Discussing AI with Students

The 2023-2024 school year is the first one where generative AI tools are broadly available and in wide use. The landscape is changing daily, and many teachers, librarians, and administrators are still learning and wrestling with the implications of these tools for everything from class discussions to academic integrity policies to assignment and assessment design.

There is a lot of hype in the media about generative AI, and this can make tools like ChatGPT and Bard seem mysterious and intimidating, or even a bit magical. But looking at AI in that way can be problematic. As author and computer scientist Jaron Lanier points out, "Mythologizing the technology only makes it more likely that we'll fail to operate it well." Instead of becoming overwhelmed by the hype, pulling back the curtain on what these models actually do and how they work can help demystify them and also reveal both their possibilities and pitfalls more clearly. While anyone who interacts with generative AI would benefit from this exploration, it can be particularly beneficial in an educational setting, where educators and students can learn from each other and become critical thinkers and users of these tools together. Here are some factors to consider when facilitating a classroom dialogue about AI:

Educate yourself - but don't get overwhelmed! You may feel like you don't have the technological expertise to have a conversation with your students about AI. But you don't need to know everything about how AI works in order to talk about its implications for learning and living. Take some time to play around with some of the more commonly used tools, practice some prompt engineering, and learn a little more about how AI models are trained. learnprompting.org is a great free resource that you can use to introduce yourself to AI and get some practice working with it. It may even give you some ideas for how to structure prompts to use with your students as part of your class.

Take an inquiry based approach: Approach a conversation about AI with your students with an open mind. Students may be wary to talk about their usage if they think it'll get them in trouble or that you're opposed to any use of generative AI. Ask them open ended questions, such as: What do you know about how large language model AI works? Have you used AI in personal or academic contexts? What tools have you used? Where have you found it useful, and what shortcomings do you think it has? How do you think AI could be helpful to your learning? How do you think it could be harmful? As you're getting to know your students, these questions and the discussion you have will help you get a sense of what your students already use AI for, where their gaps in understanding are, and what opportunities and challenges you may have in structuring lesson plans and assignments to encourage AI literacy as well as independent thought.

Encourage your students to think critically: Many of your students may be unaware of the ramifications of AI usage. Ask them what they think or know about this topic. There are lots of areas to explore. For example, are students aware of the environmental footprint of many AI tools? Do they understand the human labor that goes into helping train an AI tool? Do they know how AI models are trained, and the problems of bias and inaccuracy that can come along with these training models? If students have an understanding of the shortcomings and concerns associated with AI, it can help them be more responsible users of these tools.

Enlist your students as partners: Be open with your students about the learning outcomes for your course, or for a specific assignment. This transparency is always helpful, but can be especially so when thinking about the role of AI in your students' work. For example, if your learning outcome is for students to be able to analyze a primary source, ask them what kind of assignment would allow them to show that knowledge. How would the use of AI be incorporated, or not? Students often relish the opportunity to have agency in showing their learning, and adding in a new tool is exciting. You don't have to take all of their suggestions, of course, but they may have fresh and creative thoughts on how to use AI in an assignment that shows their understanding. Challenge them where you see pitfalls or factors they haven't considered. For example, if they suggest using an AI tool to find possible sources on a topic, take that as an opportunity to discuss the problems of AI hallucinations where sources that sound real are actually made up. On the other hand, if they suggest writing a rough draft in class and using AI to refine their language, that may be an option you are more open to, depending on your learning outcomes.

Explore AI together: One way you can enlist your students as partners is by creating activities that allow you to teach using AI. For example, if you're teaching a literature class, try having students write prompts asking AI to write in the voice of a particular character or craft a poem in a particular structure. Then "workshop" AI's writing in the same way you might have students peer review a classmate's work. If you're teaching math, have students write prompts asking AI to solve a given problem using different methods and have AI show its steps. Then have them check the work of the AI tool (if you or your students haven't used AI models to solve math problems before, you may be surprised to learn that it actually often has trouble with computational problems). Take this as an opportunity to explore why the way AI models are trained can lead to this difficulty. Discuss how writing prompts differently might lead to different answers, and have students try out different possibilities. (If you are actively employing AI as part of a class assignment, remember to do so taking into account your institution's AI policies as well as privacy and confidentiality policies on student data. Remind your students that any content they input into an AI tool does not have an assumption of confidentiality, and is used by the AI company as data to further train its model.)

This is a moment in time where the process of educators and students learning a new tool together can be quite powerful. If your students see that you are open to exploring while also guiding them to think critically, it can go a long way towards building both trust and partnership.

Sources and Resources

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