When Can I Use AI in Academic Writing?

A Brief Tutorial on Using Generative Artificial Intelligence Tools

By Liza Long

About this Resource

This lesson introduces generative AI use cases and shows students how to apply generative AI syllabus policies in a first-year writing classroom. The lesson can be modified to fit any syllabus policy. I have focused on steps of the writing process that are used to draft a brief research paper. The lesson may also be useful in demonstrating how students might use AI for instructors who are not yet familiar with chatbots. This content is licensed CC BY 4.0, which means that you may use and remix the content as long as you provide attribution to the original author. I used Microsoft Copilot Creative model on April 14, 2024 to create the generative AI content for the lesson. With time for discussion, the entire lesson should take about 45 minutes. It can also be used in fully online courses.

About me: I am a full-time assistant professor of English at the <u>College of Western Idaho</u>, a two-year community college where I teach first-year writing, first-year experience, ethics, world mythology, and literary analysis. I am a Ph.D. student in Idaho State University's English and the Teaching of English program. With Joel Gladd (CWI) and Amy Minervini (Lewis Clark State College), I wrote <u>Write What Matters</u>, a modular OER platform for use in first-year writing courses. I share my experiences teaching with AI in my Substack: <u>Artisanal Intelligence</u>. I have also co-written a literary analysis textbook with ChatGPT 3.5 entitled <u>Critical Worlds:</u> A Targeted Approach to Literary Analysis. You can contact me here: lizalong@cwi.edu

- <u>Video</u> demonstrating the prompts I used for this lesson
- PowerPoint Presentation
- H5P presentation that can be embedded in any LMS.
- Prompts and responses (Microsoft Copilot)
- Sample student paper (written by Microsoft Copilot and formatted by me)

When Can I Use AI? It Depends

Large Language Models (LLMS) like Open Al's <u>ChatGPT</u>. Google's <u>Gemini</u>. Microsoft's <u>Copilot</u>, Anthropic's <u>Claude</u>, and even Snapchat's <u>MyAl</u>. may be useful in a variety of ways. But when is it ethical to use them in the academic setting? The answer to this question often depends on the person you ask. Some professors allow any and all use of generative Al. Others ban it completely. Perhaps the most common approach is a "middle of the road" one, where professors specify ways that students may use generative Al tools in their classes.

Because the technology is so new, there's not really a consensus right now among faculty about how these tools should (or should not) be used in college classes. When in doubt, refer to your course syllabus policy and ask your instructor. And if you do use generative artificial intelligence in any way, remember that you should always <u>acknowledge and cite it.</u>

Can My Teacher Tell If I Use AI?

This presentation will not tell you how LLMs work. Here's more information if you are curious.

You may have heard that there's no reliable plagiarism detector for content generated by large language models. While this is technically true, there are some definite "tells" that might give you away. For example, do you really know what the word "exigency" means? Do you regularly use the transitional expression "moreover"? Finally, do you proofread your work to make sure it doesn't include a phrase like "as a large language model, I cannot..." (yes, I have seen this in some student work!).

Ultimately, it's up to you to know why it's important that you are the author of the academic work you submit. What skills is the assignment trying to develop? **As with any kind of plagiarism**, **you're only cheating yourself if you don't do the work.** What skills is the assignment trying to develop? As with any kind of plagiarism, you're only cheating yourself if you don't do the work.

When AI Is Not the Expert

To understand why your professors might not be as impressed as you are with the content that large language models generate, try this experiment from YouTuber Marques Brownlee.

Think of something that you are an expert in. This might be your favorite anime or fandom, a video game, or a special interest you have. Now write a prompt asking generative AI to write a short paper about your topic.

You'll probably notice that the answer feels superficial or incomplete to you. Your professors are experts in their fields, so they have the same experience when you submit something to them that was entirely written by ChatGPT.

Applying Syllabus Policy to Possible Uses

In the next slides, I am going to share one "middle of the road" example of a generative AI syllabus policy from a college English course. Use the syllabus policy as your guide as you consider several potential uses of generative AI in writing a research paper.

For each use case, I will ask you to determine whether the use is allowed under the syllabus policies, not allowed, or whether the depends on situational factors. I will use Microsoft Copilot for this demonstration because many students have access to this tool through their institutions.

Remember that each use case would require you to acknowledge and cite your use of generative AI tools.

Syllabus Policy

Here is the syllabus policy example we will use in this lesson. Make sure you have a copy of it to refer to as we consider some use cases of generative AI.

I encourage students to use generative AI tools for the following types of tasks:

- 1. Outlining content or generating ideas.
- Providing background knowledge (with the understanding that ChatGPT and other generative AI programs are sometimes wrong—Wikipedia is a better resource for background information right now)
- 3. Checking essay drafts for organization, grammar, and syntax.

We will use generative AI occasionally for class activities.

If you choose to use generative AI tools for your essays, you MUST do the following:

- 1. Cite the Al tool (see this resource for more information on how to do this).
- 2. Write a brief acknowledgment statement at the end of your work explaining how and why you used an AI tool. Include the prompts you used and links (when available). I reserve the right based on my assessment of your assignment to require you to revise and resubmit all or parts of the assignment if I conclude that you have not used AI tools appropriately.

If I suspect that you have used generative AI tools, **and** you have not included the required citation and acknowledgement statement, then you will need to meet with me either in person or through Zoom to talk about the assignment. This conversation will include knowledge checks for course content.

Use Case One: Writing the Paper

Your class was lucky enough to witness the April 8, 2024 total solar eclipse. As a follow up to this experience, your teacher has asked you to write a 1000-1500 word research paper using the topic of solar eclipses as your starting point. The research paper should include 3-4 high quality sources as well as your own relevant personal experience. You decide to plug the assignment prompt into Microsoft Copilot and have it write your paper for you. Watch this brief video to see what happens.

Is this an acceptable use of generative AI?

- Yes
- No

It depends

Discussion

The correct answer here is "No." This is not an acceptable use under the syllabus policy. The syllabus policy requires you to be the author of your own work. If you're struggling to get started, or if you are tempted to outsource this work to generative AI, think about these questions:

- Why are you writing this paper?
- What skills are you learning and applying?
- Why will these skills be important in your future courses and workplace?

Follow up with your instructor or visit your college writing center for more support, or consider using generative AI in ways that are allowed by the syllabus policy as you brainstorm and outline your ideas.

Use Case Two: Brainstorming Ideas

Your teacher wants you to narrow and focus your paper about the eclipse to consider one aspect of the topic. You decide to use Copilot to help you consider some possible narrowed and focused topics. Watch this brief video to see what happens.

Is this an acceptable use of generative AI?

- Yes
- No
- It depends

Discussion

The correct answer is "yes." This is an acceptable use under the syllabus policy.

Using generative AI tools to brainstorm ideas can help you to narrow and focus your research. AI can be a helpful writing partner in generating ideas around a topic. You can also use it to narrow and refine your research question or argument.

When I am writing a paper or proposal, I often ask AI to help me come up with several title suggestions. Sometimes I pick one, and sometimes, the suggestions help me to create my own title.

Use Case Three: Writing a Personal Narrative Paragraph

Once you have generated some ideas, you decide to ask Microsoft Copilot to write a draft of your personal experience for you. You give the AI some relevant details—where you watched the eclipse, who you watched it with, and how you felt about it—in your prompt. You ask Copilot to write a rough draft of your personal narrative paragraph. Watch this brief video to see what happens.

Is this an acceptable use of generative AI?

- Yes
- No
- It depends

Discussion

The correct answer is "No." This is not an acceptable use under the syllabus policy.

This is a good time to remind you that writing a prompt is still writing. You'll need to give the generative AI tool quite a bit of information—almost a whole paragraph—to get to write your "personal" narrative.

Why not just write it yourself, if you are going to spend that much time writing a prompt?

One thing that AI tools can do is free you to spend more time developing your author voice. Make sure you take every opportunity to do this. As AI "academese" starts to dominate the writing landscape, fresh voices and perspectives will be even more valuable.

Use Case Four: Getting Background Knowledge

You watched the eclipse, but you don't really know that much about eclipses in general. You could go to Wikipedia, but you decide to ask Microsoft Copilot. Watch this brief video to see what happens.

Is this an acceptable use of generative AI?

- Yes
- No
- It depends

Discussion

The correct answer is "yes." This is an acceptable use under the syllabus policy, but make sure you verify the information with a more trusted source! A known problem with AI is its tendency to sometimes make things up. You should treat any information AI gives with some healthy skepticism. Fortunately, Copilot and some other tools now provide links to more reliable sources

that you can use to check for yourself. One concern I have about general AI overall is that it's already become a feature of our search engines. Given that reliability is still a problem, you should always proceed with caution when you ask AI for information or facts.

Use Case Five: Outlining the Paper

You have narrowed and focused your topic, and you have some background information about eclipses. Now it's time to outline your essay. You ask Microsoft Copilot to help you outline a 1000-1500 word informative researched essay about your topic. Watch this brief video to see what happens.

Is this an acceptable use of generative AI?

- Yes
- No
- It depends

Discussion

The correct answer is "yes." This is an acceptable use under the syllabus policy. Generative AI tools can provide you with solid outlines for a variety of different types of papers. Make sure you specify the type (informative, persuasive, etc.) when you ask for help with your outline. Also, remember that you are ultimately the author of your paper. If you don't want to follow the outline, you don't have to. You can also ask follow up questions to refine or tweak the outline.

Use Case Six: Locating Sources

Now that you have the outline, you need some sources. Your teacher has encouraged you to use your college library or Google scholar to find high-quality peer reviewed sources, but you decide to use Copilot instead. Watch this brief video to see what happens.

Is this an acceptable use of generative AI?

- Yes
- No
- It depends

Discussion

The correct answer is "it depends." The syllabus policy does not explicitly allow source location as an acceptable use. But given that your teacher is clearly open to using generative AI tools, you could definitely ask about this, and she might allow it.

In my own experience, I have not found generative AI tools to be as useful as working with my college librarians or using Google scholar to find sources. The correct answer is "it depends." The syllabus policy does not explicitly allow source location as an acceptable use. But given that your teacher is clearly open to using generative AI tools, you could definitely ask about this, and she might allow it.

In my own experience, I have not found generative AI tools to be as useful as working with my college librarians or using Google scholar to find sources. You may have heard that generative AI tools make sources up. This continues to be a concern, and another problem is that they often point users to lower quality sources. This area will likely evolve quickly, as both scholars and students have an interest in reliable AI academic source location.

But right now, even if your teacher allows this use (and you should ask), I would still proceed with caution. If you do choose to use AI for this part of your paper, make sure you explain this use in your acknowledgement statement.

This area will likely evolve quickly, as both scholars and students have an interest in reliable Al academic source location. But right now, even if your teacher allows this use (and you should ask), I would still proceed with caution. If you do choose to use Al for this part of your paper, make sure you explain this use in your acknowledgement statement.

Use Case Seven: Summarizing and Responding to an Article

Your teacher asked you to read (Annie Dillard's famous 1982 essay "Total Eclipse" [paywalled] and summarize and respond to the article in a discussion board post. You don't have time to read the article, so you ask Copilot to write your summary and response. Watch this brief video to see what happens.

Is this an acceptable use of generative AI?

- Yes
- No
- It depends

Discussion

The correct answer is "No." This is not an acceptable use under the syllabus policy. Your teacher clearly wants your human response to the essay, not Copilot's. No AI has had the same life experiences that you have. You will bring unique ideas and perspectives to the conversation.

Another ethical concern with this use is that the essay in question is a copyrighted, "all rights reserved" work. Because this is an older essay, and lots of people on the Internet have talked about it, generative AI tools can summarize it without "reading" it. But for newer essays (after 2022), you might have to copy and paste the text of the essay into the chatbot to get a

summary. Do you have the author's or publisher's consent to do this? Probably not. I'm speaking as an author of a book that was used without my permission or consent as part of the Books 3 data set used to refine AI responses. Honestly, I'm not too happy about this.

However, when thinking about the question of summaries in general, you might want to follow up with your teacher about this for more guidance. Sometimes I use generative AI to summarize an article for me to determine whether it will be useful to read in greater depth. I might also consider letting students use AI to write a first draft of an abstract for a longer research paper.

Use Case Eight: Providing Feedback on an Essay Draft's Organization

You have completed your draft of the essay, but you aren't sure about the organization. You'd like some help in making sure that your ideas flow and that you are using transitional expressions to connect your good ideas. You decide to use Copilot as a writing tutor and ask it to review your paper for organization. Watch this brief video to see what happens.

Is this an acceptable use of generative AI?

- Yes
- No
- It depends

Discussion

The correct answer is "yes." This is an acceptable use under the syllabus policy. I have actually had a lot of success using generative AI tools to coach students in better organizing their papers. Any time you are viewing a generative AI tool as a "writing tutor," it probably has the potential to help you improve as a writer. You can ask follow up questions to better understand the AI's feedback, and this can help you to be more aware of the challenges you face in organizing your writing.

However, it's important to remember that you are the author of your paper! Don't include words that you wouldn't normally use. I'm seeing a lot of weird transitional expressions in my students' writing. Make sure your work "sounds" like you.

Use Case Nine: Writing a Peer Review

Your teacher has asked the class to review each other's drafts in a peer review discussion board. You decide to copy and paste your peer's paper into Copilot and ask it to write your review for you. Watch this brief video to see what happens.

Is this an acceptable use of generative AI?

Yes

- No
- It depends

Discussion

The correct answer is "No." This is not an acceptable use under the syllabus policy. Your teacher is giving you an opportunity to practice an important skill. Don't outsource this learning opportunity to AI.

It's important to consider why the skill of peer review is so important. In the workplace, you will likely be asked to give and receive feedback. Practicing this skill in the college classroom can make you a better employee in your future career.

As with the previous example of the essay, one of the most important ethical considerations in this case is whether your peer consented to have you give their work to a large language model data training set. If you read Copilot's terms of use (and you should), you'll note that Microsoft reserves the right to use anything you share as part of its LLM training set. This can be a potential threat to someone's privacy, especially considering that this essay included a required personal narrative component. You should never share peers' work with any LLM without your peer's informed consent.

Similarly, your teacher should not use AI to grade or assess your work unless she has YOUR consent (Note: I have tried this with a few students' consent, and it's another reason I think we should use these tools as writing tutors to improve writing. It generally gives good feedback and specific, concrete suggestions for how to improve).

The same advice, for the same reasons about consent give above, applies to having AI write your responses to classmates on discussion boards. Don't do it.

Use Case Ten: Proofreading the Final Draft

You have completed your essay. You've included the required sources and personal experience, checked your essay organization, addressed your peers' feedback, and now you want one last set of eyes on your paper. You could use tools like Grammarly or Microsoft Word's grammar checker for this. You decide to try out Copilot instead, and you also ask it to check your required APA style references. Watch this brief video to see what happens.

Is this an acceptable use of generative AI?

- Yes
- No
- It depends

Discussion

The correct answer is "yes." This is an acceptable use under the syllabus policy. The policy clearly allows the use of all AI tools including Grammarly and Microsoft's grammar checker. One important note: if your teacher completely prohibits the use of any AI in the classroom, make sure you get clarification about certain tools that most of us have been using for a while now. These include Grammarly, Quillbot, Microsoft's grammar checker, Google Translate, PowerPoint Designer, and any talk-to-text dictation software you might be using to draft essays (I often create rough drafts of essays using the talk-to-text Notes app on my iPhone, and I suggest this to my own students, but make sure you check with your instructor!).

Generative AI is getting better at checking for specific format styles like MLA or APA, but you should still check with your college librarian, your writing center, or your teacher if you are not sure about the citation format.

Takeaway: Don't Cheat Yourself

The examples we have looked at here are not the only ways you can use generative AI to improve your learning and writing experience in the classroom. But the important takeaway is that in an academic setting, you should always be the author of your work. This was true before AI, and it's especially true now, when your human experiences and voice may matter more than ever.

Just because generative AI can write a paper for you doesn't mean you should use it in this way.

Make sure you familiarize yourself with each instructor's syllabus policies about generative artificial intelligence use. Never assume that a teacher allows a use. When in doubt, ask! And always cite and acknowledge your use of generative artificial intelligence tools.

Finally, keep in mind that there are a number of ethics concerns about these tools. We've touched mainly on plagiarism, privacy, and consent in this presentation, but these are just a few concerns among many. My own personal <u>main concerns</u> include the effects these tools will have on climate change and how they may inadvertently widen the existing digital equity gap and harm people in the Global south.

Ultimately, you should use generative AI tools to augment human intelligence, not replace it.

Happy writing!

Al Acknowledgement Statement

I acknowledge that ChatGPT does not respect the individual rights of authors and artists and ignores concerns over copyright and intellectual property in its training; additionally, I acknowledge that the system was trained in part through the exploitation of precarious workers in the global south (Phipps & Laclos, 2023). In this work I specifically used Microsoft Copilot to

respond to prompts I created for the use cases I describe. All other writing in this work is my own.

Licensing Information

"When Can I Use AI in Academic Writing" by Liza Long is licensed CC BY 4.0