



As I continue my studies towards a Masters Degree in Education Leadership, I have to thank colleagues at the National College of Education (NCE) for pointing us to this recently published working paper on artificial intelligence. After digesting 'The Future of AI in Education - 13 Things We Can Do to Minimise the Damage', penned by education and technology luminaries Arran Hamilton, Dylan Wiliam, and John Hattie, I felt I'd share my thoughts on this increasingly crucial conversation. The article serves as a cautionary tale and a roadmap, detailing the pitfalls and promises of AI in the educational landscape.

The working paper also offers various scenarios considered by the authors for the advancement of artificial intelligence more generally and risks associated with the 'de-education' of humanity with AI easily replicating and exceeding our own capabilities, requiring humans to think and do less. They offer the up-side too, as the need for humans to work in the traditional sense disappears and we lead a life of almost permanent retirement - the authors explore ideas around a 'Universal Basic Income' as humans become completely de-coupled from economic activity and are paid a monthly 'freedom dividend' to spend as we wish. Cue lots of raised eyebrows, but this is a fascinating paper and one that forces readers to pause and think hard about artificial intelligence and what it means to us. This is not a distant technology, this is one that is advancing incredibly quickly and the scenarios suggested are possibly only 2-5 years away.

Here, I offer a deeper dive into some of the most pressing points raised in the article, along with my own reflections and questions they evoke.

THE WEIGHT OF ETHICAL CONCERNS

The paper places heavy emphasis on the ethical dimensions of AI in education, something that strongly resonates with us all, I'm sure. For instance, the authors ponder on the potential for AI to sift through students' data, raising privacy concerns, and even inadvertently introduce biases in educational outcomes. These are not just technical issues but ethical dilemmas that need to be carefully considered at both policy and implementation levels. The educational sector has always been more than just about grades and efficiency; it's about moulding future citizens with a well-rounded worldview. Bypassing ethical concerns could lead to an ecosystem that prioritises algorithms over true education.

THE FINE LINE BETWEEN PERSONALISATION AND STANDARDISATION

A significant challenge that the authors address is the balancing act between personalised learning experiences and standardised curriculums. With AI's powerful algorithms, we could hyper-personalise education to the point where every student follows a distinct learning path. While this sounds ideal, the authors warn us that too much personalisation can erode the shared cultural and academic norms that standardisation provides. I couldn't agree more. Standards serve as a benchmark that allows us to gauge performance and proficiency on a broad scale. They ensure that no matter how customised the learning experience becomes, there are unified milestones that every student should reach.

THE WIDENING DIGITAL DIVIDE

One of the most troubling points raised by the authors is the potential for AI to exacerbate educational inequalities. Schools in technologically advanced areas (areas or countries) may have the upper hand in integrating AI tools, widening the gap with schools that are already resource strapped. I can't help but be struck by the irony here; a technology that offers the potential to revolutionise learning, scaling quality education throughout the globe, could actually set us back in efforts to level the educational playing field. Any rollout of AI in education needs to be done equitably, ensuring that all students, regardless of socio-economic background, have equal opportunities to benefit from this revolution.

THE POWER OF ALGORITHMS

'Who holds the algorithm holds the power', caution the authors. This is a salient point in the era where knowledge, or rather data, is power. Algorithms determine what information we see, how we interact with content, and even how we learn. The authors argue that these algorithms, which could profoundly influence a generation of learners, should not be left under the control of a select few, usually big tech companies. It's hard to disagree. There should be public scrutiny, and perhaps even a decentralised approach to managing these powerful algorithms that can dictate educational outcomes.

A ROADMAP FOR THE FUTURE

The article culminates in offering 13 actionable steps that can guide us towards a future where AI's incorporation into education is both beneficial and ethical. These range from creating universal ethical guidelines and standards for AI in education to training teachers on how to leverage AI tools for pedagogical improvement effectively. These aren't just abstract ideals but actionable points that educational boards, tech developers, and policy makers can start to enact now.

IMPACT ON SKILLS AND LEARNING - THE CHARTERED MANAGEMENT INSTITUTE

I also came across discussions papers and research carried out by CMI for their Management 4.0 campaign as they explore the skills that managers and leaders are likely to need in a workplace transformed by 'new technology, new business models and societal changes.' This led me to their latest discussion paper, available here - <https://www.managers.org.uk/wp-content/uploads/2020/02/Lifelong-Learning.pdf>

CMI talk of the 'Fourth Industrial Revolution' and its seismic disruption of the workplace. They suggest that by 2030, something like 14% of the global workforce (around 375 million workers) will need to find new jobs and careers as automation and advances in AI transform the world of work¹. CMI go on to say 'Many existing roles and occupations will disappear, and many new ones will be created. Some predict that 85% of the jobs in 2030 do not exist yet².'

¹ McKinsey and Company - <https://www.mckinsey.com/featured-insights/future-of-work/retraining-and-reskilling-workers-in-the-age-of-automation>

² Dell Technologies - <https://www.delltechnologies.com/content/dam/delltechnologies/assets/perspectives/2030/pdf/Realizing-2030-A-Divided-Vision-of-the-Future-Summary.pdf>

CONCLUSION: THE NEED FOR THOUGHTFUL DIALOGUE AND ACTION

'The Future of AI in Education - 13 Things We Can Do to Minimize the Damage' is not just an article but a call to action for all stakeholders involved in education and technology. While it

unveils the hazards lying on the path of unbridled AI adoption, it also paints a picture of how we can navigate this complex terrain with caution and foresight.

If you haven't read this seminal piece yet, you really should!

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August 2023