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Restructuring Education to Adapt to New AI Technology

The education world has been thrown for a loop in the past year with the release of the generative AI tool ChatGPT. Concerns of students cheating on assignments have risen dramatically and teachers have been sent into an utter state of panic doing everything they can to stop it. However, at this point we can no longer be afraid; we must adapt to the new technology and embrace it. In future classrooms, ChatGPT must not be considered a threat but rather a tool for all parties involved to help further advancement in education for the better.

AI should be considered as a tool and not be feared in education because of its lasting impacts on society. When ChatGPT was released into this world, the immediate reaction from teachers was fear. Kevin Roose, a writer for the New York Times who has discussed this topic with many educators said, "It's easy to understand why educators feel threatened. ChatGPT is a freakishly capable tool that landed in their midst with no warning, and it performs reasonably well across a wide variety of tasks and academic subjects" (Roose). This is very true, knowing students can use tools that allow them to cheat at ease is very scary. The most common argument here is that this technology does not support the development of students and misrepresents their knowledge if they use it to cheat on assignments and turn in work they didn't do. In his article, "No, ChatGPT Is Not The End Of High School English", Peter Greene, a teacher, describes his experience experimenting with ChatGPT and concludes it can produce pretty mediocre essays to save a student from failing but nothing more than that (Greene). Here itself the argument is put at

rest because it's clear that even if a student uses ChatGPT to write an essay, it would not be a good one and it would be quite easy to tell they didn't write it. Furthermore, this is a very restricted view which limits its use case to purely cheating, which is the wrong way to look at it. It is obvious that it is harmful to their development if a student submits purely generated work. However, it would be helpful if the student was taught to use the resource as a tool to work alongside them instead of as an answer machine, which it is not. This becomes even more apparent when you think of this in the grand scheme of things. Realistically, we need to understand this technology exists now and it will only develop further from here, there is no way to get rid of it. Roose also mentions this in his article saying that a school can block ChatGPT on school networks and devices, but students still have numerous ways of accessing it (Roose). It is made painfully clear no matter what efforts schools or teachers make to try and ban or limit the use of ChatGPT it is ineffective. But why ban it in the first place if these students that are being raised by the education system are also growing up with this technology? It will always be available to them and effectively using these tools can cause growth at faster rates. Instead of banning the tool, we should teach these students to properly use it to prepare for this future where this technology becomes integrated in our daily lives.

In order for us to build a positive future in education using AI, teachers must be educated on the topic, and they must educate students as well on how to correctly use AI as a tool. As previously mentioned, the first step is to have teachers approach AI with an open mindset instead of being apprehensive or scared. Eliminating this fear inspires curiosity, teachers should learn more about the tool. Have them experiment with AI and learn for themselves how to effectively use it as a tool and how to create prompts most effectively. They must also understand its limitations: what it can't do, how it often makes up information, how it doesn't cite sources, and

how easy it is to differentiate human and AI generated writing. Teachers should have a full understanding of the weaknesses and strengths of generative AI tools. Once they have done this, they can pass this knowledge on to their students and show how it can be used to help them with their classwork. In an interview in Roose's article, a teacher said that she "recently assigned students in one of her classes to use ChatGPT to create outlines for their essays comparing and contrasting two 19th-century short stories (...) once the outlines were generated, her students put their laptops away and wrote their essays" (Roose). This is a great example of how teachers can use AI within the classroom. It was used as a tool to help develop ideas instead of completing the full assignment. Practicing this in the classroom shows students how to effectively use it to produce meaningful output and shows what an acceptable use of the technology is. They also learn to determine whether the output was truthful or not. If all students learned to use the tool like this, we could drastically change the approach to education and have students learn much more effectively. Also, Sal Khan, in a TED talk, expresses his thoughts on the topic and says, "We're at the cusp of using AI for probably the biggest positive transformation that education has ever seen, and the way we're going to do that is by giving every student (...) an artificially intelligent (...) amazing personal tutor" (Khan). Khan shows how optimistic he is about the future of education with his own custom AI tool on his own platform which is specifically geared towards helping students think instead of giving answers. It just shows how much faster students can develop if they are taught to properly use the tools given to them.

In the future, assignments should be restructured so that they are not at risk of being completed by AI but rather to help the student develop their ideas along the way. Oftentimes within school, essays are assigned to report on a topic, a common example being the 5-paragraph essay about a certain war or a certain event with little room for student variation. Assignments

like these are not effective because they are essentially long summaries with very little input from the student. These can very easily be completed by generative AI tools and do not really help the student develop any skills besides summarizing. In his article Greene states that, "If you have come up with an assignment that can be satisfactorily completed by computer software, why bother assigning it to a human being?" (Greene). Greene brings up a great argument describing why it is ineffective to assign tasks to a human which a computer can complete. What point is there in making students fuss over tasks that can be completed by a computer when they can do greater, better things which could allow them to hone their skills. This all leads to the conclusion that assignment prompts must be restructured. It would be much more effective if they were more open-ended and involved critical thinking to take an arguable position and develop reasoning and thought behind it. This would make it much harder for a tool like ChatGPT to complete and if students were to use it, it would generate very shallow arguments with not much evidence. This almost forces the student to use ChatGPT in a more productive manner to understand subtopics or summarize many documents or generate an outline which would help the student develop their understanding of the topic and develop and strengthen their argument further. Some teachers may still argue that using the tool to do even these tasks is not productive and does not develop the students' understanding of the topic. However, this is not the case, within Greene's article he addresses this saying that "If they put a great degree of thought into designing a prompt, would that not mean that they were doing something involving real learning?" (Greene).

Just by developing prompts students are furthering their understanding of course material and using ChatGPT itself can be considered a form of research or learning. Overall, it can be very

productive to use ChatGPT in assignments as long as assignments are adjusted to account for this as well.

In summary, generative AI tools can be both very helpful and harmful in the education world. However, if we take the proper steps to mitigate the harm and properly educate students on the proper use of the tool it will bring about a positive change to the education world.

Works Cited

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