Teaching in the Digital Age:
Generative Artificial Intelligence and Online Writing Aids

What are they?

Artificial intelligence (AI) writing aids range from the familiar spelling and grammar checkers found in Word, Google Docs, and Grammarly to the more recent natural language processing bots such as ChatGPT. These tools "learn" from various inputs, human and artificial, in order to produce writing/grammar tips, prompts, or original responses to user queries. As of January 2023, ChatGPT and similar A.I. powered bots marked a significant step in the power of A.I. to generate original content.

Why it matters

Writing in various forms is a keystone approach for learning across many disciplines. Understanding the affordances and constraints of AI and online writing tools is an important aspect of teaching in the digital age. As with most educational technologies, successful exploration and use of online writing aids and content creation bots in teaching and learning is dependent on intentional course planning.

Teaching applications

The Studio for Teaching & Learning Innovation (STLI) recommends instructors implement clear course expectations and learning goals to guide the use of online writing aids. This is especially important in courses with assignments creating new and unique content to show mastery. The following practices will help establish the approach that works best for your class.

1. **Expectations**
   - Be sure your syllabus includes a statement on academic integrity and references the W&M Honor Code. In class, discuss how improper uses of chatbots or other AI tools are not acceptable.
   - Syllabus should make clear that any submitted work can be reviewed, as needed, for plagiarism, lack of citation, and improper use of AI-generated content.
   - Review the importance of academic integrity and the value of the writing process for learning. Additionally, discuss the consequences of cheating.

2. Assessment approaches

- Implement a variety of assessment approaches to provide multiple pathways for learning. Beyond writing assignments, consider traditional exams, take-home projects, oral presentations, digital projects, visual poster presentations, and lower-stakes in-class activities (discussions, group work, debates).
- Consider adding an "oral defense" component to major submitted assignments.
- Scaffold larger or higher-stakes assignments to allow students to work on the assignment in "chunks" with instructor feedback along the way.
- Consider using a chatbot like ChatGPT as a class activity in which students apply their knowledge and understanding to an auto-generated prompt. This can be a good way to discuss genres in academic writing, common structures for thesis statements or integrating quotations, and the difference between risky and safe assertions.

3. Use of technology aids

- Leverage campus resources such as SafeAssign to detect copied or poorly cited work.
- Tools to detect AI generated content are evolving as quickly as the AI generators. Consider using one of the tools listed below if you have concerns about a particular submission.

Sample syllabus statements

Consider using traditional syllabus language regarding adherence to W&M's Honor code ([samples available here](#)). Additionally, include course-specific language governing the use of AI-generated content. See examples below:

- The use or incorporation of any AI-generated content (from ChatGPT, Dall-e, etc.) in assignments is not allowed. Submitted work may be reviewed, as needed, for AI-generated content.
- All work submitted in this course, whether in draft or final form, must be your own and must be cited appropriately. You may incorporate AI-generated content or ideas in assignments, but you must cite this content and you must fact-check all material, because AI-generated content often contains falsehoods and fictional sources. Citations must

include which AI platform generated the content, and the specific prompts used to generate content.
- In this course, we will explore the use of AI-generated content as a [insert objective - educational/societal/other] tool. You will analyze the [insert here - quality/ethics/bias/etc.] of this content. Ideas and content generated by you, and those that are AI-generated, should be clearly delineated and cited accordingly.

Resources

[Huginface GPT-2 Output Detector](#)
[GPTZero Detector](#)
[500+ samples of GPT-3 power Apps](#)

Learn More:

"***[Can AI detectors save us from ChatGPT? I tried 3 online tools to find out](#)***", *January 10, 2023, ZDNet.*

"***[Alarmed by A.I. Chatbots, Universities Start Revamping How They Teach](#)**, January 16, 2023, New York Times.*