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The Future is Now…

What generative AI means for our students in 2024

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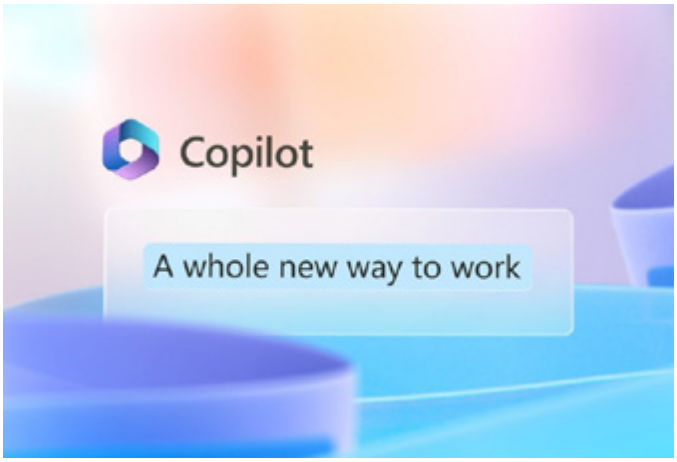
Have you ever looked up to the stars at night, and been struck by the sheer vastness of the sky? Viewed the cosmic lights from the ground and felt completely dwarfed by their significance, their potential? Interestingly, peering into the modern-day computer screen has much the same impact for many of us at this point in history; awed, impressed, and inspired by the capabilities of the platforms to hand. Take Microsoft Office, as a starting point, which has recently launched its' impressive 'Copilot' to new keyboards around the world, destined to transform the ways in which we live and work, at the slightest touch of a button. Whilst there are some remarkable breakthroughs in generative Artificial Intelligence (AI) that will positively impact our society, before we move forward, it is important to note that the term 'generative' refers to an algorithms' ability to assess user preferences and skill sets, and then tailor further content to suit these interests. This term is being used more often now to refer to AI capabilities and this generative function is already active in many parts of our everyday; think Netflix's 'recommended for you', or your Google search function, or even the stream of advertisements that enter your Instagram feed as you scroll. In addition to the positive and streamlined assistance that these generative tools provide, there are certainly some ways in which humanity is likely to be challenged by the advances that have evolved, and we must take heed of these if we are to use the technology to the best of its' potential.

On the first staff day of Term 1 this year, before our students commenced, all members of the Luther College team had the opportunity to hear from change strategist Michael McQueen (Michael McQueen - Speaker, Trends Expert & Author), who imparted his current understanding of generative AI on the future of education in Australia. His narrative followed the tag line, 'Teaching for Tomorrow', and gave staff insight into the myriad skills students will need to succeed in this new world. Ultimately, he believes that generative AI will have a part to play in this skill development, and we as educators need to brace ourselves for the ride. McQueen challenged Luther staff to understand that the online world in which we live is so completely different from that of five years ago, that we have to change our way of doing things in the classroom if we are to provide our students the skillset that they need to be future proofed once they leave our gates.

Change strategist, Michael McQueen



Microsoft Office's new Copilot key

McQueen framed much of his analysis on Einstein's oft-quoted sentiment, that 'insanity is doing the same thing over and over again and expecting different results', (Wilczek, F., 2015), however McQueen turned this on its' head. He in fact claimed that the true is opposite, that 'doing the same thing and expecting the *same* result', (McQueen, M., 2024),

should in fact be the modern definition of insanity. The world is not what it used to be, and so it follows that the end result for our students should not be what we already expect.

Only 12 short months ago, the advent of Chat GPT was upon us, and we teachers were left scrambling at the end of our summer break trying to work out what this would mean for our classes. Certainly, our concern was primarily for authentication – how could we verify students' work was their own? How could we encourage students to think through the content before turning to AI to find the answers? One of the criticisms of Chat GPT has been that it *does* make mistakes in response if the questions are not clearly defined enough for its' algorithms. Further, when answers are then produced, the language used by the program can be robotic and clinical, and very clearly artificially generated. Now, a year later, we are faced with new and improved generative AI tools which on all accounts are even more user friendly than the last, and in theory, should make our lives even more streamlined.

Enter Microsoft Copilot; the one-stop-shop for generative AI which has been operating in the background of our desktops for a while now, but is coming to all new keyboards early 2024. Copilot is fundamentally designed to minimise the mental load so that we may be more creative; put together our 'to-do' lists so that we can focus on productivity. It has the power to synthesize data so that we may skip to the analysis. It can take our ideas and order them into palatable power point presentations, ready to be shared and understood by others. It can take notes, write plans, and re-write our drafts to align more closely with the intended audience. In short, it is here to make our work life function more seamlessly, and it is here to stay.

Whilst on the surface, this technology sounds like it has the potential to take over, before we get to that, let's spend some time exploring how and why this new AI platform might work in our favour. To consider, the advent of generative AI such as Copilot will mean that:

1. **It can complete menial tasks, so that we have more time to make important decisions**
2. **With this additional time, we can boost our creative thinking**
3. **Out of this creativity will emerge innovation and change**

To unpack these ideas further, firstly, the advent of Copilot is here deliberately to simplify our lives and our thinking; it is the tool of the future, and it is here now. By minimising the taxing nature of 'life admin', completing our daily task lists or grouping our sets of data, we will, in theory have more time to ourselves in the world of work or education, more time to boost creativity. Universities around the globe agree that the rote learning of the past is insufficient for success in the modern world, with our very own Melbourne University launching its 21st Century 'Competency Kits', (Faculty of Education (unimelb.edu.au), outlining the competencies or skills required to thrive in society today and in the future. As a faculty we are already committed to developing these attributes in our students with the Luther Learner framework, but further to this, creativity has been recognised globally as the single most important attribute an agile modern learner should possess; the power to take an idea and transform it into something new and remarkable. Students, and indeed people, need the time and flexibility to consider ideas and the impact that they will have on a community. Researchers at the McKinsey Global Institute agree that the increased assistance of generative AI such as co-pilot will certainly 'transform the nature of work and the workplace itself', (Manyika, J., 2018). However, these researchers are also confident that there will still be opportunities aplenty for people to work, grow and evolve in industry if we are willing and able to adapt with change.

One of the key ways in which we will continue to innovate and develop with time is through creativity and the ability to look at situations with a modern and agile lens. As the mundane tasks of the workplace become AI operated, people

will need to develop in original ways in order to make continued improvements and advancements. Whilst there may be a natural reaction to think that you are not a 'creative person', the good news is that people can be taught this attribute, just like any other skill or application. Here, we need to think beyond the hyper colour of painting and drawing that might be classically considered 'creative', and understand that at the heart of any innovative breakthrough or strategy lies creativity.

The theory continues, that once we have the scaffold in place, and with the gift of more time for research and reflection, the result will be the birth of innovation, invention and ultimately, change. When we consider this in terms of the school environment, research coming out of the Harvard Graduate School of Education in Boston suggests that teaching students to think rather than simply memorising content, is a step in the right direction. Student led inquiries, or Harvard's Project Zero Cultures of Thinking, work deliberately to move students from the sponge state of information absorption to the agile place of thinking, drawing connections and asking 'what if' questions, Homepage | Project Zero (harvard.edu). Already in schools we are managing pedagogy to support this contemporary way of viewing the world, and classroom teachers are trained to deliver their content by adopting this framework. At Luther College we are also fortunate with the agile teaching spaces we have within our grasp, and ultimately these spaces, combined with the classroom practice, will lead to invention, creation and innovation.

Whilst there are certainly numerous positive advances in generative AI and the impact this will have on people and their time, the other side of the coin does show limitations which need to be carefully considered if we are to advance to our potential. Let's consider these challenges, below.

The negative flow on from generative AI may mean that:

1. **Making life easier can generate apathy in the user**
2. **This disengagement can lead to a lack of motivation and removal of 'rigor'**
3. **This indifference has the potential to eliminate risk and opportunity to fail**

One of the main critiques of generative AI is that the intention behind it is to make our lives more simplistic, remove discomfort and pain so that we may feel success more easily, and this in turn can lead to a lack of effort. When things are routine and straightforward, the danger of this fluency is that we can develop a sense of apathy. This term, characterised by '*feelings of indifference and lack of emotion*', (Purse, M., 2022), can develop if life becomes too predictable, too uncomplicated, too vanilla. When things become routine, such as driving your car to work each morning, or following the same family meal plans, the human response is often indifference; if there is no energy required to make this task successful anymore, we are quite unlikely to stretch ourselves and invite change. Why would we want to spend energy when we can tune out and listen to podcasts in the car, rather than think about a different (and potentially better) route to work? The answer is that we do not, because our routine is already fixed, and therefore the habit is difficult to break.

This same analogy applies to our students in the classroom; why would they find motivation to extend themselves, push themselves through a challenge, if the answer can be found at the click of a button? Why would they want to make themselves feel uncomfortable, or stretched, if the answer is much easier to find? The fact is that some students will not; they will fall into the apathetic mindset of 'near enough is good enough', and they will not learn the satisfaction that can be achieved through rigor and intrinsic motivation. Glennon Doyle, a current podcaster, author and activist imparts her view that, "*here is the world. Beautiful and terrible things will happen. Don't be afraid.*" (Doyle, G., 2023), which suggests a tenacity for life that is inbuilt, authentic and hard to erase. Through challenge, rigor, and

extending ourselves beyond what we think we can, to achieve something new, provides an inner sense of pride and accomplishment that is hard to replicate without the ardour. We often tell our children that sometimes life is not easy, but we must move through the different trials and changes so that we may grow and evolve into our whole selves, and the same is true in the case of education. Generative AI has the power to make our lives too easy, the answers too straightforward, the planning and preparation too lightweight. It follows that through this simplicity we risk losing the rigor; the innate pride and joy we take when we accomplish something that we have worked hard to achieve. Educators must be mindful of this, as we craft our learning experiences for these children of the future.

This notion leads us to the discussion of failure, and the ways in which school communities hold the unique opportunity to program for success, and indeed failure. Educators must provide opportunities for students to challenge themselves safely, have them learn the internal success that can be felt when a task is overcome, have them understand that through failure comes growth, evolution and opportunity. If schools are remiss at providing these chances for change, we risk diminishing our understanding that through discomfort comes advancement. Schools such as ours are very good at building risk opportunities into curriculum for their students over the course of each academic year, whether this be camp experiences, or academic challenge, or sporting success. However, the crux here is that students need to be made to feel challenged, or uncomfortable, or that something is hard to master. If these feelings of test are not met, then the rigor is not there, and the growth cannot occur.

When Michael McQueen imparted his wisdom on staff in January, he reminded us that generative AI is here to stay, and we had better get ourselves up to speed with its' capabilities or we will be left behind. Moreover, not only would we run the risk of obsolescence, but we would also be doing our students a disservice if we are to ignore the technology and just keep teaching as we have always done. McQueen challenged us by claiming that in his view, 'insanity is doing the same thing and expecting the *same* result', (McQueen, 2024), implying that as educators and parents we must continue to evolve with time and interact with young people in new and engaging ways. In the classroom, this means challenging students to take risks, to think for themselves and not simply accept the facts laid out before them. At home, this might mean giving your children the opportunities for more freedom, or shifted boundaries, or shared responsibilities. Certainly, for humankind as a race this means analysing the worlds problems with a 21st Century lens and seeing how we might solve some of these tangled riddles with the best and newest of technologies.

Ultimately though, we need to continue to stare in awe at the twinkling night sky, to marvel in fascination into the unforeseeable depths of the computer screen, and continue to feel amazed, excited and inspired each and every day. It is through this vitality, this energy and this curiosity that we continue to grow, evolve and shift in remarkable ways, and for this we will ultimately live our lives for the better.

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