Looking Back to Look Ahead: The Best Way to Think About AI for Education - 2024

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Artificial intelligence is fast becoming one of the most important forces of our time. It's hiding in plain sight within your smartphone, helping Alexa offer up advice, powering your online searches, and targeting advertisements based on your interests. Its latest form, Generative AI, or GAI, has now emerged and been met with equal parts excitement and apprehension – because it brings both opportunities and risks to many sectors.

This is especially true in education, where it has the potential to enhance teacher quality and efficiency, for example, by making grading faster, more consistent, and more accurate. And it can analyse large amounts of data on individual learners so that teaching interventions can be effectively personalised. However, it also raises genuine concerns, such as potential job losses in the sector and perpetuation of bias in the data sets used by AI systems.

Accordingly, we need to better understand the technology and its limitations; more

those early books, amplified by the internet's ability to capture, and to a certain extent curate, knowledge on a huge scale.

> " The internet opened the doors to the world's biggest library, all for free. "

For knowledge to be of use to any learner it needs first to be curated: selected, organised and maintained. It also needs to be easy to navigate, so that what is most important can be found quickly. FInally, it must be verified, to ensure that the knowledge is accurate, relevant and reliable. GAI does all of these incredibly well, with the exception of accuracy; its current form is prone to "hallucination," or making stuff up. But over time, this will almost certainly improve.

Impact on education

It's easy with any new technology to extrapolate its potential to an extreme and then draw conclusions that seem logical but rarely prove to be accurate, due to variables and unknowns. For this reason, in attempting to predict the impact of GAI on education, it's best to think no further ahead than the next 5, maybe 10 years. As such, the following are simply a few key thoughts to explore possibilities and stimulate discussion as to how GAI can be used for good:

- **GAI will change our relationship with knowledge.** Each new technology impacts how we think about and engage with knowledge, and GAI is no exception. If we want to find an answer to a question, we Google it. If we want to learn how to do something, we watch a video on YouTube. With GAI, we can engage in conversation, asking questions and receiving answers in real time. This might result in a generation of learners who feel there is no need to learn anything because as Einstein is purported to have said "Never memorise something that you can look up." But learning is about far more than answers: knowledge is needed to formulate the questions in the first place. Critical thinking isn't possible without the building blocks of knowledge that underpin the process. What value do humans bring if they simply ask questions without the ability to understand and challenge what they are told? More ideally, learners become experts at formulating challenging and thoughtful questions:

![BOLD LEARNING — PRESENTED BY KAPLAN]

One final – and perhaps the most critical – challenge: the need to prepare learners to think critically to help discern truth from falsehood amidst the vast sea of information available. We have been trying to perfect this skill for thousands of years and yet it still eludes us. And it's getting harder as the result of the apparent authenticity of much of the content we see, which GAI can take to a whole new level. Add to this the tendency we all have to seek out and remember only the information that confirms our preexisting beliefs (confirmation bias) and you have a combination that can easily result in division, each side believing they are right with the evidence to prove it.

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Conclusions

As we explore the potential impact of GAI on education, it is essential to consider the lessons of history. By understanding the disruptions and benefits brought about by transformational innovations like the printing press and the internet, we can better prepare for the future. It's crucial to remain vigilant about the use of GAI and to actively promote critical thinking and digital literacy. By drawing from the past, we can harness the potential this technology will bring and create a future where active learning and knowledge are accessible to more people than ever before.