Generative Artificial Intelligence in Academic Contexts: Considerations for Faculty at University of the Pacific

What is it?

Text generative AI (Artificial Intelligence) are large language models that mine vast amounts of primarily open electronic data to develop predictive modeling of which words will follow others in a sequence. As they continue to mine and model, language models can "learn" to produce text that mirrors many aspects of human writing, including grammar and syntax. Language models are one of a variety of AI tools available, both for written and visual work.

What are some examples of popular Generative AI tools?

- ChatGPT Text creation
- Jounce.ai Text/article creation
- •Midjourney Image creation
- •DALL-E 2 Image creation
- •Stable Diffusion Image creation
- ·Lalal.ai Audio creation
- Notion.ai Copywriting
- •GitHub CoPilot Coding
- Codex Coding

What writing tasks can Generative Al perform well right now?

- General writing tasks, where there is likely much available information. E.g.: "How important was Abraham Lincoln to American democracy?" "Debug this code." or "Solve this algebraic word problem."
- Brainstorming potential language or concepts. E.g.: generate fillable forms and reference letters, provide examples, and build reasonable lesson plans in many disciplines.
- Allow students with certain disabilities or language barriers to get real time support for building understanding around course content and ideas.

What tasks does Generative AI perform poorly right now?

- Tasks where misinformation is built into the question. E.g.: Asking "How does Tina Pippin use Wellhausen's documentary hypothesis to understand the Apocalypse of Peter?" will yield a response that indicates she does use that theory when, in fact, she does not.
- Tasks where personal information, localized context, or community knowledge are critical. E.g.: "In class, we discussed turbidity as one measure of water quality. When you performed a turbidity analysis of the water in the Calaveras behind the Stockton campus, what did you learn about its Nephelometric Turbidity Unit?"
- Tasks where visuals must be analyzed in relationship to contextual material. E.g. "How does this graph [image] help us understand the ways post-partum depression might be diagnosed and treated (or left untreated) in the communities discussed in your folder of

- 2022-2023 birth rates in Stockton?" or "Show me the complete score of a musical about Filipinos in Stockton."
- Most tasks with information specific to after 2021, although this is likely to change.

How can I make my assignments and assessments resilient to Generative AI?

- Consider adding a short affirmation to anything students turn in that might be susceptible to AI interference, if it is not allowed. For example, students must include "I certify that this assignment represents entirely my own work. I have not used any unauthorized or unacknowledged assistance or sources, including services offered on the internet."
- Make sure students know the how, what, why, and when of anything you assign.
 Academic dishonesty happens most often when students are anxious and overwhelmed or believe that their own ideas or progress aren't good enough. Being transparent about all aspects of the assignment helps decrease student anxiety, imposter syndrome, and stereotype threat, and is more likely to result in authentic work.
- Design for AI resilience. Currently, AI like ChatGPT is not great at personal narrative, localized context understanding, understanding events after 2021, or analysis of images, audio, or video. Use these limitations to design your assignments if you are concerned about AI usage.
- Design for multiple attempts and scaffolding. Use low-stakes assignments and scaffolded attempts to get a sense of student voice early on. Students can use this scaffolded work to build toward a higher-stakes paper or assessment; you can have a greater assurance that the final work will be their own.
- Offer a brief statement in your syllabus that reminds students that Al generated work is not as valuable, important, or reliable as their own words and ideas for assessments. Let them know specifically when the tool might be used (if at all) and when it must not. (See more below).
- Recognize that, at present, there are no reliable "detectors" that don't steal students' intellectual property.
- Remember that all Al is a tool, like other tools that students already access, and there may be some cases in which it can be valuable to our students and your work.

What language might I use on my syllabus or in Canvas to alert students to my policies regarding ChatGPT?

Short statements one can add-on to existing academic honesty policies if a separate section of "AI specific" policies is too much

- It is academically dishonest to turn in work created by ChatGPT or other artificial intelligence tools as your own; I will expect that, by turning in the work, you are affirming that you have done the work without the use of such tools.
- [Disciplinary journal or guild] reminds us that "[quote about not using ChatGPT]," and because we are learning to be ethical professionals in that field, I expect that we will practice and follow these same guidelines in our work.

No Al Allowed Statements

• In this course, we are learning how to think, write, and act like [professionals in a specific discipline]. To learn those skills, we need to practice. Using Chat GPT or other Al

doesn't allow us to do the practice needed to become professionals; they keep us from doing the work of learning. For that reason, I expect that all work you do will be entirely your own creation, unaided by AI, and I will ask you to affirm as much when you submit your assignments. Please ask me if you have questions about these expectations before it becomes an issue.

I know that it can be tempting to use ChatGPT or other AI tools when we are rushed, frustrated, or feel that our words and thoughts aren't good enough. I want to assure you that your authentic voice and ideas are incredibly important to me, much more important than what could ever be generated by AI. Because of this, I expect that you will produce all your own work without the use of artificial intelligence. If you are in a situation where you are tempted to use the tool's words as your own, I hope that you will consult with me. We can work together to get you the support you need to succeed without reliance on these tools.

Some Al Allowed Statements

- ChatGPT and other AI tools are just that: tools. When it comes to education, that means they can be used to support learning, or they can circumvent learning. In this course, I recognize that there may be times AI tools could be useful to your success. However, in other instances I want to see what you have learned (not what the AI is "learning"). You may use these types of tools in these specific instances [list instances, or mark on class schedule or assignment list] and I expect that you will not use any AI tools in these instances, so that you can show your authentic progress in the course [list instances].
- In this course, we will use AI tools (like ChatGPT) often to practice writing in [our field]. The tools will help us understand the advantages and limitations of the tool itself for [our field] and give us a starting point to analyze the ways we write / use language here and beyond our classroom. In cases where I ask for *your* analysis or understanding, I expect to hear from you (not the AI) so that I might get an authentic sense of your learning in the course. Those non-AI assignments include all of the following [list or reference to class schedule].
- When you use generative AI in your work (in cases where we agree it is allowed), I expect you will properly and ethically cite that source. The use of generative AI without citation will be treated as an honor code violation.

Conclusion

Al systems will continue to evolve. Here are some ways CTL can offer support.

- A module to plug into your Canvas course (forthcoming, if desired) to discuss AI tools and their limitations.
- Consultations on assignments that might need to be more resilient to Al.
- Ways to ensure that equity, accessibility, and student success are foregrounded in any design decisions.
- A conversation partner to discuss what to do differently next time if concerns arise in assessment.
- Provide updates to faculty each semester regarding evolution of Al systems.

Reach out to us at ctl@pacific.edu to schedule a consultation or demonstration for your unit or department.