ChatGPT and Academic Integrity

Recommendations for Educators

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Introduction.

THE RISE OF ARTIFICIAL INTELLIGENCE (AI) WRITERS LIKE CHATGPT HAS EVOKED EXCITEMENT FROM USERS WORLDWIDE, BUT EDUCATORS ARE INCREASINGLY CONCERNED ABOUT THE TECHNOLOGY'S IMPLICATIONS FOR THE CLASSROOM. Following the November 2022 release of ChatGPT — a large language model (LLM) that predicts and crafts human-like, intelligible responses to prompts within seconds (Dubinski, 2023; Ho & Liu, 2023; Mills & Goodlad, 2023; Young, 2023) — educators and policymakers have explored the risks of students using the technology to plagiarize written assessments, sidestep the learning and thinking processes, and reduce their learning gains (Aziz, 2023; Rosenblatt, 2023; Yang, 2023).

ChatGPT has proven itself capable of not only writing code, emails, poems, essays, and more (OpenAI, 2022; Simon, 2022), but also of passing a Wharton MBA exam (Terwiesch, 2023) and researchers are investigating its success with complex assessments such as the United States Medical Licensing Exam (Kung et al., 2022). Because the chatbot produces writing very similar to that of humans, plagiarism detection software often fails to distinguish between the two, leading to ChatGPT's creator, OpenAI, and entrepreneurs experimenting with solutions to the emerging infringement problem (Hern, 2022; Osborne, 2023).

This is only the beginning of the generative AI era as OpenAI is planning to release more adept chatbots like GPT-4 and is earning billions in investments from companies like Microsoft and Google who are in turn developing similar tools (Griffith & Metz, 2023a; Griffith & Metz, 2023b; Young, 2023). Because of its explosive popularity and the sophistication of its writing capabilities and creative applications, AI writers like ChatGPT pose a real challenge to educators by threatening academic integrity. Thus, there is a growing need for educators to understand how to maintain academic integrity, preserve student learning, and incorporate the technology into curriculum planning to enhance innovation and engagement in the classroom. In this paper, we offer a number of solutions to help educators respond to this challenge.

Recommended solutions.

In the classroom.

- Develop a keen understanding of tools like ChatGPT: how they operate, what their outputs look like, the implications of and opportunities in using such technologies, and how chatbots can produce responses for assignments in your course(s) (Mills & Goodlad, 2023; Using Technology Better, 2023).
- Discourage cheating by creating classroom norms, divorcing credentialing and learning, respecting students and their time, educating learners on chatbots, and evaluating courses to ensure there is not an excess of content that would impel students to use chatbots to complete assignments (Watkins, 2022).

- Revise class policy (e.g. honor codes, rules of engagement, student ethics discussions, academic integrity guidelines) to provide clear instruction on the conditions (or lack thereof) of using AI writers in learning.
- Integrate case-based or project-based learning that builds on itself, using multi-step assignments.
- Where possible, avoid essay writing; instead, ask students to engage in group discussions, presentations, debates, or other interactive activities (Watkins, 2022).

In assessments.

- Experiment with the chatbot to craft prompts, create formative assessments, and design personalized evaluations based on individual student needs and abilities (Cotton et al., 2023; Herft, 2023; Lindsay, 2023; Using Technology Better, 2023).
- Set questions that require students to demonstrate critical thinking, reasoning, problem solving, and communication skills; that are open ended; and that require originality and creativity (Cotton et al., 2023; King, 2023; Lindsay, 2023; Yeadon et al., 2022).
- Require students to make explicit connections between the assignment question(s) and the course(s) (e.g., reference class discussions, lectures, and materials).
- Prompt students to apply knowledge or skills or establish relevance, significance, or connections to specific contexts (e.g., case studies or the particular context of their country, community, organization, recent events, or their personal lives).
- Prompt students to reflect, share ideas for how they could improve, and explain their thinking (Lindsay, 2023; Watkins, 2022).
- Ask students to use a tool like ChatGPT to conduct an analysis and then critique the produced response.
- Challenge students to demonstrate their understanding in visual, video, or audio formats (Lindsay, 2023; Watkins, 2022), being mindful of inclusive pedagogical practices.
- Design assignments that ask students to provide a detailed analysis of images, videos, audio, or lengthy publications or describe complex relationships between concepts (Mills & Goodlad, 2023).

Conclusion.

The emergence of ChatGPT creates new challenges and opportunities for educators. Tasks like studying these tools, revisiting policies, evaluating courses, and redesigning assessment practices can be time-consuming for an already time-poor population of educators. And creating the conditions in which students are educated, equipped, and encouraged to maintain academic honesty when easy-access artificial intelligence tools are temptingly within their reach is a complex undertaking.

Yet the opportunities offered by tools such as ChatGPT are rich and diverse. Making AI writers a focal point of the classroom and educator communities provides a much-needed impetus, creating a moment to revisit and reflect on educational content, teaching practices, and assessment methods. It also provides a space to formulate and integrate new ideas that leverage technology to empower students with the knowledge and skills they need and desire. Crucially, tools such as ChatGPT can save educators time by automating some tasks, allowing them to concentrate their efforts on creating engaging, creative, and personalized learning opportunities at scale.

In this time of opportunity, the strategies outlined in this paper can help educators understand how their courses and students can thrive in the midst of boundary-shifting challenges and changes in industry and society. Preserving the teaching and learning process and protecting academic integrity in the early generative AI era is possible. How will you contribute to this journey?

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