AI: A tool to fear?

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Years ago, the education system feared the invention of calculators and the internet, and now, the fear has shifted to the rise of AI. AI has been around for a long time. It became popular with the general public when ChatGPT was released in 2022. Naturally, students and teachers alike wondered what this new tool would mean for the school system. From helping with math homework to writing essays, the question remains whether AI usage should be allowed in education. Some argue that AI usage should be prohibited in education due to a myriad of factors, including students using it for cheating or missing out on learning key skills and content. But AI is not something to be scared of. Instead, it is a powerful tool to be wielded. The benefits of AI surpass any consequences. However, like any tool, students must learn when and how to use it. Students should be able to freely utilize AI in their education, provided they are trained in the various techniques and methods of utilizing it for their learning growth.

Although a primary concern of unrestricted AI usage is cheating, educating students on how to avoid plagiarism with AI can help prevent an increase in cheating because the primary cause of cheating is not AI access. NYU defines plagiarism as "the use of ideas, sound recordings, computer data or images created by others as though it were one's own" (Source E). It's easy to see how AI could cause people to do that by submitting AI-generated work for their school assignments when it would not be their own work. This raises concerns among teachers and educators about whether students are submitting AI-generated materials as their own, which in turn leads to students worrying about being caught plagiarizing. However, plagiarism isn't a new thing; students have plagiarized for years, using the internet or other resources. That doesn't mean that those resources are permanently restricted. Instead, students learn about plagiarism

and how not to do it. It is impossible to expect students not to do something if they don't know what it is or how to avoid it. So, let's teach students how to avoid plagiarism with AI. A provost at NYU says they did that in hopes that it "would persuade students to forgo the lazy uses. It did not" (Shirky). So if teaching students didn't reduce the lazy methods of cheating with AI, what will? Goldstein argues that "cheating had less to do with access to AI than with 'other factors,' like are students engaged in the class?" (Source B). When cheating doesn't have to do with AI access, but more with other factors, AI isn't increasing cheating. Teaching students about avoiding plagiarism with AI can help reduce unintentional cheating, but it won't deter those determined to cheat. So, it is essential to look beyond AI and to the root cause of why they are cheating. Since AI isn't the main reason students cheat, free use of AI will not cause an increase in cheating, provided that students are educated on how to avoid plagiarizing when using AI.

Rather than causing students to lose their originality, AI will help students have time and energy to be more creative, as long as they are taught what types of AI usage promote this. Olivia, a teenage student who relied on AI, felt her individuality was lost. She says to ChatGPT, "slowly, your voice started to replace my own" (Source C). While Olivia feels that her unique voice was lost through using AI, a literary professor who was once skeptical about AI felt differently: "ChatGPT helped me conserve energy for higher-order thinking and writing. It didn't diminish my sense of agency; it restored it" (O'Rourke). Both of them feel strongly about being creative and having their own unique voice. Yet one of them wants to give up AI, while the other wants to use it more. What sets them apart is the tasks they use AI for. Olivia used ChatGPT for tasks where having a personal voice mattered to her, such as writing assignments. However, the professor utilized AI for tasks she dreaded, such as creating checklists and sending memos. This restored her sense of agency because it cleared up time and energy to focus on tasks that she was

excited about and ones that mattered to her. One key part of any tool is knowing when to use it; you don't use a fork to eat soup. When students learn to differentiate between various types of AI usage and identify which ones promote creativity, they can utilize AI to strengthen their own creativity rather than diminish it.

Students also diminish their learning when using AI if they blindly trust it, but when taught to review AI's responses and techniques to learn with AI, they learn content and demonstrate their understanding even better than if they didn't use AI at all. A study was conducted to compare the content understanding of individuals who used AI to write their essays with those who didn't. They found that the people who wrote their essay using AI "hadn't internalized their own 'writing,' and little of it had sunk in" (Brooks). An understanding of the essay topic is expected for those writing it. This is even critical for students, as the purpose of a school assignment is to learn the content, not just produce a result. So, students who use AI to write their essays for them won't internalize the content they were supposed to learn. However, AI isn't the core problem. Students have found ways to side-step assignments to get quick results without understanding, even before ChatGPT. But these other methods weren't personalized for each student's needs, so students still had to make some adjustments before submitting. The core problem is the blind trust many students have in AI's ability to personalize to their assignments. This leads them to submit the response without reviewing, a key step of the process that inevitably builds and demonstrates understanding. If students are effectively learning and checking AI's responses, then it will reflect their understanding of what was taught. But the students need to be taught techniques to check over and critically think about whether AI's work is accurate and effective. But, a NYU professor questions, "if you never build those muscles, will you grasp what's missing when an LLM delivers a chirpy but shallow reply?" (O'Rourke). Even

if students are taught to review responses, they won't recognize what was missing in AI's response if they never learned the content. The Alpha School has figured out how to teach its students to learn content with AI. The Alpha School is a kindergarten through 12th-grade school in Texas that teaches students using AI in the morning with teachers as guides and then allows them to work on real-world projects in the afternoon. At this school they "believe an AI-forward approach helps tailor an education to a student's skills and interests" (Salhotra). Alpha School is a prime example of how students can use AI to empower their learning. There, students can learn at their own pace with the help of AI tools, effectively eliminating the struggles many students face, such as falling behind in classes or getting bored due to easy material. Students everywhere should use these various techniques to learn the material better. Students can't do it on their own, though. Similar to how students learn to better use a graphing calculator for a physics test or better use the internet for research, students can learn the techniques to better use AI to learn the material. After learning these techniques to better understand content and review AI's responses, students can learn and demonstrate their understanding of the material better, since they aren't blindly trusting AI's responses.

Blindly trusting AI also causes students to use less brain power, but by changing the goal and teaching students what types of tasks AI can help with, students will improve their critical thinking. In the same study comparing people who generated essays to those who wrote them themselves, they found that people who AI-generated the essays had less brain activity, meaning they didn't use their brains as much. Brooks describes this as, "more effort, more reward. More efficiency, less thinking" (Brooks). This is a scary fact. But why does AI have to promote less thinking? It often has to do with the goal of the AI use. Maybe the end result was feasible through AI. The people who wrote the essay with AI probably wanted to create something and

finish it up. This led to less thinking and a quick result. So maybe the goal needs to be changed.

Greene argues that "if software can now reliably produce mediocre performances of 'writing,'

then why bother teaching students to do it? Drop the formula essays" (Source F). By changing

the goal, it will change the way students approach the process. In the study, if the essay aimed to

present a stronger argument or a unique viewpoint, the authors would still need to think critically,

even if they used AI, since it's not guaranteed that the AI-generated essay would achieve its goal.

However, since it was a "formula" essay, a generic prompt that didn't reward thinking outside

the box, it was easy to complete with AI. The same goes for essays and assignments in school.

The education system should focus on skills that the computer can never replace, such as

thinking critically or outside the box. A student at the Alpha school explains, "to be a useful

person in the age of AI, you have to have unique insights that AI doesn't really agree with"

(Salhotra). Thinking critically and independently means being ready to have ideas that AI won't

tell you. In order to be able to do this, students can't use AI to complete all of their assignments.

Students have to be taught when to use AI, like for tasks that take a lot of time but don't require

heavy thinking, and when to rely on their own brains. Students are taught in school to question

what they read on the internet and think for themselves. Similarly, if students are taught to

question AI and only rely on it for certain types of tasks, they will increase their critical thinking

capabilities instead of using their brains less.

     If students are taught how to decide when and how to use AI, then they should be able to

use AI freely in the classroom. Right now, teachers are concerned about AI and are trying to

catch students cheating with AI. This makes students more focused on avoiding getting caught

than on the goal of the assignment. This isn't the first time this has happened. Whether it was the

calculator or the internet, educators feared that the new technology would break the system. But,

it didn't. Instead, the innovations fostered students to learn more and achieve even more. AI can do the same as long as the system is conducive to it. Rather than fearing AI, students can learn how to use it to their benefit to improve their education. Whether it's avoiding plagiarism, boosting creativity, enhancing understanding, or improving critical thinking, AI can help. As learned from calculators and the internet, technological advancements find a way to be an integral part of education, and now it is time to do the same for AI.