Artificial Intelligence – the crossroads

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Prediction: Artificial Intelligence will emerge to drive innovation in Academic Institutions.

The conceptual framework surrounding academic integrity offers a glimpse into the complexities surrounding how and why students cheat. The framework becomes increasingly fraught with a myriad of other factors when artificial intelligence is used to enhance the academic output of students. Thus, blurring the line between synthesized original thought and outright theft and plagiarism.

We are at a crossroads in technological history. The fourth industrial revolution described by former World Economic Forum chairman Klaus Schwab is in its infancy. New and emerging technological markets continue to evolve as the evolution of complex digital technologies increasingly raise the stakes in a systematic overhaul of the status quo. Momentarily, these disruptors can be non sequitur.

The Process of Mastery

To achieve mastery in a particular field requires continuous learning and training. A careful refinement of the knowledge and skills presented. This in part is transferable to the tertiary environment where students undertake a form of vocational training or study in a given discipline to gain mastery. The reasoning behind tertiary study is as individual as the student.

The temptation for students to cheat using digital aids becomes increasingly prevalent when outcomes become high stakes. Students reason that high level outcomes justify the process of cheating over the process of mastery. In this outcome, a student will achieve mastery through the process of skill refinement. Students are now equipped with multiple digital tools to enhance their assessment outcomes.

Powerful new computing technologies allow students to achieve more productivity within the blink of an eye. The results whilst not always flawless provide seemingly high-quality work on a moment's notice. Grammar and writing tools allow users to undertake complex tasks with minimal mastery to the skills and content. Artificial intelligence is part of this new digital revolution.

Enter Artificial Intelligence

The emergence of Artificial Intelligence offers users a plethora of creative and administrative tools at the blink of an eye. Whilst much has been stated around Artificial Intelligence and its involvement in the fourth industrial revolution (4IR – the advancement of technology in the 21st century), there is still a larger debate concerning its overall impact playing out.

An almost 'ludditesque' reaction to Artificial Intelligence being the harbinger of the Apocalypse has prevailed through subsets of public opinion. The notion that all jobs will be replaced by Ai within the next few years is unfounded. The premise ignores the human factor to work and built environment. However, AI does provide a certain amount of concern for academic institutions as the ability and instances of students utilising it to enhance their written and, in some cases, non-written assessments increase.

The notion of the past and its technologies can be seen as vague. The use of handwriting is often seen as relegated to the past. Once upon a time this was not the case. It has however increasingly become so in the digital era where it is not uncommon for a student to never use pen and paper. The same to a degree can be said about cash. Regardless of near catastrophic events such as the 2024 Australia-wide update debacle where access to banking and other IT platforms was limited.

Guiding Student conduct

How and why students choose to plagiarise is complex. It requires a myriad of motivational factors and analytical studies of human behaviour. Human beings are complex. And no one size of why actions occur can answer the question easily. Inversely, students can choose to take a course of action that is advantageous to their future academic endeavours.

It is important to remember that most students utilise tools such as AI to increase their efficiency and academic outcomes. This presents a challenging set of precepts for academic institutions. Academic misconduct or cheating is not a new concept. Plagiarism has existed for millennia. The shifting point is the tools at the disposal of the students undertaking the tasks.

The use of continually evolving tools can present invigilation challenges for institutions as algorithmic shifts often render current software platforms mute. Part of the shift is to ensure student engagement with learning materials and course requirements. A carefully guided sense of knowledge and skills acquisition. The secondary part of the equation is an increase in and institutions proctoring capabilities.

Proctoring Capabilities

The use of proctoring software provides part of the solution for monitoring how and when students choose to use enhancements for their work provides an important first step in the process of ensuring academic integrity. Adapting to an evolving world of artificial intelligence provides a unique opportunity for academic institutions at the crossroads of technological advancements.

Imagine a world where academic integrity is at the forefront of innovation. Consider its applications and benefits. Particularly for academics as they aim to reward student progress in their journey towards mastery. A sense that progress can be achieved towards a student's course goals. This is the world we seek to emulate and enhance on a daily basis, providing students with a larger capability to manage their progress without enhancing their work with digital tools and technologies.

The emerging digital world of the last 30 years has seen an explosion in the growth and power of digital technologies. The implementation of artificial intelligence has proven to be a powerful tool for the 21st century workplace. The shift in part is seismic. A new world has emerged. One that promises great opportunities for academic institutions and their students in the coming years.

Skynet or Friend?

The trepidation surrounding AI may well be partially warranted. Hollywood has done a phenomenal job ensuring that technology has become a diabolic muse. Terminator, Westworld, Brainstorm, and Logan's Run all spell dystopic and nightmarish futures for humans. A world where machines mercilessly hunt man like prey. But - is this realistic or within the realms of fantastical dreaming?

Artificial intelligence whilst emerging to make some jobs redundant is unlikely to become Skynet overnight. Skynet for the non-initiated is the name of the governmental system in the Terminator franchise that initiates Nuclear Armageddon. In fact, the Australian Government Department of Industry, Science and Resources has an AI Ethics Principles page. The principles whilst voluntary provides a framework to ensure that malevolence is kept at bay through checks and balances.

Additionally, the use of AI principles provides a strong sense of direction towards ethical replacement of low-skilled non manual jobs. It is important to remember that AI is a tool. Used effectively, this can be beneficial for many people. Used ineffectively and unethically, this may lead to widespread layoffs or contribute to the next big market crash.

Where to from here?

The emerging technological landscape will present a smorgasbord of opportunity for those willing to embrace the technologies in the right way. It wasn't so long ago that the populace went about their daily work with minimal or no digital technologies. Those days are long passed. The future will present opportunities to the current and future generations of people that allows for creative solutions implemented by digital technologies.

The next five years will see AI increasingly implemented into daily life. The first generation of smartphones and smartwatches with AI are currently available. The next steps will see smart devices and connected webs of appliances, allowing for a fully integrated life where supporting tools will assist in budgeting, purchasing household necessities, and scheduling important medical appointments. Technology will become ever smaller to the point of implant technologies.

AI use in academia will become second nature with students utilising it as an effective tool as opposed to using it for plagiarism and cheating. There will be great opportunities ahead for those who embrace it in an ethical manner. In five years, we will look back to see that 2020 and the COVID years became the dividing line between the old and new world. A world where more became possible because our tools were more powerful. Because despite all our concerns and trepidations, the world changed technologically. We face two diverging roads. One less travelled. The other sullied by conformity and comfort. And to quote Robert Frost: "And that has made all the difference."

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