Guidance for teaching in the era of ChatGPT and other AI tools

AI writing aids such as ChatGPT create challenges for designing and assessing assignments. These aids also create opportunities for increased faculty and student productivity. In this document, Marquette COBA Teaching Committee provides suggestions and resources to help faculty navigate teaching in the world of AI writing aids.

Practical suggestions for faculty:

- 1) Familiarize yourself with the capabilities of AI writing aids. You might be surprised at what they can do well!
- 2) Consider how your courses can work with AI technologies, rather than trying to fight the technologies. Attempts to completely prevent students from using these technologies are likely to fail.
- 3) ChatGPT is an implementation of an AI large language model (LLM) released by OpenAI. There are other models currently available, and this is a rapidly advancing area. Instead of focusing solely on ChatGPT, consider how the writing process may evolve 5 or 10 years from now. How can our courses help students prepare for the integration of LLMs into the workplace?
- 4) Be clear with students about what you consider acceptable use of technology in your course. How can you encourage transparent use of LLMs? As an example, *Nature* journals have formulated two principles¹ for authors. [In brackets, we provide implications for student usage.]
 - a. Nature Principle 1: First, no LLM tool will be accepted as a credited author on a research paper. That is because any attribution of authorship carries with it accountability for the work, and AI tools cannot take such responsibility. [Faculty should remind students that AI tools cannot be accountable for work. Students must take full responsibility for reviewing and editing output from LLM tools.]
 - b. Nature Principle 2: Second, researchers using LLM tools should document this use in the methods or acknowledgements sections. If a paper does not include these sections, the introduction or another appropriate section can be used to document the use of the LLM. [Faculty should consider how they will foster transparency in student usage of LLMs.]
- 5) Consider alternatives to some traditional assessment methods.

If you currently	You might consider instead	
Use writing assignments where students	Creating an assignment where students critique AI	
summarize longer articles or cases.	generated summaries of articles or cases.	
	Creating an assignment where students find	
	current events to illustrate concepts from an	
	article or case. (ChatGPT currently does not pull	
	from recent news.)	
Assign take-home exams with open-ended writing	Creating more in-class opportunities for students	
questions.	to reflect and write.	
Mainly ask students to do qualitative analysis	Adding some quantitative aspects	
Assign written essays	Assigning more presentations.	
Ask students to summarize current thinking	Creating written assignments that encourage bold	
	instead of conventional ideas	
Only have students submit final drafts of writing	Asking students to submit more of their drafting	
	process, such as outlines or "tracked changes" in	
	Word documents	

¹ https://www.nature.com/articles/d41586-023-00191-1

ChatGPT Resources and suggested articles

ChatGPT Advice Academics Can Use Now

Tools such as ChatGPT threaten transparent science; here are our ground rules for their use

ChatGPT: Understanding the new landscape and short-term solutions

ChatGPT Prompting Guides

https://learnprompting.org

https://github.com/f/awesome-chatgpt-prompts

MidJourney Prompting Guide

https://docs.midjourney.com/docs/prompts

 $\underline{\text{https://medium.com/mlearning-ai/an-advanced-guide-to-writing-prompts-for-midjourney-text-to-image-aa12a1e33b6}$

ElevenLabs

https://beta.elevenlabs.io

Other Generative AI Resources

Matt Wolfe's YouTube Channel

ChatGPT Prompt Basic Types

Prompt Type	Description	Prompt Text	ChatGPT Response
Zero-shot Prompting	Basic ChatGPT interaction model; simple Q&A	What is Marketing?	Marketing refers to the process of promoting and selling products or services through various activities such as advertising, public relations, sales, and distribution. It involves understanding consumer behavior, identifying target markets, creating products or services that meet consumer needs and wants, and promoting those products or services to potential customers
One-shot Prompting	Provide a single example of the output you expect	I need short, bullet-point answers to my questions. Question: How does the sun work? Answer: • fusing of hydrogen nuclei to form helium • releasing an enormous amount of energy in the form of light and heat estimated that the sun has enough "fuel" for around 5 billion more years Question: How does a bird work?	Answer: • generate lift using wings • use feathers to provide insulation and streamlining for flight • use a muscular system for flight control • use a digestive and respiratory system to provide energy and intake oxygen for powering flight muscles
Few-shot Prompting	Provide multiple examples of the output you expect	Answer me in a fantasy language: Question: Who are you? Answer: Nomo Badu esterion. Question: What is your name? Answer: Badu. Question: What does "name" mean in your language? Answer: Nomo. Question: How old are you? Answer: Badu hut esterion. Question: Where do you live and what do you do for living?	Answer: Yer Badu ilo lafetaste esterion, ar Badu ilo retvosastes esterion. Question: Translate your last sentence into English. Answer: I live in a small village and I work as a craftsman!
Chain of Thought Prompting	A few-shot prompt with embedded logic that the AI will also mimic; helps with mathematical operations	Which is a faster way to get home? Option 1: Take an 10 minutes bus, then a 40 minute bus, and finally a 10 minute train. Option 2: Take a 90 minutes train, then a 45 minute bike ride, and finally a 10 minute bus. Option 1 will take 10+40+10 = 60 minutes. Option 2 will take 90+45+10=145 minutes. Since Option 1 takes 60 minutes and Option 2 takes 145 minutes, Option 1 is faster. Which is a faster way to get to work? Option 1: Take a 1000 minute bus, then a half hour train, and finally a 10 minute bike ride. Option 2: Take an 800 minute bus, then an hour train, and finally a 30 minute bike ride.	Option 1 will take 1000+30+10 = 1040 minutes. Option 2 will take 800+60+30 = 890 minutes. Since Option 2 takes 890 minutes and Option 1 takes 1040 minutes, Option 2 is faster.
Role Prompting	Define ChatGPT's role and explain what it will be doing	I want you to act as a tour guide. I'll give you my location and you will suggest a place for me to visit near my location. In some cases, I will also tell you the type of places I want to visit. You will also suggest places of a similar nature that are near my first location. My first command is "I am in Milwaukee, Wisconsin and I want to visit museums."	Great! If you're in Milwaukee, Wisconsin and interested in visiting museums, I would highly recommend checking out the Milwaukee Art Museum. It has an impressive collection of over 30,000 works of art, ranging from contemporary