Embracing Generative AI in Higher Education: Navigating the Transition in AUT

Symposium theme: Practice

Presentation title: Embracing Generative AI in Higher Education: Navigating the Transition in AUT

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Abstract

The emergence of generative artificial intelligence (GenAI) has prompted significant changes in higher education. We are undergoing a profound transformation, prompting universities to reevaluate pedagogical and assessment strategies. In this short paper, we adapt the Kuebler-Ross Five Stages of Grief to reveal how Auckland University of Technology (AUT) recognise GenAI as an indispensable part of modern education. The paper uses empirical accounts from early AI adopters to show that AUT is at a place of acceptance: embracing AI not just as a tool but as a transformative force. AUT educators are adapting to this new technology, despite traditional resistance to change of teaching practices. Accounts of integrating GenAI into learning, teaching and assessment demonstrate that our educators are taking the lead in guiding this transformation. We are not blind to gen AI's flaws which include bias, transparency, and privacy. But we debate, explore and upskill ourselves to address these concerns. Our students keep pushing us forward in this cycle through anger at GenAI's arrival to acceptance that it is here to stay, and we must continue to find ways to move forward in collaboration with our learners.

Keywords: AI in Education; technology acceptance; improved learning outcomes; assessment reform

Embracing AI in Education: From Anger to Acceptance

The rapid integration of GenAI into the educational sector has sparked a range of reactions, from excitement to apprehension, to outright anger. Many educators find themselves struggling with the pace of technological advancement, fearing GenAI might undermine their roles and change the essence of traditional teaching (OEB, 2023). However, it is becoming increasingly clear that AI is here to stay, and the real challenge lies in moving from a place of resistance to one of acceptance. University graduates will require literacy in AI technologies and their ethical application to meet requirements of the job market (World Economic Forum, 2023). This short paper offers a practice-based account of lessons from early adopters of GenAI in teaching at Auckland University of Technology (AUT), providing real-life use cases aimed at transitioning educators from anger at GenAI's arrival to acceptance, and ultimately enhanced teaching practices.

The Kuebler-Ross Grief Cycle

Elisabeth Kuebler-Ross introduced the *Five Stages of Grief* in her 1969 publication *On Death and Dying* (Rivas & Jones, 2014). The five stages of the *grief cycle* are: denial, anger, bargaining, depression and acceptance. These stages may not be linear as individuals follow unique paths (Gerhardt & Puchkov, 2023). The grief cycle can also be applied to academia. Rivas and Jones (2014) use this model to examine a USA university as they "began its organizational change towards national accreditation" (p. 8).

We can apply the Kuebler-Ross Grief Cycle to understand the different reactions academics are experiencing regarding GenAI, such as ChatGPT. This allows us to understand why some are 'stuck' in a stage of the cycle (Gerhardt & Pushkov, 2023). Whilst there has been plenty of discussion amongst academics about the impact of GenAI on their courses and assessment, this is anecdotal, and little has been published in academic journals. Educators' reactions to GenAI mirror Kuebler-Ross' stages of grief: dealing with change beyond control is akin to mourning a loss, as illustrated in Figure 1.

Figure 1: The Kuebler-Ross Grief Cycle in Education

1. **Denial: The Initial Shock**
   The first stage of the *Grief Cycle* is *Denial*, described in Rivas and Jones (2014) as "a…refusal to accept facts, information, reality...relating to the situation concerned." In November 2022 OpenAI launched ChatGPT (Chat Generative Pre-Trained Transformer) (OpenAI, 2024), described as a "a language model that can generate realistic, human-like text" (ABC, 2023, para. 6). GenAI's arrival seemed improbable, and educators clung to their traditional methods, dismissing this

digital newcomer. There was resistance to change: 'but we've always done it this way'. ChatGPT and similar tools would allow educators to create personalised content and even do some of our work by writing lesson plans. This was a seismic shift in education. Whilst ChatGPT came as a shock to many, it wasn't new. GPT-1, -2, and -3, dating to 2018, offered "unsupervised learning in language understanding tasks, using books as training data to predict the next word in a sentence" (Marr, 2023, para. 10).

2. **Anger: The Storm Brews**
   The second stage of the *Grief Cycle* is *Anger*, "an overwhelming emotion" (Rivas & Jones, 2014, p. 7) aimed at GenAI tools infiltrating classrooms, saw anger flare, with educators feeling betrayed. Educators were outraged that "ChatGPT could potentially be used by university and school students to cheat on written assignments without being detected" (ABC, 2023, para. 9). A senior lecturer from Victoria University of Wellington advocated for closing universities, to workshop "how their lessons and assignments should change as a result of AI development" (Nicol-Williams, 2023, para. 13), liking the introduction of GenAI as an arms race, with students ahead and academics falling further and further behind.

3. **Bargaining: Seeking Balance**
   The third stage of the *Grief Cycle* is *Bargaining*, where "individuals trying to understand their situation often explore ways of 'striking a deal with higher powers' to 'postpone the inevitable'" (Rivas & Jones, 2014, pp. 7-8). Educators wanted GenAI detectors to find the 'cheaters'. Early attempts saw universities turn to trusted partners, such as plagiarism tool Turnitin and their AI detection tool. Amanda Hoover (2024, para. 1) states "Students have submitted more than 22 million papers that may have used generative AI in the past year…Turnitin shows." In February 2023 Mitchell Clark (2023, para. 1) states, OpenAI "has released a free tool that it says is meant to 'distinguish between text written by a human and text written by Ais'". Hoover (2023, para. 5) wrote, "Detecting the use of gen AI is tricky. It's not as easy as flagging plagiarism, because generated text is still original text."

4. **Depression: The Weight of Change**
   The fourth stage of the *Grief Cycle* is *Depression*, "whereby individuals begin recognizing the truth of the situation and accepting reality" (Rivas & Jones, 2014, p. 8). Educators mourned their traditional roles, wondering if they were obsolete. In December 2022 came the declaration: "AI is going to make the college essay irrelevant" (Cain, 2022, para. 1). At this stage of the Grief Cycle the focus is on trying to create assessments that are difficult or even impossible for students to use GenAI to cheat. But as an article by ABC (2023, para. 12) states, "This would require a radical rethink of school and university assessment."

5. **Acceptance: A New Dawn**
   The final stage of the *Grief Cycle* is *Acceptance* where "people begin to experience objectivity of the situation" (Rivas & Jones, 2014, p. 8). Slowly, acceptance is dawning. Educators realise that AI is an ally. Students are looking to their lecturers to accept that they too want to use GenAI tools. Education is now at a critical juncture: educators who don't accept that AI is here to stay risk missing out on all the benefits and grappling with AI detection to the detriment of student

learning. Educators who do accept this new reality are finding progress towards changing policies and reviewing assessment design at an institutional level is slow. Ethical considerations are paramount.

At AUT our approach to gen AI has evolved. Some are adapting and seeing the valuable contribution tools can bring. We realise that while traditional education has changed fundamentally, a future is emerging where our expertise can coexist with GenAI tools to enrich our students' learning journeys. The remainder of this paper describes how AUT academics and students are *accepting* GenAI.

Acceptance at AUT: Our Ongoing Journey with GenAI

At AUT we find ourselves in a dynamic phase as we move to a place of acceptance of AI and look for ways to move forward. Exposed to GenAI tools, our students are demonstrating improved problem-solving abilities and adaptability. These tools are helping our students approach academic challenges with a creative and flexible mindset, enhancing their critical thinking and engagement in learning, underscoring the importance of incorporating AI into educational frameworks to enhance learning outcomes (Walter, 2024).

Curiosity and Exploration

We are no longer passive observers. We are running workshops, seminars, professional development courses - anything to understand GenAI better. At an AUT event in May 2024 an audience of over 100 educators from across Auckland heard from our own panellists who are actively embracing AI. A postgraduate shared how AI tools like Elicit and KnowledgeMaps are "improving [her] knowledge acquisition, productivity, and cognitive abilities". Tools like Beautiful.ai enhance this student's creativity and help her overcome language barriers. She can generate engaging PowerPoint slides by prompting with imperfect English and training the AI with additional context to get the results desired; even getting an AI-written script to help prepare for oral assessments. Grammarly translates work written in the student's own language, containing her own thoughts and articulation of ideas, into correct English. Discussing AI in academic writing, Mohamed Khalifa highlights that AI-driven language tools can help bridge communication gaps for non-native English speakers, providing more accurate translations and helping to prevent biases in academic settings (Khalifa & Albadawy, 2024).

Our Faculty of Business, Economics and Law (FOBEL) rolled out professional development sessions in *gold standard prompt engineering*, via the Learning and Teaching Department (LTED). LTED also recently held a 3-day symposium featuring short talks from AI adopters. We continually ask: "How can this benefit our teaching and the students' learning?" Our Researcher Education and Development (RED) team have developed workshops for using GenAI tools that include a "Using AI Tools to Streamline Your Research Processes" workshop for teaching staff. Analysing content, finding research articles, creating scaffolds and writing plans, and data visualisation are some of the skill areas focused on. RED have also updated guidelines for responsible GenAI use in their Postgraduate Handbook and hold GenAI-themed forums at staff research development days to discuss the future of AI in their roles, supervision and wider AUT.

Student-Centric Adoption

In a postgraduate class on responsible leadership, various approaches to utilising GenAI were carefully introduced, starting as an open conversation at the beginning of each lecture. Strategies

discussed ranged from allowing students to run queries on course literature through a proprietary small-world neural network (where the knowledge domain is defined by the educator) to using various platforms to refine original text. Students now had ethical and practical guidelines for incorporating AI tools into their academic work; a form of positive supervision to encourage students to actively engage in AI technology (You et al., 2023).

Early in the course, a dyslexic student sought to discuss the potential of GenAI as a support tool. This student reported difficulties in processing information efficiently, identifying patterns in knowledge, and their ability to produce work that conveyed their intended meaning. The student noted "I believe that AI can help make the complicated simple for everyone, not just me as a dyslexic". GenAI can potentially level the playing field in education through impact on a variety of stakeholders (Mansinghka & Saboo, 2023). From this student's perspective, GenAI helps him as a dyslexic learner to express ideas more fluently by suggesting words, correcting spelling/grammar, and assisting with sentence structure. This support boosts confidence and reduces the cognitive load associated with writing tasks, allowing students to focus more on content rather than mechanics (Stagg & Sjoblom, 2018). As well as agreeing on the advantages of GenAI with the student, guidelines around academic integrity were discussed and agreed. The student acknowledged that any work submitted must be original, and for the avoidance of any doubt a disclaimer was developed:

> *Disclaimer: I have dyslexia, which can sometimes make it difficult for me to express my ideas clearly in writing. For this assignment, I used generative AI technology to help refine and improve the clarity of my writing. The core ideas, analysis, and intellectual work are my own, but the AI assisted in ensuring it was communicated effectively.*

Figure 2: Student Disclaimer

Guiding students to use GenAI ethically involves fostering critical thinking and responsible digital citizenship. Our educators emphasise the importance of academic integrity, teaching students to cite AI-generated content appropriately and using it for inspiration rather than plagiarism. Robust guidelines for students on using and citing AI tools are available via our AUT Library services and through our Canvas Learning Management System. We are working to include clear guidelines in course syllabi and having ongoing conversations with students about AI's role in their learning.

AI as a teaching companion

Research shows that active learning techniques, such as interactive (often QR-accessed) activities and problem-based learning, lead to significantly better learning outcomes compared to traditional lecture-based instruction (Freeman et al, 2014; Prince 2004). A senior lecturer teaching a course in Digital Transformation & Industry 4.0, says that the AI-powered online platform Curipod has "assisted in creating differentiated learning materials and assessments, saving time and allowing for more personalised instruction", which is in line with GenAI opportunities outlined by Tan (2022). Utilising AI, this lecturer is reshaping course content and delivery; already seeing student evaluations report how AI-driven activities are enhancing their grasp of concepts and improving overall academic performance.

Assessment Reimagined

At AUT, the concept of measuring knowledge and understanding is changing. For some of us, written essays no longer define our assessment landscape. We find that projects, case studies, interactive oral assessments that reflect real-world challenges are much more meaningful. We are navigating this pivotal move and demonstrating a collective willingness to "move on" in the Kuebler-Ross cycle. This progression is evident in FOBEL's updated assessment policies, which now incorporate GenAI usage. Our new policies are based on the two-lane approach (Liu and Bridgeman, 2023), with one lane focusing on traditional learning and assessment methods, while the other integrates AI-driven tools to enhance learning and evaluation. This allows our educators to provide a more comprehensive educational experience, preparing students for future challenges and opportunities presented by AI technologies. AUT is not only aligning with the practices of progressive institutions like the University of Sydney but also setting a precedent for others to follow. Our revised assessment principles provide clear guidelines on the ethical use of AI, encouraging students to engage with GenAI, enabling them to critically evaluate AI's input versus their own analytical contributions (Miserandino, 2024).

AUT places utmost importance on academic integrity, encouraging students to approach learning with honesty, integrity, trust, fairness, respect, responsibility and courage (ICAI, 2019), which are also critical skills that employers look for in the workplace. The revised assessment principles promote open communication on AI usage. AUT have a dedicated Teaching and Learning Site - accessible by students and staff - clearly setting expectations on all aspects of GenAI usage, including guidelines on the consequences of unauthorised AI use. Plagiarism concerns remind us that integrity matters, but we believe in providing authentic assessment opportunities, recognising that our students are comfortable with algorithms and will use AI tools wherever possible.

We are not blind to GenAI's flaws (bias, transparency, privacy), and have concerns about detecting with certainty if content in submitted work is AI-generated. We debate, explore and upskill ourselves to address these concerns. Our students? They're ahead of most of us! We teach them to critique and to use GenAI responsibly. Student questions push us forward. "Can we use AI for improving our writing? For research?" they ask. We are learning alongside them! An example is the development of workshops to inform postgraduate students about responsible use of GenAI tools for literature reviews and data analysis.

A Work in Progress

Acceptance is a gradual and ongoing process at AUT. Here are some reflections from our early adopters:

> *Success relies on educator curiosity and willingness to be trailblazers; not everyone is on the upward trajectory of the grief cycle*
>
> *Building AI literacy for students is imperative*
>
> *Upskilling is needed for educators*
>
> *Funding is needed for the tools*
>
> *Access to a pool of tried and tested AI tools and resources would help*
>
> *Students get inconsistent learning experiences depending on their educator's position on the grief cycle (or which faculty they study in)*

Improved student engagement is evident in course evaluations and via informal feedback

Processes are slow to respond to radical changes needed in teaching and assessments

Some students are afraid to use AI in case they get caught cheating

Others are using AI but not ethically or responsibly

We are failing our students by not assessing them in a way that is appropriate for the AI-driven world they are living in and will work in

The future is one where our educators and AI tools work together to help us produce AI-literate, internationally competitive graduates across all disciplines. When it comes to allaying the fears of our colleagues, several strategies are being employed:

Communication:

- Open dialogue is crucial. We are beginning to demystify GenAI by discussing its capabilities, limitations, and ethical considerations in faculty meetings and workshops.

Faculty Training:

- Offering training sessions on GenAI tools helps build confidence. Faculty members now have training opportunities to learn how to integrate AI into their teaching. Rolling out training for our Postgraduate supervisors and ethics staff is an important focus right now.

Pilot Programs:

- Starting with small-scale experiments allows cautious adoption. Colleagues are already testing the popular AI agent 'Cogniti' to build custom chatbots in specific courses and assignments and will share their stories.

Collaboration with Students:

- We continue to involve students in the process because they often adapt faster to technology. Student feedback on AI tools is allaying some apprehensions amongst colleagues. Building student AI literacy levels is high on our agenda.

Ethical and Responsible Use:

- We are discussing bias, privacy, and data security at an institutional level. Highlighting responsible practices and emphasising that GenAI is a tool, not a replacement for human expertise, will be imperative for bringing colleagues on board.

Changing How we Assess:

- In Anglophone universities, assessment has traditionally been based upon an understanding of facts and an interpretation of data, expressed through a demonstrated written and spoken competence in the English language (and in the case of universities in Aotearoa New Zealand, in Te Reo Māori or New Zealand Sign Language). In the long term, our approach to assessments must change dramatically. We argue that the concept of plagiarism, and what it means in the context of using GenAI tools in academic work, will also change over time and our instructors must reframe their thinking on their students' use of this technology.

Our journey from fear to acceptance is gradual. By fostering a supportive environment and emphasising the benefits, we at AUT are navigating this transition together.

Conclusion

This paper aims to inspire and motivate educators to explore and experiment with AI tools in teaching practices, and foster an environment of open, honest, and collegial sharing of both successes and failures. The goal should be to utilise GenAI as an additional resource for empowering students rather than allowing technology to replace human instruction. Beckingham et al. (2024) suggest that educational institutions avoid substituting educational relationships with tools such as ChatGPT. Rather, GenAI should serve as an aid that enhances students' critical thinking and communication skills. Educational institutions play a pivotal role in enhancing AI literacy, which will enable students to collaborate effectively with AI as a tool not only in the university but also in their workplace (Long and Magerko, 2020). It is crucial that universities stay informed about AI developments and engage in ongoing research and discussions (Lee et al., 2024).

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Author bios

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Chris Griffiths has a passion for teaching and a strong affinity for digital technology. With a career that began in design and manufacturing, Chris progressed through senior management roles in procurement and supply chain before pivoting to academia. He holds an MBA with distinction from AUT and has received multiple scholarships for his postgraduate studies. As a Senior Lecturer at AUT, Chris teaches courses on ethics, sustainability, learning and development, and stress resilience in the workplace. Chris's research interests include technology-enhanced learning, business and management, and organisational behaviour.