. Can lead to false accusations of violations

False accusations of academic integrity violations can be really harmful to students long term. Knowing AI detectors are also more likely to flag human non-native speakers' writing as AI-generated means many AUC students are even more likely to be falsely accused of unauthorized use of AI. If you are a non-native speaker of English, give it a try yourself with your own writing and see what the detector indicates for you!

3. Easy to circumvent

It is very easy to "get around" the algorithm of an AI detector. Small amounts of human writing interspersed with AI writing, or use of multiple AI tools in a row (e.g. ChatGPT followed by Quillbot) can easily fool AI detectors into considering something human writing. Since AI detectors can be easily "fooled", this contributes to the lack of their reliability. Our own tests at CLT have proven this to be the case on multiple AI detectors. Try it yourself. Generate something with AI then make small human modifications and see what the AI detector gives you.

4. Student privacy concerns

Students own the intellectual property of their writing and you should not be uploading their content to tools outside the university-approved tools without student permission, knowing that many such free tools have privacy policies that may prey on students' work.

Four Things We Can Do Instead

1. Communicate your boundaries to students for each assessment

Be clear on your syllabus and in your assignment guidelines whether or not students are permitted to use AI, and if allowed, in what stages of writing and how to cite. If they are prohibited from using it at all, clarify your procedures for verifying this (see #3), and what the repercussions on students are.

2. Use your own intuition on students' writing voice versus relying on a tool

Know your students' voice. Teacher intuition is more accurate than any AI detector. If you know your students' writing voice from previous **in-class writing,** you will likely intuitively sense something is not right, whether it is the use of AI, or any other unauthorized help the student received which is equally problematic. Assigning a small amount of in-class writing for benchmarking can help with this.

3. Verify orally. Talk to your students and give them the benefit of the doubt

Verify their knowledge. When you suspect a student did not write their own paper, **invite them to your office and orally verify** the level of their knowledge about what they wrote. Ask them questions about references they used beyond what ended up in the paper. If they didn't write it themselves, they wouldn't be able to defend the writing. If they defend well but you still suspect AI use, they may have only used AI tools like Grammarly to paraphrase their own ideas.

4. Give bad grades for bad writing/work

Give bad grades for bad writing! Unless a student is an expert in using AI (most are not yet that proficient) the **writing will likely be vague and generic**. It would probably not get a good grade anyway. If students consistently see that use of AI is getting them C and D grades, hopefully they will stop using it in your course.

Apart from all of this, the best way to avoid student use of AI is to consider reimagining your assessments to make them more authentic. CLT has offered several workshops on this and will be hosting a few other events this semester (see details below). We're also available for a one-on-one consultation to support you with your own course.

Sign up for a CLT consultation here.

CLT Upcoming AI Events

CLT is organizing two in-person events focused on Artificial Intelligence in education.

Co-creating AI Guidelines with Students during Liberal Arts Symposium

Register here

Date: Tuesday, February 27, 2024.
Time: 1:10 pm - 3:20 pm
Location: Moataz Al Alfi Hall
Audience: Faculty and students

In this workshop, we invite faculty to bring a couple of their students to participate in a series of co-design activities. We will start with a quick exercise to enhance everyone's AI literacy using metaphors and visuals, followed by a co-design exercise where faculty and students look at a selection of assessments and decide where AI use may hinder or support learning, and whether those choices promote equity and academic integrity. Together, each small group will come up with suggested directions for AI guidelines for 2025.
Facilitators: Maha Bali, CLT, Hoda Mostafa, CLT, and Yasser Tamer (undergraduate student and CLT intern)

AI Spring Hackathon: Transforming Assessments for the Future

Register here

Date: Tuesday, March 5, 2024
Time: 9 am - 12 pm
Location: SSE CP16
Audience: Faculty
Refreshments will be served

This is an opportunity to examine and rethink a current assessment and learning outcomes in a small team of faculty and learning designers. We will go through a structured process of:

1. Pre-assessment practice: explore how well AI does on your sample assignment
2. Prioritizing learning outcomes that matter and examine the relevance of your course learning outcomes 5 years from now with a focus on skills and attitudinal outcomes
3. Making an assignment/assessment more authentic - considering small or large steps
4. Making an assessment more inclusive - considering small or large steps
5. Exploring where critical use of AI may offer opportunities to enhance learning and world readiness.

Facilitators: CLT members & CLT ambassadors

More CLT Resources on AI:

https://www.aucegypt.edu/academics/center-learning-and-teaching/artificial-intelligence

References

Eaton, S. (2023). *The Use of AI-Detection Tools in the Assessment of Student Work.* [Web log post] https://drsaraheaton.wordpress.com/2023/05/06/the-use-of-ai-detection-tools-in-the-assessment-of-student-work/

Kansas University (undated). *Why you should use caution with AI detectors.* https://cte.ku.edu/careful-use-ai-detectors

Purdue (undated). *Guidance on the Use of AI in Teaching and Learning.* https://www.purdue.edu/provost/teachinglearning/ai.html