Empowering educators in the age of AI - Part three

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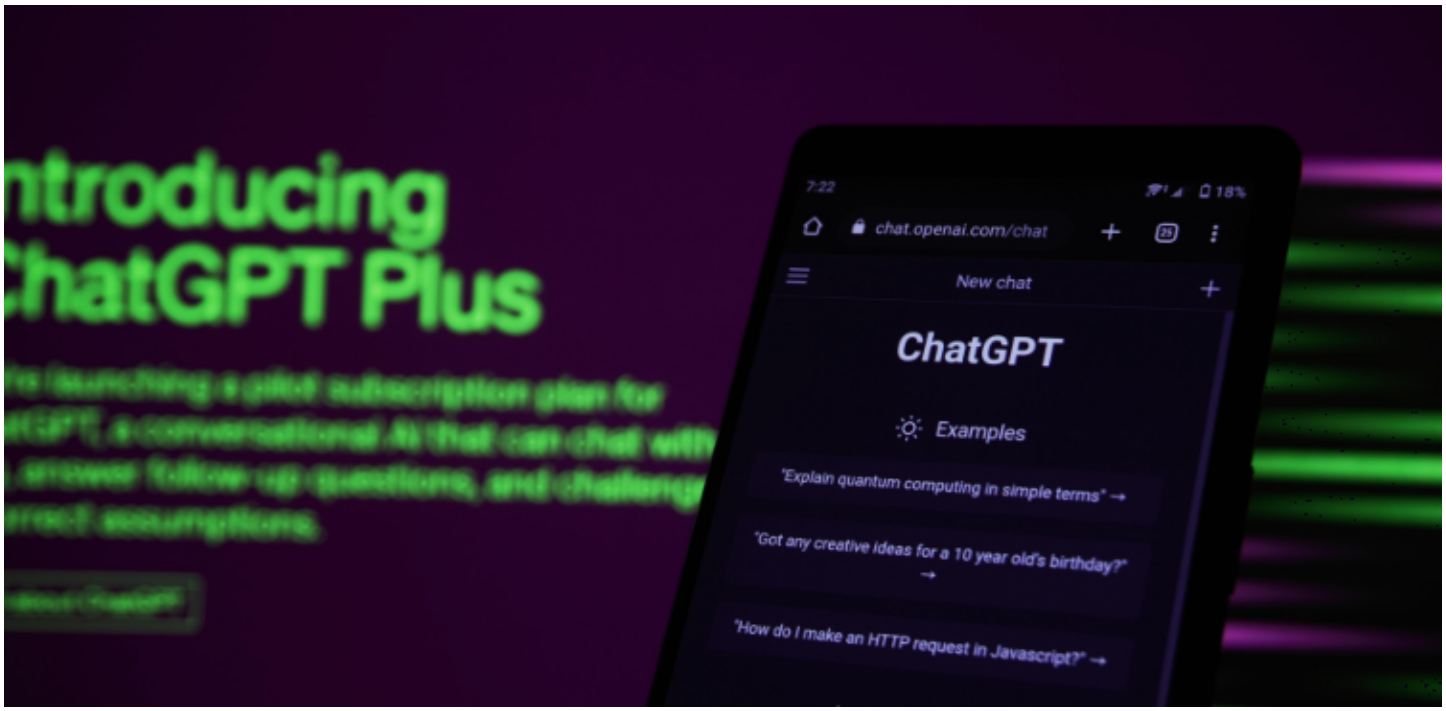

I teach in the global north and though I have been exposed in many ways to the global south education and teaching context, I understand that my reality could be vastly different for others - context matters in education.

The integration of AI in education could raise both positive and negative implications for global equity and the decolonisation of education.

On the positive side, AI could enhance access to educational resources, providing personalised learning experiences and bridging gaps for learners in underserved regions.

However, challenges emerge in terms of equitable access to AI technologies, as wealthier nations often have greater resources to implement cutting-edge tools, potentially exacerbating existing global disparities.

As an example, in rural areas, Labster offers a virtual lab, while tools like Caktus A.I. and ChatGPT support personalised tutoring.

This, combined with Gradescope and Flipgrid, enables students to document their learning on Microsoft Teams.

Despite imperfections, it does offer an enhanced academic experience and demonstrates the indispensable role of the

teacher in navigating all these elements.

It proves especially impactful in bridging equity gaps and fostering inclusivity in classrooms, emphasising that AI complements, not replaces, teachers.

In the context of decolonising education, AI can offer diverse perspectives and inclusive content, challenging traditional Eurocentric narratives.

Yet, there's a risk of continuing and amplifying biases ingrained in the algorithms if not carefully designed, especially considering that it's mostly being done in English.

The reliance on AI systems developed in predominantly Western contexts may inadvertently reinforce existing power imbalances, hindering efforts to create truly inclusive and culturally diverse educational environments which would represent the realities of our classroom today.

Striking a balance involves intentional efforts to ensure equitable access to AI technologies globally, a conscientious approach to developing AI systems that consider diverse cultural perspectives and histories, fostering a more inclusive and equitable educational landscape.

What I would emphasise is that the use of AI or any digital tool should align with the age, skill level and subject matter, while serving the goal of enhancing various facets of a holistic education and enhance the teaching and learning.

As an example, a new theory about the mental health crisis appeared in an Edutopia article "that a primary cause is a decline over decades in opportunities for children and teens to play, roam and engage in other activities independent of direct oversight and control by adults."

It is imperative that AI doesn't become an overarching controlling presence in their lives reinforcing the delicate balance and interconnectedness that professional educators must do for a holistic education.

The significance of age-appropriate implementation and scaffolding, the foundational building blocks, paves the way for a future where university students are adept at utilising AI-driven personalised learning tutors or platforms in an ethical and responsible manner.

It can be a positive.

These explorations have solidified my thoughts on my personal practice in the classroom which has been to focus more on a holistic approach, engaging students with the process as much as the end product, conferencing with students to defend their thought process and reasoning, utilising AI in a way that engages students such as looking at an AI generated text to teach critical thinking, cross-referencing and collaboration and teaching how to effectively use some of these AI tools.

A collective journey to mitigate the risks posed by AI

I typically approach disruption and new initiatives in my classroom with a sense of calm and quiet excitement to the possibilities.

However, this journey has me feeling uncomfortable and remarkably destabilised. It takes an emotional toll and many are not going at it alone, meeting on social media in groups such as "ChatGPT for teachers".

The scope of change we now face extends far beyond education with us being left behind by the quickness of its integration in the workforce.

As educators and professionals, it's our responsibility to confront these feelings of fear and discomfort.

We must actively engage with our lack of understanding to chart a way forward, avoiding being swept along paths that we intuitively know are not right.

Through my personal experiences and discussions with various stakeholders globally, it's become evident that we lack a comprehensive understanding of the vast landscape of AI, both in terms of its potential benefits in education and the potential pitfalls.

While I am engaging with AI, I do so with a vigilant awareness of the uncertainties and challenges it poses.

In a recent article, Michelle Toh and Nectar Gan conducted a comparison between Baidu's ERNIE Bot 4.0, a product of the Chinese technology giant and GPT-4.

While both demonstrate similar capabilities, ERNIE Bot boasts a larger current knowledge base. What raises inherent concerns is ERNIE Bot's obligation to adhere to the directives of the ruling Communist party, involving content censorship and user blocking for questioning the government too frequently.

It's noteworthy that China was among the first countries globally to establish policies on generative AI, a move followed by the EU.

In one instance, the aim is control and in the other its aim is to ensure ethical and responsible AI practices, addressing potential risks and challenges and most importantly safeguarding fundamental rights and values.

The alarming aspect is the misuse of AI for government control, programming it purposefully with bias and misinformation.

This underscores the importance of remaining vigilant against such pervasive actions but also against those that, without intent, perpetuate existing bias and inequities.
The other aspect of AI and any digital tool that keeps me up at night is protecting the student.

As we explore the use of these tools, we need to be aware that cybersecurity measures might not be current, but we do have some possible solutions.

I have been looking at how implementing a blockchain-based system where each student has their own blockchain.

A blockchain is a decentralised ledger technology recording transactions securely across multiple networked computers.

Each block includes a timestamp and links to the prior block, forming an unalterable chronological record. This could be a viable solution for ownership and control of their educational digital data.

Currently, can we really answer who owns the student's data and work once they graduate? Are we and the students aware of how their data is being used from these digital tools?

Each student's blockchain could securely store and manage their academic records, achievements and other relevant data, providing a transparent and tamper-resistant ledger that the student owns and controls.

However, careful consideration of privacy, security and legal implications would be crucial in implementing such a system.

The impact we are witnessing and experiencing in this new era of AI within our high schools and universities is undeniably real and our professional opinions must be acknowledged as integral to these larger discussions.

We require real-time research, ongoing professional development, ideas for implementation based on our individual context, an environment and culture to empower our teacher agency and the ability to pivot as necessary – all essential for teachers in this evolving and increasingly complex profession.

In the final article of this series, I will explore ways forward, both in broad terms and with some suggestions on how educators can navigate these challenges and engage responsibly.

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