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How AI Will Transfigure Academics Completely

When we think of artificial intelligence, many of us may picture the dystopian novels and movies that present it as an evil entity gone rogue against humanity. Though this may seem like an exaggeration, the advancement of AI made in the year 2023 alone may pose significant concerns over how near we may really be to that nightmarish reality. A majority of fields are beginning to incorporate artificial intelligence into many aspects of their work in an accelerated manner. This includes the education system. Projected into the next 20 years, AI will completely change the academic atmosphere by infiltrating the classroom through teaching methods, altering curriculums and degrees, as well as dominating the job scene.

Teachers are beginning to incorporate AI right now to instruct their students. This has been received in both a positive and negative light. To some, AI has been able to enhance the classroom by providing a more immersive experience. Additionally, students are claiming it as a homework tool and tutor for their classes. Author Shonubi Olufemi writes about AI in an article titled, *AI In the Classroom: Pros, Cons and the Role of EdTech Companies*. In the introduction of this article, the author expresses that AI can be implemented in education and he states, “AI can provide students with personalized learning experiences, automate repetitive tasks and provide instant feedback.” These outline some of the advantages that artificial intelligence can provide in the classroom. The article also mentions that there are currently many artificially intelligent tools that teachers are using to assist in educating their students.

On the other hand, it is feared that AI has the potential to take over the class completely and replace human teachers. In the article written by Olufemi, the author mentions the “lack of human interaction and emotional support that students receive when using AI-powered educational tools.” Students need human interaction and the emotional connection that teachers provide when educating. With the advancement of AI, there is a fear that some will begin to see teachers as unnecessary (Shonubi). In the next two decades, I imagine AI will be implemented as a replacement for human educators rather than used as a tool. Furthermore, teachers are presenting concerns that students will no longer be learning but using AI to complete all their assignments. In an article titled *ChatGPT and Beyond: How to Handle AI in Schools*, Senior Editor Christine Elgersma offers advice to educators on how they can navigate through this advanced technology. Elgersma expresses that “we interact with AI every day we’re online.” This is especially prominent in the school system, where many of the learning resources are now provided through technology. With that, there are challenges that spark worry amongst instructors: plagiarism, ethics, biases, and misinformation as outlined by the author.

Given the increased use of AI that has occurred just in the last year, AI has shown a likelihood of expanding in the classroom tenfold. In an article titled *An Intellectual Leap*, authors Jeremy Hsu and Matthew Sparkes explore the recent advancements in artificial intelligence and the “boom” it inspired. With the launch of ChatGPT which “attracted 1 million users in just five days,” many companies have begun launching their own chatbots with incredibly advanced powering technology (Hsu and Sparkes, 12). Generative AI, ChatGPT, is being banned in schools because students are using it to complete their homework assignments for them (Hsu and Sparkes, 13). As stated by the authors, this is because “it can generate entire essays that often appear indistinguishable from student writing.” In an article written by Kathryn Hulick, titled

How ChatGPT and Similar AI Will Disrupt Education, a pole is sourced that was conducted at Stanford University where 17% of students admitted that they used AI generated writing and claimed it as their own. This poses the question of whether individuals will even need to learn how to do a lot of the work required for a college degree as AI will be able to generate that work for them in a matter of seconds both in and out of college.

Assuming the expansion of AI is even slightly as drastic as it is projected to be, it will have the potential to exceed humans in their own careers. With the continued use of AI to do schoolwork, degrees may not require as much education. The expansion of artificial intelligence has been fueled by millions of dollars across many businesses, to create the highest functioning tool they can. In the article written by Hsu and Sparkes, the authors state that the creators of ChatGPT claim their “mission statement says the firm is dedicated to spreading the benefits of artificial general intelligence – AIs that can outperform humans at every intellectual task” (15). This proves that AI is continuously being improved in hopes of being more than an equal to humans in intelligence. Computer scientist, Geoffrey Hinton, often referred to as “the godfather of artificial intelligence” is quoted from interviews in an article written by David Hamilton and The Associated Press. Hinton expresses his concerns that AI may have already surpassed humans in intelligence. Hamilton writes the discoveries Hinton has made stating, “not only can AI systems learn things faster, he notes, they can also share copies of their knowledge with each other almost instantly.” Hinton points out that this is far more advanced and possibly a “better form of intelligence” in comparison to humans (Hamilton).

In the next 20 years, curriculums will have to focus around how to use AI to do tasks. In higher education, the courses will not focus on how to complete tasks or parts of a job, but to use AI to do those things. For example, the calculator altered the way that math is taught in all levels

of education and now, we learn how to use calculators to do our math. This reflects how AI may be used in the future as well. Referring to the article written by Elgersma, the author speculates that the advancement of AI will alter the job market altogether. Elgersma asserts that this could lead educators to face even more hurdles when she states, “preparing students for a world we can’t quite even imagine is a true challenge.” Artificial intelligence is built to always update and change with recent advancements, so learning how to use it will be critical in the next 20 years. Hence, the emphasis educators will need to place on working with AI.

If the curriculum teaches how to use AI, then careers will be focused on AI too. However, AI is being used now to do a lot of aspects of careers. So, it is highly likely that AI will take over the job market. According to an article from Forbes Magazine, a report from Goldman Sachs claims AI will impact about 300 million jobs. In this report, it is also estimated that at least a fourth of all jobs could be done by AI alone (Johnson). This loss of jobs will reflect a magnified version of what occurred during the pandemic. Author Alan Semuels highlights this point exactly in an article from TIME Magazine. Citing a paper written by economists at MIT and Boston University, Semuels states, “Robots could replace as many as 2 million more workers in manufacturing alone by 2025.” The author points out that the automation that artificial intelligence provides will allow successful companies to require far less workers. Though some businesses argue that this use of technology allows them to produce new jobs, this is a much smaller number of jobs when compared to the number lost (Semuels).

Our future is inevitable, however, steps can be taken to prevent the impending doom that AI presents. In education, teachers are the compassionate bridge students need between themselves and resources/learning materials. So, while AI may provide some useful features to enhance education, we must not allow it to replace human teachers altogether. Whether AI will

succeed us in the full spectrum of intelligence is still not certain. Given the growth that has occurred in this area already, it is highly likely that AI will reach a superior level of intelligence compared to people. There will always be discord over if that is a positive or negative attribute of AI. The control that humans allow artificial intelligence to have is ultimately what determines the outcome. One way that we may understand how to use AI is by focusing on using it as a part of education. Using AI will become a major focus of careers in the future which will create a new market for education to focus on.

Two decades may appear to be a short time to most but given the advancement that has occurred in AI over the span of a few months, I do not think it unlikely to assume AI will have reached levels humans cannot even imagine now. The only factor slowing the process of artificial intelligence development is humans. Assuming humans continue the trend of being slower to adapt than AI, I doubt we will reach the level of dependence that has been depicted in films such as *Wall-E*. In our near future, artificial intelligence will reshape the educational climate we know now through altering how students are taught, reconstructing curriculums and degrees, and invading the career market. As technology advances, we must adjust what we place value on. For example, I probably did not need to write this paper myself as AI could have done it for me in a matter of seconds, but I value learning and honesty.

Citations

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