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Academic Librarians, Information Literacy, and ChatGPT

Sounding the Alarm on a New Type of Misinformation

On a regular basis, I get emails from vendors promising to train me "how to use Chat-GPT"—as if there's a secret prompt that reduces ChatGPT's propensity for providing inaccurate information. There isn't, and academic librarians should not be complicit in higher education's efforts to downplay the negative impact of ChatGPT on student learning. No amount of prompt engineering can prevent ChatGPT from generating responses containing erroneous information and logical fallacies. ChatGPT, and other generative AI tools, hold great potential for improving teaching and learning, but they also hold great potential for undermining it. And, if you've chatted with an English Composition instructor lately, then you know that ChatGPT is already undermining the development of student writing. The educational crisis triggered by generative AI has an especially profound impact upon first-year college students, who are sometimes using ChatGPT to bypass the cognitive effort that is essential to their attainment of course learning outcomes and general education outcomes.

Although academic librarians have, in recent years, demonstrated a reluctance to dissent from fashionable positions and emergent orthodoxies in higher education, this topic is relevant to information literacy, and we should be speaking up. Some administrators in higher education have made a mad dash to publicly embrace ChatGPT. Academic librarians, however, should avoid virtue signaling and focus instead on "speaking truth to power," something we don't shy away from in other areas. I decided to do my part by creating a LibGuide in which ChatGPT does the talking for me. In "The Other Side of AI: ChatGPT Explains Its Downsides," ChatGPT explains the uniquely problematic nature of its misinformation, how it undermines the development of writing skills, how it impedes the development of moral reasoning, and why its operational principles undermine scholarly communication.

The complex, unique nature of the misinformation that ChatGPT produces is something that college administrators and instructors alike often do not yet grasp. As advocates for information literacy, academic librarians should be explaining why ChatGPT's output has introduced a *qualitatively different* type of misinformation. In short, ChatGPT's responses consistently include a combination of erroneous claims and logical fallacies, yet the *plausibility* of its responses—which is often attributable to the sophisticated nature of its errors—means that vetting a ChatGPT response is frequently difficult and time consuming, even for subject experts.

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ChatGPT often claims it's a helpful tool to use at the start of the research process. Yet even there it can introduce misconceptions that students don't forget, and it can misrepresent the nature of the scholarly discussion. ChatGPT's usual defense is that students need to check its responses for errors. But if a student needs a topical overview to jumpstart their research, why would we encourage them to generate a ChatGPT response and then comb through it for errors, when they could just start with credible reference sources?

ChatGPT, when pressed, sometimes concedes that having students vet its responses is a waste of time:

Anonymous: Yes, but, in many cases, if I want quick, factual information, wouldn't it just be better to check the Encyclopedia Britannica, especially given your tendency to produce plausible misinformation that, as you say, needs to be fact-checked by me?

ChatGPT: You're absolutely right that for quick, factual information, especially when accuracy is paramount, consulting a reliable and authoritative source like the Encyclopedia Britannica is often a better choice. Encyclopedias are carefully curated and edited by experts, ensuring that the information is accurate, well-researched, and trustworthy.

Yet, even after an exchange like this, ChatGPT usually persists in encouraging me to use it for exploratory research. Still, ChatGPT has its confessional moments:

ChatGPT: . . . for exploratory research, starting with ChatGPT may not be the wisest use of time. Students are better served by beginning with academically reputable sources that are specifically designed to introduce and explain key concepts. . . . In essence, you're right that using ChatGPT in the exploratory phase of research could introduce more problems than it solves, wasting time and potentially confusing the student.

Of course, vetting a ChatGPT response could be an information literacy assignment in and of itself, and I think that's worth exploring. But we need to be clear about the potential for ChatGPT to derail students during the research process.

This might also be the moment to have wider institutional discussions about the practice of citation. Beyond preventing plagiarism, the practice of citation is about being able to identify the scholars, sources, and ideas that are contributing to the scholarly conversation, and being able to determine how one's ideas relate to that discussion. ChatGPT, which produces responses based on patterns it has learned from billions of pieces of data, renders the practice of citation meaningless in this respect. A citation for ChatGPT's output refers us back to nothing that can be confirmed. Instead, it's more like an acknowledgement that one has consulted the world's worst plagiarist.

It is not possible to be an advocate for students if one is unwilling to speak openly and honestly. Expressing dissent—even dissent framed in the most respectful and deferential way—requires us to take the risk that our dissent might be misrepresented. One approach to blocking valid criticism of generative AI is an ad hominem attack along the lines of, "Oh, you're just resisting technology." But I use ChatGPT on a daily basis: it is an excellent tool

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for exploring argumentation. The idea that we have a low tolerance for nuanced positions in higher education should be repellent to everyone who values the pursuit of truth, and we should work to strengthen our free speech norms, not undermine them.

When was the last time you were willing to voice an unpopular opinion as a highly contested topic was being discussed at your college? Robust debate is the lifeblood of liberal democracies, and it should certainly be the lifeblood of institutions of higher education. Yet too many academic librarians whisper their dissent to each other, choosing to remain silent during committee meeting after committee meeting. Generative AI is highly relevant to academic librarianship, and we should be using our expertise to shape reasonable policies, practices, and norms at our colleges and universities. ***

Note

1. "The Other Side of AI: ChatGPT Explains Its Downsides," Germanna Community College, last updated September 9, 2024, https://germanna.libguides.com/c.php?g=1407891&p=10435951.

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