



Tech Talk

AI and Academic Integrity: Guiding Educators Through the Evolving Challenge of Student Plagiarism

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Abstract

The arrival of Artificial Intelligence (AI) in education brings exciting opportunities and significant challenges. This article explores educators' concerns about AI's role in the classroom, particularly the potential for AI-assisted cheating. Based on personal experiences, conversations with educators, and professional research, we highlight the ethical issues posed by AI tools like ChatGPT, which students may misuse for assignments and exams. Surveys show a troubling trend: many students admit to using AI for schoolwork, raising questions about academic honesty and integrity. We discuss ways to reduce AI misuse, such as redesigning assessments, encouraging open discussions about ethics, and using AI detection tools. The article stresses the need for ongoing dialogue, adaptive policies, and collaborative efforts among educators to maintain academic integrity in the digital age, ensuring that AI supports rather than hinders educational success.

Introduction

Artificial intelligence (AI) has opened the door to many fantastic educational opportunities, from virtual assistants to platforms that assess, provide feedback, and tailor learning to generate content and experiences. Unfortunately, there are also risks (Caukin et al., 2023). AI encompasses technologies capable of simulating human intelligence, like those that use language learning models to generate responses, like ChatGPT (Hetler, 2024; OpenAI, 2023), and virtual

personal assistants like Pi, Siri, Alexa, and Google Assistant, among others (Aisera, 2024; Inflection, 2023). These tools are designed to assist learning, improve productivity, foster creativity, and generate ideas. Some of these tools, however, can be misused by students to produce assignments and exam answers that simulate human effort.

We teach. So, we understand the challenges that teachers face in the classroom and the concerns regarding AI in education. We also offer professional development to educators on several topics. Most recently, PD has been provided on the emerging subject of a new frontier termed Artificial Intelligence (AI). Meeting with educators confirms their concern and, perhaps, trepidation about exploring this territory. Their fear is rooted in thoughts of plagiarism and dishonesty, as students may rely on AI platforms inappropriately when creating their assignments. As Dehouche (2021) noted, “One challenge with using [Artificial Intelligence] for assessment in higher education is the possibility of plagiarism. AI essay-writing systems are designed to generate essays based on a set of parameters or prompts. This means that students could potentially use these systems to cheat on their assignments by submitting essays that are not their work” (p.20). And we know they do.

We understand. We, too, have experienced students who have used AI to plagiarize work. AI is here, and as it continues to evolve and reshape education, it presents both opportunities and challenges for educators. One significant challenge Dehouche (2021) mentioned is the existence of AI-assisted cheating, where advanced technological platforms enable students to disregard academic integrity standards.

We offer hope! Addressing AI-assisted cheating is crucial for educators. It is about upholding academic standards and fostering a culture of honesty and ethical behavior among students. Understanding how AI can be misused for cheating, implementing effective preventative measures, and utilizing AI to promote integrity are essential steps in this endeavor. This article serves as a guide for educators, as it focuses on understanding, preventing, detecting, and responding to AI-assisted cheating.

What Does the Research Say?

Studies indicate a rising trend in AI-assisted cheating across educational levels. Best Colleges reported on a survey fielded by Pure Spectrum and administered to 1,000 undergraduate and graduate students in the fall of 2023, about one year after the release of ChatGPT. Students were asked about their thoughts on AI in higher education. Of the students surveyed, 56% admitted to using AI on assignments or exams. It should be noted that 53% of students surveyed reported using AI as part of their course requirements, and 79% indicated that their professor discussed the ethical use of AI (Nam, 2023).

A similar survey of college students from Intelligent.com determined that 90% of students were aware of ChatGPT, and 89% of those survey respondents reported using the platform to help with a homework assignment. Slightly less than half of the students admitted to using ChatGPT for a take-home test or quiz, 53% had it compose an essay, and one-fourth of the students had it write an outline for a paper (Westfall, 2023). Using AI to assist with or produce academic assignments is attractive to students. Access to these platforms is easy, and the cost associated with its use is minimal, if anything at all.

Study.com researched the perceptions of AI in early 2023 from the teacher's perspective. Of the 203 K-12 teachers they surveyed, they found that 80% had heard of ChatGPT, 43% felt like ChatGPT would make their job more difficult, 26% had caught a student cheating using ChatGPT, 72% had not received any guidance for the use of ChatGPT in the schools, and 67% do not think ChatGPT should be banned in schools (ChatGPT in the Classroom, 2024).

The reality of AI suggests that teachers should consider the ethical considerations and impacts it can have on students' academic integrity. The moral implications of AI-assisted cheating are significant. AI is here to stay, so it must be recognized and addressed. Cheating undermines the trust between educators and students, gives dishonest students unfair advantages, and impedes the development of essential skills needed for academic success and future careers. With AI, cheating becomes more effortless and instantaneous. This is appreciated by a generation of students who are used to having answers to questions literally in the palm of their hand.

Help Afforded

First and foremost, the dependence on AI can be mitigated. To do this, educators can implement several preventative measures. For one, teachers can focus on the way they design their assignments. Cotton, Cotton, and Shipway (2023) discussed that educators can develop assessments that compel students to showcase their problem-solving, communication, and higher-level thinking abilities by engaging them in group discussions, presentations, or various interactive exercises where they can apply their skills, understanding, and expertise.

Promoting open discussions with students about ethics to emphasize the importance of academic honesty is another way to minimize the abuse of AI. Openly discussing AI detection tools such as plagiarism checkers and specialized AI-detection software can be helpful and insightful for students. Learners need to understand that there are ways to identify AI-generated content. This could help reduce its misuse.

Now, an example. A sixth-grade teacher asks his students to respond to the following question: "In the novel "Walk Two Moons," how does Sal's journey to find her mother help her understand and cope with her feelings and experiences? Identify and explain key moments that illustrate her emotional growth." Here is a student's response:

"Sal's journey to find her mother in "Walk Two Moons" is a transformative experience that helps her understand and cope with her emotions. As she travels with her grandparents, Sal reflects on her memories and the stories she hears, which allows her to confront her feelings of loss and abandonment. Key moments, such as learning the truth about her mother's departure and coming to terms with her death, are crucial in her emotional growth. Through these experiences, Sal gains a deeper understanding of herself, her mother, and the importance of accepting life's challenges and changes." (ChatGPT, 2024).

As a teacher, ask yourself these questions when assessing this student's work. "Does this sound like a typical sixth-grade student response?" "Is the language typical of a sixth-grade student?" "Is it written with grammatical errors?" and "Does it resemble the student's previous work?" If you answer "no" to these questions, then the likelihood of AI assistance is high. For the record, this answer was 100% produced by AI.

As such, educators can identify AI-generated content through various indicators. Knowing how students write without assistance is essential to identifying misuse. Once a baseline of student work is established, it is easier for educators to recognize stylistic inconsistencies or student use of overly sophisticated language. Encouraging peer review and collaboration can also aid in detecting indiscretions in assignments and projects.

Establishing clear policies with defined consequences for AI-assisted cheating ensures fairness and consistency in educational practices. Educational interventions, workshops on academic integrity, and supportive measures for students who cheat can help educate students about ethical behavior.

A notable example of a university that has successfully implemented a plan for AI detection is the University of California, Berkeley (University of California, Berkeley, 2024). It has adopted a multi-faceted approach to detect AI-generated content and ensure academic integrity. Key components of the plan include:

- **AI Detection Software:** The university uses advanced AI detection tools like Turnitin's AI writing detection technology, which can identify text generated by AI language models.
- **Faculty Training:** Instructors are trained to recognize signs of AI-generated content and understand the capabilities and limitations of AI detection tools.
- **Student Education:** Students are educated about the ethical use of AI and the consequences of academic dishonesty. Workshops and resources are provided to help students understand how to properly use AI tools for learning without violating academic policies.
- **Policy Development:** Clear policies are established regarding the use of AI in academic work, outlining what is permissible and what constitutes misconduct.
- **Ongoing Research and Updates:** The university continually researches advancements in AI and updates its detection tools and policies accordingly to stay ahead of new developments.

This comprehensive approach has allowed UC Berkeley to effectively manage the challenges posed by AI-generated content and maintain academic integrity. Discussing the appropriate and inappropriate uses of AI with faculty and students is critical to learning how to navigate its use and mitigate potential issues.

Apart from having a solid policy in place to guide the use of AI, sharing lessons learned is another way that educators can begin to manage AI-related challenges effectively. Creating and recommending best practices that encourage a collaborative approach to tackling AI-assisted cheating across educational settings is a necessary step. Continuous dialogue, adaptation, and flexibility within the academic community are imperative for staying ahead of developing challenges.

Addressing AI-assisted cheating is crucial for maintaining academic integrity and ensuring a fair learning environment at all educational levels. Educators are encouraged to stay informed, proactive, and collaborative in navigating the complexities of AI in education. By understanding the tools, implementing preventative measures, detecting dishonest practices, and fostering

ethical behavior, educators can uphold the fundamental values of education in the digital age. By sharing knowledge, experiences, and strategies, we can collectively support academic integrity and promote genuine learning experiences for all students, ensuring that AI enhances rather than undermines educational outcomes. We teach. We understand. We offer hope.

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