A Sampler of Generative A.I.-based Activities & Assignments, June 2023

Note
The following activities are offered on an experimental basis. The Center for the Advancement of Teaching endorses evidence-based teaching practices, but the widespread availability of AI is so new that an insufficient body of evidence is available. If you are interested in trying one of the following ideas, please consider conducting a small-scale Scholarship of Teaching and Learning study to advance the field.

Prompt Competition

1. Identify a major question or challenge in your field or discipline that ChatGPT could write about. Preferably a question with no clear single right answer.
2. Have students collaborate (in pairs or small teams) on developing 5 to 10 criteria for assessing ChatGPT responses to the major question. For example, does ChatGPT’s output reference more than one theoretical perspective?
3. Ask students to individually write a prompt for ChatGPT to answer the major question. Have students use their criteria to judge the responses of other students (in the pair or small team), and then rate the ChatGPT prompts/responses from best to worst.

Reflect and Improve

1. Ask students to individually identify a major question or challenge in your field or discipline, perhaps related to the current unit you are teaching or in anticipation of a new unit.
2. Have students use ChatGPT to generate a response to their question or challenge.
3. Ask students to reflect on ChatGPT’s output (e.g., what is correct, incorrect, what they don’t know if it is correct or incorrect, what should they look up elsewhere to verify, what should they ask ChatGPT next).
4. Using Track Changes in MS Word or Suggesting in Google Docs, have students improve the output of ChatGPT (e.g., correcting errors or misinformation, expanding on shallow content).
5. Have students submit their prompt and the improved ChatGPT response with their added content highlighted.

1 https://medium.com/@rwatkins_7167/updating-your-course-syllabus-for-chatgpt-965f4b57b003
Re-vision

1. Ask students to individually identify a major question or challenge in your field or discipline that ChatGPT could write about, perhaps related to the current unit you are teaching or in anticipation of a new unit.
2. Have students use chatGPT to write a response to their question or challenge.
3. George Heard is attributed with saying “The true meaning of the word revision is this: to see again.” Have students revise (write again) ChatGPT’s output from a different perspective. For instance, take a different perspective, apply a critical lens, expand on a particular concept, or correct aspects of the output that could otherwise cause their peers to misunderstand or misinterpret.

Evaluate an AI-generated Annotated Bibliography

Objective: The objective of this assignment is to critically evaluate ChatGPT's ability to compile an annotated bibliography and compare its performance with that of human-generated bibliography. By examining ChatGPT’s strengths and limitations, you will gain a deeper understanding of the importance of human input and critical thinking in academic tasks.

Instructions:

1. Annotated Bibliography Compilation:
   a. Familiarize yourself with the requirements and guidelines for creating an annotated bibliography, including the style and format (e.g., Chicago Manual of Style).
   b. Compile an annotated bibliography consisting of at least five sources on a topic of your choice. Ensure that each entry includes a proper citation and a concise summary of the source's content and relevance to your topic.

"I used [ChatGPT] in an assignment that I intended as a teachable moment. I had students compile an annotated bibliography with strict instructions about style and format. Then I had them prompt ChatGPT to do the same thing, then grade ChatGPT as strictly as they thought I would grade them. I gave them the rubric I was going to use on the human-generated assignments. It worked really well! They really took ChatGPT to task. They all used library databases to check whether the resources existed (in most cases they didn’t) and the Chicago Manual of Style to check whether the style was correct (it often wasn't). They all made the observation that it was quite useful for writing grammatical sentences, but that this wasn’t enough. I was actually really pleased."
c. Pay close attention to accuracy, style, grammar, and adherence to the provided guidelines.

2. ChatGPT's Annotated Bibliography:
   a. Prompt ChatGPT to generate another annotated bibliography on the same topic, following the same guidelines and instructions given in step 1.
   b. Request ChatGPT to provide citations and summaries for at least five sources.
   c. Evaluate the quality of ChatGPT's annotated bibliography based on accuracy, style, grammar, and adherence to the provided guidelines.

3. Comparative Evaluation:
   a. Use the rubric that was provided for human-generated annotated bibliographies to grade ChatGPT's work.
   b. Compare your evaluation of ChatGPT's work with the expectations outlined in the rubric.
   c. Use library databases or reputable online sources to verify the existence of the sources cited in ChatGPT's annotated bibliography.
   d. Verify whether the style and formatting used by ChatGPT conform to the guidelines provided (e.g., Chicago Manual of Style).
   e. Analyze the accuracy of ChatGPT's work and note any inconsistencies or errors in citations, summaries, or adherence to the given style.
   f. Identify the strengths and weaknesses of ChatGPT's annotated bibliography compared to human-generated assignments.

4. Reflection and Discussion:
   a. Write a reflective essay discussing your overall experience with this assignment.
   b. Describe your observations and findings regarding ChatGPT's strengths and limitations in compiling an annotated bibliography.
   c. Discuss the importance of human input, critical thinking, and the role of AI tools like ChatGPT in academic tasks.
   d. Reflect on how this assignment impacted your understanding of research and writing.

Submission Guidelines:

1. Annotated Bibliographies:
   a. Submit your human-generated annotated bibliography as a separate document, properly formatted according to the given style guidelines.
   b. Include proper citations and summaries for each source.

2. Reflective Essay:
   a. Submit a well-structured essay (500-800 words) reflecting on your experience with the assignment.
b. Clearly articulate your observations, analysis, and insights regarding ChatGPT's performance.

c. Discuss the significance of human input, critical thinking, and the implications of using AI tools in academic tasks.

Create a Business Plan with the Help of AI⁴

Outline your business idea. Make sure your goals for what you are planning to accomplish over the quarter are "ambitious to the point of impossible." Simulate three famous people from history to criticize your business idea. Identify 10 weak points in your plan that the AI can locate. Have the AI give you a vision of success.

Description

I would like your outline to include the following: Team members, your business idea, who your customers/competitors/partners are, some basic market sizing data (remember to use an AI tool that is connected to the internet to get up-to-date information, and check all the results), and tentative plans for what you are going to do to test/verify your idea during the quarter. Make what you are planning on doing ambitious to the point of impossible, you are going to be using AI to make the impossible feasible. Can't code? Definitely plan on making a working app. Does it involve a website? You should commit to creating a prototype working site, with all-original images and text. I won't penalize you for failing if you are too ambitious.

Any plan benefits from feedback, even if it just gives you permission to discuss what might go wrong. Ask the AI to give you 10 ways your project could fail and a vision of success, using the prompts from class. And, to make it interesting, ask three famous figures to criticize your plan. You can invoke entrepreneurs (Steve Jobs, Tory Burch, Jack Ma, Rhianna), leaders (Elizabeth I, Julius Caesar), artists, philosophers, or any other people you think would be useful to critique your strategy in their voice. Figure out a prompt that gives you good results, give me the results, and tell me what, if anything you learned from it.

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Spot the Impostor

This activity builds on regular (e.g. weekly) reading responses or other discussion prompts using a tool such as Canvas discussion boards. Everyone writes their own post as normal except for one student, who is tasked with using an AI tool to write their response. In addition to the normal discussion, students try to identify the AI-created material, explaining why they think the post was machine-assisted.

Addendum

Although this document was written with OpenAI’s ChatGPT in mind, the number of AI tools is rapidly proliferating. A different AI may be more appropriate for you and your students. Futurepedia and There’s An AI For That are tools that can help you find other AI applications.

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5 Based upon a discussion at a session on AI in the classroom from Course Hero’s Education Summit 2023.