Spring 4-4-2024

Does AI Ask Good Questions? A Discussion Activity

Katherine Tilghman
Washington University in St. Louis, k.a.tilghman@wustl.edu

Does AI Ask Good Questions? A Discussion Activity

Summary: Students will prompt ChatGPT to generate discussion questions for a course text or artistic work, then evaluate the questions and modify them to make them more engaging and thought-provoking.

Digital tools used: ChatGPT 3.5, ChatGPT 4 (optional)

Format: This activity is potentially adaptable to in-class, out-of-class, group work, or individual work scenarios. Duration is also flexible according to how many discussion questions are generated and discussed.

Learning Objectives:

Students will:

- Discuss what makes a good discussion question
- Evaluate the quality of ChatGPT's discussion questions
- Practice modifying questions to make them more thought-provoking

Additional Resources:

Wazana Tompkins, Kyla. "We Aren't Here to Learn What We Already Know." *LA Review of Books*, 13 September 2016, https://avidly.lareviewofbooks.org/2016/09/13/we-arent-here-to-learn-what-we-know-we-already-know/.

Example Procedure:

1. Opening discussion (think-pair-share and/or as a class):
    a. What makes a good discussion question?
        i. Optional: use Wazana Tompkins article above and ask students what they think of those strategies
    b. What kinds of questions do you find most helpful for understanding a text? What kinds are least helpful? What kinds are the most difficult to answer?
    c. Do you predict ChatGPT will be good at asking thought-provoking discussion questions? Why or why not?
2. Have students prompt ChatGPT to generate a set number of discussion questions about one of the course texts/pieces.
    a. Assume students only have access to the free version of ChatGPT, although if someone has access to the premium version, that can add an interesting level of comparison.
    b. Optional: Have some or all students ask it to generate questions on particular themes or elements of the text.
    c. Optional: Allow students to modify their prompts to generate better or more relevant questions.
3. Students discuss in pairs the quality of ChatGPT's discussion questions. Consider asking:
    a. What works about these questions? What doesn't work?
    b. Are they similar to the discussion questions we typically talk about in class?

    c. Did anything surprise you about the results you got?
4. In pairs: have students choose the best two questions and the worst two questions out of the pool of questions that ChatGPT generated for the two of them. Then, ask students to modify all four questions to improve them. (The number of questions chosen could vary based on class size and time allotted for the activity.)
5. Pairs share ChatGPT's original 4 questions and their modified versions with the class (a shared Google Doc or writing on the board may be helpful for this), explaining how they chose which were best vs. worst and sharing the rationale for their modifications.
6. Discussion and debrief as a class:
    a. What trends do you notice in the type of questions ChatGPT generates? What is it good at? What does it tend to miss or ignore?
        i. Emphasize that ChatGPT is not actually "thinking" and has not actually "read" the text in the human sense
            1. Optional: reference Wazana Tompkins' piece about reading practices
    b. What types of modifications did you and your classmates make to improve the questions? How could you apply similar modifications to improve your own discussion questions or reading process?
    c. What are the benefits and disadvantages of using AI to generate questions about a theoretical or artistic work?
        i. For instance, is it more helpful for our learning to generate questions ourselves? Why or why not?
            1. Optional: discuss how the process of generating questions outlined in Wazana Tompkins' can help us think more deeply about a text
            2. Optional: discuss differences in reading/question-generation processes based on whether this is a foreign language class or not
        ii. The ethics of using ChatGPT are also relevant here. This might include:
            1. The environmental impact and/or resource usage of generative AI
            2. Potential bias in AI source data and/or results
            3. Ethical issues surrounding the potential labor-related impact of using AI and/or source data and data privacy