

It takes a village... Program-wide approaches to redesigning assessment in a time of generative artificial intelligence (GenAl)

Associate Professor Kelli Nicola-Richmond, Professor Phillip Dawson, Professor Helen Partridge, and Associate Professor Susie Macfarlane Deakin University, Australia

Abstract

The rapid maturation of generative artificial intelligence (GenAl) platforms has created significant challenges for higher education, particularly in relation to assessment. This project sought to explore the lived experiences and views of GenAl in relation to assessment for academics and students in higher education. A qualitative interpretivist approach was adopted, using semi-structured interviews. When data were thematically analysed, three themes were developed; emotions, academic role and identity; assessment must change, and the work and expertise required to change assessment. Academics and students experienced both positive and negative emotions in relation to GenAl. Concerns about the complexity of changing assessment and resources needed to change assessment were pervasive. Based on these findings we propose that "it takes a village" to redevelop assessments in a time of GenAl and therefore collaborative, program-wide approaches are the way forward.

Editors

Section: Curriculum and Assessment Editor-in-Chief: Dr Joseph Crawford Senior Editor: Dr Alison Purvis

Publication

Submission: 17 April 2025 Revised: 3 July 2025

Accepted: 18 September 2025 Online First: 20 September 2025

Copyright © by the authors, in its year of first publication. This publication is an open access publication under the Creative Commons Attribution CC BY-ND 4.0 license

Practitioner Notes

- 1. Academics are concerned about the time, skills and resources required to redesign assessments to minimise students' use of GenAl
- 2. Redeveloping assessments in a time of GenAl takes a 'village' of collaborators with expertise in areas such as academic disciplines, GenAl capabilities and assessment design.
- 3. Collaborative, program-wide approaches may be effective to maximise the use of resources and bring together people with diverse expertise to address assessment redesign.

Keywords

Generative artificial intelligence, assessment, higher education, program-wide, university teaching.

Citation:

Nicola-Richmond, K., Dawson, P., Partridge, H., & Macfarlane, S. (2025). S It takes a village...Program-wide approaches to redesigning assessment in a time of generative artificial intelligence. *Journal of University Teaching and Learning Practice*, 22(7). https://doi.org/10.53761/zpp2ja61

Introduction

The rapid maturation of generative artificial intelligence (GenAI) platforms such as ChatGPT is causing mass disruption in universities, creating a watershed moment for higher education. With many easily available GenAl tools now capable of completing common assessment tasks, and detection tools proving unreliable and unsustainable (Odri & Yoon, 2023), the emergence of GenAl is prompting academics and universities around the world to review the effectiveness of their assessment strategies and their capacity to assure that students achieve the learning outcomes associated with awarded qualifications (Dianova & Schultz, 2023). Students are also impacted as they navigate a landscape where assistance to complete their work is more effective and more readily available than ever before. Student use of GenAl in assessment is now widespread, with a 2024 study of more than 8000 Australian students indicating that 83% of students were using GenAl and 40% were using it when they knew they were not supposed to (Al in Higher Education, 2024). In the UK setting, the Higher Education Policy Institute (HEPI) have reported similar findings, with 88% of surveyed students (n = 1041) reporting they use GenAl in assessment (HEPI, 2025). Generative artificial intelligence use is also rapidly expanding in industry and in everyday contexts, and therefore universities must prepare students for a world of work where they will need to be capable of working with this technology, while also understanding its limitations, biases, and relevance (Bearman & Ajjawi, 2023). Whilst universities need to prepare students to use GenAl effectively in the workplace, the responsibility to assure that our assessments are valid (i.e. that they assess what they intend to measure) (Corbin et al., 2025) and that students graduate having acquired the learning outcomes of their awarded qualification remains imperative. Therefore, the impact of GenAl on assuring students' learning must be addressed.

The GenAl literature base is growing rapidly, with recent literature offering general guidance on approaching assessment in the GenAl era (Cotton et al., 2023; Rudolph et al., 2023; Bearman & Ajjawi, 2023; Wise et al., 2024). A range of frameworks for assessment redevelopment have also been produced to assist with reconsidering assessment given the impact of GenAl (for example the traffic light system, the Artificial Intelligence Assessment Scale (AIAS) and the Two-Lane Approach - see below for further description). Recent work by Corbin and colleagues (Corbin et al., 2025) provides a useful delineation between discursive and structural changes to assessment, emphasising the need to consider structural changes to assessment that make it difficult for students to use GenAl at key points in programs. However, there is a need to move beyond conceptual understandings of how GenAl may impact higher education to understand from an empirical perspective how it is impacting both students and academics, especially with respect to assessment. How GenAl impacts academic decisions about assessment is also important. This is crucial because it bridges the gap between conceptual understanding and enacted practice, and also because how academics design and implement assessment ultimately determines both students' experiences in assessment, and the validity of those assessments. We also need to identify the expertise academics require to deliver effective assessment in this new environment, and understanding their experiences is essential to achieving this.

Therefore, this project explored the question: What are the lived experiences and perspectives of GenAl in relation to assessment for academics and students in higher education? More

specifically the study sought to explore: the impact of GenAl on academic assessment practices, views on how assessment might need to change in light of GenAl, and the role of the university as GenAl matures.

Literature

Reviewing Assessment in Response to GenAl

As universities scramble to respond to GenAl, research and policy relating both to the need to review assessment in response to GenAl and how this process should be undertaken is rapidly expanding. Many universities around the world have developed or updated their policies in response to the emergence of GenAl primarily with the aim of supporting responsible GenAl use (Luo, 2024). Whilst approaches and views to addressing the challenges of GenAl are mixed, more recent publications suggest a focus on the integration of GenAl into assessment in meaningful, effective and ethical ways, along with careful consideration of what constitutes original student work in a time of GenAl (Luo, 2024). There is growing evidence that assessment redesign is needed as many forms of traditional assessment are no longer effective, alongside revision of learning outcomes to reestablish how they relate to assessment (Weng et al., 2024). Revision of learning outcomes may also be necessary to reestablish how they relate to assessment (Weng et al., 2024). The importance of assessment that focuses on authentic career-related competencies and skills for life-long learning is also increasingly emphasised (Salinas-Navarro et al., 2024; Weng et al., 2024).

Common frameworks that have been developed include the Traffic Light model and AIAS. The Traffic Light model has been described in a number of similar formats, with red indicating no GenAI use is allowed, amber that GenAI tools may be used to assist work, and green to indicate that GenAI use is expected (University of Leeds, nd). The AIAS was developed in 2023 with a more recent update in 2024. This scale includes five levels to guide GenAI use in assessment ranging from Level 1 - no artificial intelligence (AI) use at all in any element of the assessment, to Level 4 - full AI use in any element of the assessment and Level 5- creative use of AI by academics and students to co-design assessment (Perkins et al., 2024).

Very recent work by Corbin et al. (2025) building on the Two-Lane approach - either assuring learning or allowing human-Al collaboration - described by Liu and Bridgeman (2023), highlights the need to consider assessment validity as we tackle innovation in assessment in response to GenAl. The authors emphasise the importance of being able to determine that students have genuinely developed the capabilities being assessed, if the validity of assessment and credibility of universities is to be maintained. In discussing this, the authors describe two main types of assessment change. Discursive approaches rely on communication to students about what is expected in relation to GenAl in assessment, as represented in the Traffic Light and AlAS models. In contrast, structural changes involve altering the 'nature, format or mechanics' (Corbin et al., 2025, p.5) of assessment tasks. These changes reshape assessment so that their success is not dependent on students' understanding or compliance. The authors highlight that many of the current approaches to tackling the challenges of GenAl for assessment focus on discursive, rather than structural change, and advocate for a greater focus on structural approaches to assure student learning and preserve the reputation of higher education.

Academics' Perceptions of GenAl

Research has established that most academics believe the impact of GenAl on teaching and assessment practices will be profound, and will change their role as educators (Cervantes et al., 2024). Several studies have identified academics' concerns about students' overreliance on GenAl and the potential for plagiarism (Kohnke et al., 2023), or impeding students' development of critical thinking and creative problem-solving (Mah et al., 2024; Ogurlu & Mossholder, 2023; Saúde et al., 2024). Other concerns relate to the characteristics of artificial intelligence (Al) more broadly, including the lack of reliability of Al-generated material due to errors and bias, issues of surveillance and privacy, and the potential reduction of student-academic interactions in feedback (Cervantes et al., 2024).

Despite these concerns, studies have found that most academics believe that GenAl will have a positive impact on them and their students (Bower et al., 2024; Cervantes et.al, 2024; Kaplan-Rakowski et al., 2023) with some academics perceiving that GenAl will improve their teaching practice (Ogurlu & Mossholder, 2023). They report that they are likely to make changes in teaching practices in response to GenAl. These include increasing the focus on learning processes, higher-order and critical thinking tasks, and using collaboration and authenticity (Cervantes et al., 2024) through simulations, exemplars, interview practice, and the critique of work samples (Chan & Tsi, 2024).

Whilst the literature base is limited, the majority of educators consider that GenAl and its capabilities have significant implications for traditional assessment methods. Academics report they are adapting assessments to preclude the use of GenAl through verbal tasks, face-to-face invigilation, examinations, and paper-and-pen approaches (Bower et al., 2024). They also note the importance of embedding students' use of GenAl into the curriculum, to prepare them to use GenAl in the workplace (Chan & Tsi, 2024), and to foster critical thinking, including evaluating GenAl responses.

Students' Perceptions of GenAl

Recent studies have found that most students are aware of GenAl tools and find them helpful (Elkhodr et al., 2023). Tala et al. (2024) found that 95% of students were aware of GenAl models, with over half using them for content generation. Approximately two thirds of students in several other studies reported using GenAl (Baidoo-Anu et al., 2024; Chan & Hu, 2023; Almassaad et al., 2024). This widespread awareness highlights that GenAl tools are becoming integral to students' academic activities globally. In addition, as students gain more knowledge and experience with GenAl, their willingness to use it increases (Chan & Hu, 2023), suggesting this trend is likely to continue.

Students are aware of both the risks and benefits of using GenAI, and generally hold positive perceptions regarding its use in education (Saúde et al., 2024; Ghimire et al., 2023). Students find GenAI easy to use and efficient (Kaplan-Rakowski et al., 2023; Mah et al., 2024) and the immediacy of response is also valued (Almassaad et al., 2024) Students have identified a range of tasks GenAI can assist with including writing and brainstorming, searching for, summarising and analysing information, and image and video creation (Chan & Hu, 2023). They perceive that

GenAl can assist their learning by helping them understand difficult concepts and summarise large amounts of information (Baidoo-Anu et.al, 2024) or simplify technical topics (Elkhodr et al., 2023). Students also value GenAl for overcoming writer's block (Zhai, 2022; Barrett & Pack, 2023). Generative artificial intelligence's capacity to act as a virtual tutor has also been demonstrated (Chan & Tsi, 2024). Students reportedly understand the limitations of GenAl, with high levels of awareness of the risks of using GenAl in academic settings (Saúde et al., 2024). Most students understand that GenAl can provide incorrect or irrelevant information (Elkhodr et al., 2023), and this is a significant concern to them (Almassaad et al., 2024) along with the lack of transparency in how information is generated (Chan & Hu, 2023). Many studies have identified that students, like academics, are concerned they may become overreliant on GenAl, impeding the development of their critical thinking and problem-solving skills (Almassaad et al., 2024; Baidoo-Anu et al., 2024; Elkhodr et al., 2023). They are also concerned about the academic integrity risks associated with using GenAl (Chan & Hu, 2023).

There is considerable overlap in students' and academics' perceptions of GenAI (Barrett & Pack, 2023). However, a key difference concerns what constitutes acceptable use, and several tensions have been identified between students' and educators' perceptions. Students considered permissible use of GenAI through a plagiarism lens, based on whether GenAI was used to produce exact language, while teachers focused on how students use GenAI output. When students critically evaluate and adapt GenAI responses, integrating them meaningfully into their work, teachers view this as a legitimate scaffold to students' learning (Mah et al., 2024).

There is a significant risk that the widespread use of GenAl will impact the relationship between students and their teachers, threatening trust. This is reflected in findings for example, that 25% of medical educators believe GenAl is often used by students to cheat on assignments (Cervantes et al., 2024). Highlighting conflicting perspectives between students and teachers on GenAl usage, Ibrahim et al. (2023, p.1) note, "there seems to be an emerging consensus among students to use the tool, and among educators to treat its use as plagiarism."

Whilst the literature reflects a general agreement of the need for assessment change in response to GenAl and provides insight into academic and student perceptions of GenAl, there is limited empirical research specifically examining its impact on assessment in the Australian context. Therefore, this study will explore the lived experiences and perspectives of GenAl in relation to assessment for academics and students in higher education with a particular focus on data that relates academic perceptions and experiences, using student data as a supplement.

Method

Context

This study took place in a large Australian university in 2023 and 2024 following the rapid emergence and growing adoption of GenAl tools beginning in early 2023. At the time of data collection, the University had published guidance encouraging critical, ethical and responsible engagement with GenAl for both staff and students on university webpages. Academics involved in teaching students were encouraged to directly address the use of GenAl with their students at the commencement of each teaching period. The University had made the deliberate decision not

to ban students from using GenAI, changing policy to require students to follow unit chair instructions. Academics' use of tools to detect students' use of GenAI in their assessments was prohibited, in light of their unreliability and bias (Weber-Wulff et al., 2023). The University instead elected to take an educative approach, encouraging students and academics to explore the uses of GenAI whilst considering the risks and limitations of tools. Students were (and continue to be) advised to acknowledge their use of GenAI within assessment tasks.

Participants

Students and academics from all four faculties (Health, Science Engineering and Built Environment, Business and Law, and Arts and Education) of the University were invited to participate in the study via direct emails and posts on the student learning management system.

Research Design

This research project utilised a qualitative interpretivist approach, conducting semi-structured interviews. Qualitative methods are valuable in research that aims to understand and explore phenomena through descriptive data (Park & Park, 2016). The underpinning premise of qualitative interpretivism is that researchers investigate the processes of the social world created by individual actions (Hackley, 2019). Given that this study was exploring lived experience and perspectives of academics and students in relation to the impact of GenAI on assessment, qualitative interpretivism was well-suited. Ethical approval for the study was granted by the Deakin University Human Ethics committee (HAE-23-057).

Data Collection

Data were collected using online semi-structured individual interviews with both students (n = 17) and academics (n = 12). The interview protocol was designed to elicit participants' experiences and perceptions of GenAl with a particular focus on the impact on assessment. Interview questions explored participants' understanding and use of GenAl tools, the impact of GenAl tools on assessment practices, the role of universities in responding to GenAl, how (if at all) assessment needed to change, and what impact GenAl would have on university assessment in the future. For example, academics were asked "what impact has GenAl had on your assessment practices? and "what are your thoughts about how (if at all) assessment needs to change due to GenAl?" Students were asked questions including, "what impact has GenAl had on your completion of assessment" and "what do you see the role of the University is in a future where GenAl continues to mature and its use increases?" To preserve anonymity, particularly given the sensitivities associated with GenAl use, participants were asked only a broad demographic question at the commencement of the interview - "Can you tell me a little about your role in teaching and learning at Deakin?" for academics, or "can you tell me a little about your studies at Deakin, your year level and course?" for students. Interviews were conducted online via Zoom by a research assistant who had no previous relationship with the participants. Interviews were recorded, de-identified and transcribed verbatim. Participants were provided a gift voucher in recognition of their time.

Data Analysis

Data analysis was conducted based on Braun and Clarke's six-phase approach to thematic analysis (Braun & Clarke, 2021). Three members of the research team initially familiarised themselves with a sample of the data (eight transcripts), reading transcripts and noting initial ideas. The researchers then independently generated potential codes inductively from within the data. They then met to compare coding schemas and discuss overlaps and boundaries to support inter-rater reliability and resolve areas of difference. Provisional themes were developed through discussion and drawing on patterns identified across the coded data. All other data were then deductively coded using the provisional codes and themes whilst also considering the possibility of generating new codes and themes from the data. During this stage the authors consistently checked their own intra-rater reliability to ensure consistency in their coding over time. Codes were semantic in that they represented literal meanings interpreted from the data, rather than latent codes which attempt to discern deeper meanings. The researchers then held two further meetings to discuss and refine on themes, codes and subcodes within the data (Braun & Clarke, 2021). Discrepancies were resolved through discussion and consensus, with all researchers contributing to the final themes. Rigour and trustworthiness were strengthened within the study by using multiple participant groups (academics and students) and via the data analysis process. This paper focuses primarily on data that relates to the role of the academic in relation to GenAl and assessment, with student data used to supplement the results where relevant.

Results

Academic participants hailed from three of four university faculties; Health (n = 6), Business and Law (n = 3), and Science, Engineering and Built Environment (n = 1), with two academics choosing not to disclose their faculty. Academics had varying levels of experience, with most reporting they taught across multiple subjects. Student participants were studying across all four faculties: Health (n = 6), Business and Law (n = 4), Science Engineering and Built Environment (n = 5) and Arts and Education (n = 2). Student participants' year levels ranged from 1st to 5th year, with seven studying at post graduate level and 10 as undergraduates. The analysis of both academic and student data developed three themes: *emotions, academic role and identity; assessment must change;* and *the work and expertise required to change assessment*. Researchers coded the following subthemes outlined in Table 1. Following the table each of the themes is described using a narrative description and anonymous quotes taken from interviews, with participants identified using pseudonyms.

Table 1Themes and Sub-Themes

Theme	Sub-themes
Emotions, academic role and identity	Range of emotions
	We are behind the eight-ball
	The academic role will change
	The value of human interaction.
Assessment must change	There is a need to assure learning
	Preparing students for a GenAl world
	We need to assess differently
The work and expertise required to change	Planning ahead
assessment	Complexity of changing assessment
	Time and cost of changing assessment
	The need for pragmatism

Emotions, Academic Role and Identity

The topic of GenAl evoked a range of emotions in participants, eliciting positive and negative responses in both participant groups. Some academics were concerned that GenAl would take the meaning out of teaching and found its use "hurtful", worrying about the "diminishment of critical thinking skills" (David, academic). Julie (academic) described being "fearful for the future of my discipline" and Sharon (academic) felt that they had "been sucked in or... sort of fooled". In contrast, Michali (academic) described being "excited when I first heard about it" and Sue (academic) described moving from seeing GenAl as "a threat" to "understanding that GenAl is a tool that students need to learn to use". Fewer students expressed an emotional response to GenAl, with many perceiving GenAl as just another tool that was available to assist them with their work "Occasionally I use the other tools like on Canva for generating stuff" (Cooper, student). Although some students did express concern. For example, Elise (student) was concerned about breaking university rules relating to GenAl;

I feel a bit sort of worried when it comes to using GenAl for assessments, just because I know that the University has released a lot of guidelines and a lot of warning signs to students saying that you have to be really careful using GenAl.

Others expressed concern that GenAl use would impact their learning, "GPT's gonna [going to] make me stupid... I'm gonna become too dependent on ChatGPT" (Mei, student). While many participants expressed some excitement in regard to GenAl use, the primary reaction was concern about the impact of GenAl, particularly from the academic participants.

Academics interviewed for this study expressed a sense of being behind the eight-ball, describing an urgent need to catch up with the rapid development of GenAl technology, particularly in relation to student assessment. They felt slow to respond to the need to change assessment in response to GenAl, "I'm probably slightly behind the curve in changing over my assessments" (Kate, academic), with Colin (academic) reporting "now we're just trying to scramble around and yeah, put a Band-Aid over a massive, gaping wound". This pressure of feeling that they could not meet

the pace of development of GenAl and the need to change assessment quickly was accompanied by concern about how to change assessment, suggesting that academics need support in assessment redesign.

Most academic participants in this study felt that the academic role will change as a result of the advancements of GenAl. For example, Dimitri (academic) reported that; "your role as an academic will change if they [students] use [gen]Al, you're there to guide them through the process". Participants shared a variety of ideas about the impact of this change on their role in students' learning, with some participants reporting that GenAl might change how they view their role or force a rethink of the purpose of our teaching; "I think it's going to take some of the meaning out of teaching and educating...for staff... I don't know how you can get around it." (David, academic). Others, such as Sue (academic), were more optimistic about the role; "GenAl doesn't teach the skill of critical appraisal. It just gives you answers. So we still need to teach students how to think". Michali (academic) echoed this viewpoint reporting that "First of all, you're someone who's helping them [with] their studies... so the impact of GenAl on my role [is] to understand it and to help our students understand it, and to help them use it appropriately".

Reflecting participants' concerns that their role in students' learning may change, the value of maintaining human interaction with students was also identified. Anh (academic) highlighted the continuing advantages of "talking to a real person". Michali (academic) highlighted the value of sharing real life experience, "the thing that the students value the most is the fact that you are approachable, personable, and you're able to give them like real world or real-life experience. They love hearing your stories".

Assessment Must Change

All academic participants emphasised the need to assure learning so that universities can be sure that students acquire the learning outcomes of their respective programs. Sue (academic) demonstrated this when they reported; "I need to be able to put my hand on my heart to say that my graduates have actually securely demonstrated the necessary knowledges and attributes necessary for safe and effective care [in a health environment]." Participants reported concern that assuring students' learning would be challenged by GenAI, and that we should ask fundamental questions about the purpose and design of assessment in a GenAI age. For example, Chad (academic) stated "If we were to embrace GenAI...what [are] our assessments trying to achieve and why...the question is why are we doing them? What are they trying to achieve?". This was also emphasised by Kate (academic) "if we use GenAI to create the question and students use GenAI to answer the question, you know what's the point?"

Both students and academics highlighted the need to prepare students for a GenAl world given that GenAl use is already prevalent in workplaces and will be increasingly so. This was reflected by Chad (academic):

we know that at the end of the day everyone goes to university because they want to excel in a career,or specialise in some field. They want to come out with the most up-to-date skills that they possibly can, and I think that's why they should be using it [GenAl].

Students' responses also reflected this view; "I've come to the awareness [that] I really need to learn about it... because it is going to be integrated...you are already needing it in many workforces" (Laura, student). Most participants were against banning students' use of GenAI, with Julie (academic) expressing;

if you go zero tolerant [sic] and say 'no, we're not going to adopt it and we're not going to encourage students to use it', then you run the risk of educating a generation of students that doesn't have the benefit of accessing the technology, which means those students are going to be at a distinct disadvantage within the workplace.

However, many expressed concern about finding the balance between encouraging students in the use of GenAl while also ensuring that they were learning, as demonstrated by Chad (academic) "getting that balance right, I guess between, yeah, students learning how to use it and... not over-relying on [it]".

Both academic and student participants emphasised the need to assess differently, and to reshape assessment in response to the emergence of GenAl. This entailed both building into the curriculum students' use of GenAl in assessment and attempting to design assessments to minimise students' use of GenAl. Academics discussed the need to assess students on skills beyond basic memorisation, emphasizing the importance of developing and evaluating students' ability to apply knowledge. Sue (academic) described the change they had seen in quality of student assessment since GenAl had emerged; "[the] baseline was a lot higher, and they've extended their answers, you know more broadly, or those answers contained more advanced knowledge". They then discussed subsequent changes they had made to assessments highlighting that they now "require students to critically evaluate and make judgements and decisions between sets of data...getting students to explain why those changes have occurred"

The findings emphasise the importance of students critically engaging with GenAl when employing it, as described by Anh (academic); "I think the ultimate aim is to get them to a point where they can critically evaluate what they're being told and act more as that curator role of ChatGPT and GenAl, rather than just a consumer of it."

The Work and Expertise Required to Change Assessment

Academics highlighted the need for planning ahead, citing inflexible processes that result in long lead times for changing assessment, as described by Hannah (academic) "our university struggles in having fairly rigid systems that make innovation...more challenging than it ought to be. You have to put paperwork in almost a year in advance to change an assessment". These issues were particularly challenging in professionally accredited courses, where changing assessment required the approval of the university and meeting accrediting body requirements; "But if you're accredited... it's not as simple to just go, 'Oh, I'll change this" (Colin, academic).

Whilst there was unanimous agreement that assessment needed to change, academics expressed concern regarding the complexity of changing assessment. Participants reported they found attempting to minimise student use of GenAl in assessment particularly challenging and

they lacked confidence in how to do so "I have my L plates on when it comes to understanding it [GenAl and assessment change]" (Chad, academic). Complexity was perceived to be higher if a subject involved large cohorts and therefore large and often casual teaching teams, as described by (Julie, academic);

I've done absolutely nothing in terms of assessment practices because I don't have a clue. And what to do? That's magnified by having large student numbers, large numbers of sessionals [casually employed staff]....It's gonna lead to less capacity in larger degree areas for us to be able to oversee adequately when students are using it [GenAI] for genuine purposes.

A strong theme was participants' concerns regarding the significant time and costs of changing assessment. One expressed concern about the increase in workload that changing assessment would create: "The problem is that this will put extra burden on us, extra load on us" (Ahmed, academic). They also surmised that if assessment was changed to minimise student use of GenAI, extra resources may be required to conduct the assessment: "[In a] one-on-one oral or clinical skills type exam where you would require a staff member to be standing there and doing one student at a time... in terms of cost and efficiency, and demand for staff, it would be a very big move" (Chad, academic). The perceived demands on the time of academics to first learn about GenAI and then adapt assessment were also highlighted by Julie (academic): "I don't have the time to devote to thinking about it [changing assessment], but the other side of it is I'm genuinely stuck because I don't have a clue".

Academics who participated in this study highlighted the need for pragmatism when redeveloping assessment due to GenAl as exemplified by Dimitri (academic): "there's the ideal world and the real world. In the ideal world, you would have far more interaction with students, to really get an understanding of what your students understand".

Academics expressed a desire for the University to take a clear stance on the use of GenAl and to develop instructions, training and exemplars for academics and students. Hannah (academic) articulated this when describing what they needed from the University to change assessment; "giving us that space to innovate, not telling us what to do necessarily, but providing us with examples, exemplars, providing us with tools, insights, maybe systems?... promoting ideas, suggestions, exemplars, I think would go a long way".

Discussion

This research project provides empirical evidence relating to the impact of GenAl on academic assessment practices and the lived experiences and perspectives of academics and students at a large Australian university. Academics and students reported experiencing a range of both positive and negative emotions relating to GenAl, with many academics feeling that they were lagging behind in responding to the challenge GenAl poses. Academics felt that GenAl would impact their role as an educator, however, the importance and value of human interaction reassured participants of the ongoing need for their roles in students' learning.

In regard to how assessment might need to change in light of GenAl, there was strong agreement within both groups that assessment needs to change. Participants believed that in future some assessment would need to incorporate the use of GenAl in order to prepare students for the world of work. However, academics were primarily focussed on assessment changes that minimise the use of GenAl to ensure that students achieve the learning outcomes of the programs from which they graduate. Academics therefore espoused both of Lodge et al.'s (2023) principles of assessment for a time of artificial intelligence: that assessment needs to (1) prepare students for a world where GenAl is ubiquitous, and (2) assure learning. Our data provides support for these principles, and demonstrates the real-world challenges and complexities of changing assessments, including dealing with university systems and processes, the time-consuming nature of assessment redesign, and considerations regarding what sort of new assessments it was feasible to deliver in higher education settings at scale were pervasive.

Most academics expressed significant concern when discussing how to structurally re-design assessment that would minimise students' use of GenAl (Corbin et al., 2025). They reported being unsure as to how their assessments should change, feeling pressure to keep up with the rapid evolution of GenAl and assessment; concern about the complexity of making changes; worry about the time and cost involved in redesign; and the need for pragmatism in approaching assessment change. They were also seeking support and expertise to assist them with making changes. Based on these findings, and having reflected on what might help our academic participants to redesign assessment to minimise student ability to use GenAl, we propose that assessment redesign in this space both *takes a village* (rather than a mythical all-capable solo academic) and requires *program-wide approaches*. We will expand on each of these ideas below. This study focusses on program-wide, rather than programmatic assessment, given the significant resource and budget demands of programmatic approaches to assessment (Charlton & Newsham-West, 2024).

The significant lack of confidence in how to redesign assessment demonstrated by academics in this study led the research team to consider what it was that makes assessment redesign so challenging in a time of GenAl. As the task of assessment redesign ultimately falls on everyday academics (the villagers) in many contexts (Bearman et al., 2016), it is important to consider the expertise required to do so. The team considered any differences there may be between the expertise typically required for assessment redesign and that required when redesigning assessments to minimise the impact of GenAl. We surmised that design in this space is difficult because of the increased breadth and depth of expertise required to effectively tackle assessment redesign. Our data and conversations suggested that effective assessment redesign in a GenAl world requires the resourcing of villagers with expertise in a range of areas that are outlined in Table 2.

 Table 2

 Areas of Expertise Required for Assessment redevelopment in response to GenAl

Areas Of Expertise Required for Assessment	Notes
redevelopment in response to GenAl	
Assessment design	Assessment design principles and
	practices;
GenAl applications and uses	The current applications and uses of
	GenAl and available GenAl tools (an area
	that is extremely hard to keep up with
	given the rapid development in the field);
Subject Matter Experts	The specific subject matter being taught
	(to ensure any changes made to
	assessment are contextually relevant to
	the discipline);
Program knowledge	The program or qualification that the
	subject and the assessment being
	modified exists within (as it is neither
	feasible nor advisable to change every
	assessment in response to GenAI);
Industry knowledge	How industry is using GenAl (in order to
	prepare students effectively for the
	workplace)
Assessment and GenAl evidence-base	The assessment and GenAl literature
	(acknowledging that the GenAl literature
	is rapidly growing, making it increasingly
	difficult to remain current).

Prior to the advent of GenAI, assessment design was already a complex multi-criterion problem, requiring significant expertise (Bearman et al., 2016), as indicated by recent growth in academic development and third space academic roles in assessment and curriculum design (Smith et al., 2021). The added overlay of GenAI further broadens the expertise required to effectively redesign assessment. It is unlikely that any one individual academic will have all of the capabilities listed above, thus we propose that it will *take a village* of diverse expertise to redevelop assessments in the GenAI era. We therefore advocate for collaborative, team-based approaches to assessment redevelopment to address the challenges and opportunities of GenAI.

However, collaborative approaches in higher education teaching and learning environments raise some challenges, including the logistics and time associated with bringing all relevant parties together. Lawson et al. (2014) described the significant time burden reported by academics when collaborating to assure student learning. Our data also highlighted that academic participants already felt time-poor and held concerns about the time and resources required to redesign assessment. Considering the key role that subject and program experts would play in any collaborative approach to assessment redesign, this is an important factor to take into account. This leads us to our second recommendation: assessment redesign in response to the

emergence of GenAl should be approached at a program-wide level. Program-wide approaches are distinguished here from traditional programmatic assessment (van der Vleuten et al., 2012), as they are focused on assuring degree-level outcomes in a resource-constrained environment. so focus less on integrated assessment of multiple forms of evidence evaluating students' holistic progression, and more on assurance of learning. In addition to facilitating collaboration, programwide approaches assist in designing assessment that is constructively aligned across a program, articulating relationships between learning activities, assessment and outcomes (Biggs, 2022; Deakin, 2022, np). The guidelines developed by Lodge et al. (2023) for the Tertiary Education and Quality Standards Agency (TEQSA) in an Australian context, entitled "Assessment Reform for the Age of Artificial Intelligence" support this proposition. They outline the two aforementioned guiding principles and five propositions. One of these propositions is that we take "a systemic approach to program assessment aligned with disciplines/qualifications" where "assessment design considerations should span a whole program and/or the sub-structures within, such as majors, rather than be applied solely at individual task or unit levels" (Lodge et al., 2023, p.4). We concur with this statement and believe that a program-wide approach will enable universities to not only address the challenge GenAl presents for assessment, but also ensure a timely response.

An additional advantage of taking a program-wide approach to redeveloping assessment is that this allows for assessment innovations to be strategically positioned at key points in the program. This positioning can support both the development of students' GenAl literacy, ensuring they are well-prepared for the world of work, while also assuring the integrity of student learning by limiting GenAl use at critical points within a program. Rather than academics and support teams feeling pressure to rapidly review and adapt every assessment within a qualification, a program-wide approach allows for targeted redevelopment of assessment at key points within the student learning experience. This approach has an added advantage of potentially minimising the extra costs that may be associated with assessing in ways that assure learning in a GenAl world, as participants in our study often surmised that new ways of assessing would require greater resources. Whilst the promotion of program-wide approaches to designing and developing learning and teaching activities is not new, we contend that in a time of GenAl, the adoption of program-wide approaches has become even more important. A recent small-scale study by Tomlinson et al. (2024) supports the feasibility of such a collaborative, program-wide approach, while highlighting the importance of support from professional development and third-space academics.

In regard to the role of universities as GenAl matures, a consistent finding of this study was the strong expectation from academic participants that the university provide workload capacity and significant support to help address the challenges to assessment posed by GenAl. Academics were seeking on-the-ground guidance and specific examples of assessment redesign, despite the University already having invested heavily in this area. These findings are supported by Nikolic et al.'s (2024) recent systematic review that explored the attitudes, behaviours and intentions of academics towards GenAl. The authors found significant gaps in the supports required for the effective adoption of GenAl, and a need for both professional development and dedicated time for teaching academics to understand and engage with GenAl. Our data, in conjunction with the findings of this review, indicate that universities need to undertake strategic planning and make significant and sustained investments to provide academics with support that is meaningful and

relevant to their teaching. This support might take the form of policy change, development of frameworks and resources in relation to changing assessment, professional development and investment in tools such as portfolio or curriculum mapping software to assist with assessment. These tools will assist the villagers in undertaking the work of assessment change and in addressing the challenges posed by GenAl in the most effective way. Whilst presenting significant challenges, the rise of GenAl offers an opportunity to address some of the long-standing weaknesses of assessment design within higher education. As Boud (1995. p.35) states "students can, with difficulty, escape the effects of poor teaching, they cannot (by definition if they want to graduate) escape the effects of poor assessment". Failing to leverage the opportunity to improve our broader assessment practices as we tackle the challenges posed by GenAl would represent a significant missed opportunity.

Limitations

This study offers a range of insights into the rapidly developing field of literature relating to GenAl and assessment, however it does have some limitations. Whilst the study included two participant groups from across four broad faculties, data was collected at a single Australian university, thus the application of these findings to other settings must be considered with caution. Limited demographic data was collected from participants to preserve anonymity so that students and academics would feel free to honestly express their views, knowledge and use of GenAl. However, this limits the extent to which any findings can be attributed to particular disciplines or areas of practice. Finally, the rapid adoption of GenAl technologies means that the use of GenAl by these participants may have changed significantly since the time of data collection which occurred at a single point in time. Future research could focus on collecting longitudinal data, across multiple institutions and observing disciplinary differences.

Conclusion

The rapid emergence of GenAl has resulted in the need for academics and universities to review the effectiveness of assessment in promoting and assuring student learning. This study involved the use of semi-structured interviews with academics (n = 12) and students (n = 17) to explore the lived experiences and perspectives of GenAl in relation to assessment, the impact on assessment practices, views on how assessment might need to change and the role of the university in this change. This paper focuses on data that relates to the perceptions and experiences of academics with student data used as a supplement. The study identified that academics and students experienced a range of emotions in relation to GenAl, with both groups emphasising the need for assessment changes that not only prepare students for the world of work but also assure they graduate having achieved the learning outcomes that we promise. Concerns regarding the complexity of altering assessment practices, a lack of resources and a lack of knowledge in how to implement these changes were common. Based on these findings, we propose that effectively redeveloping assessments in a time of GenAl takes a village of collaborators with expertise in academic disciplines, GenAl capabilities and applications, and pedagogy and assessment design. Given this, and the resources needed for such redevelopment, we advocate for a collaborative, program-wide approaches that make effective use of resources and bring together people with diverse expertise to address the challenges of assessment redesign in a time of GenAl.

Acknowledgements

The authors disclose that they have no actual or perceived conflicts of interest. The authors disclose that they have not received any funding for this manuscript beyond resourcing for academic time at their respective university. The authors have not used artificial intelligence in the ideation, design, or write-up of this research as per Crawford et al. (2023). The authors confirm that they have met the ethical standards expected as per Purvis & Crawford (2024). All authors contributed to the research presented in this article. **Nicola-Richmond** contributed to conceptualisation, data collection and analysis and writing, reviewing and editing, **Partridge** contributed to conceptualisation, data analysis and writing, reviewing and editing, **Macfarlane** contributed to data analysis and writing, reviewing and editing,

References

- Al in Higher Education (2024). Students' perspectives on Al in higher education. Presented at HEDx Future Solutions Conference 2025. https://aiinhe.org/wp-content/uploads/2024/10/aiinhe_surveyinsights.pdf
- Almassaad, A., Alajlan, H., & Alebaikan, R. (2024). Student perceptions of generative artificial intelligence: Investigating utilization, benefits, and challenges in higher education. *Systems*, 12(10), 385. https://doi.org/10.3390/systems12100385
- Baidoo-Anu, D., Asamoah, D., Amoako, I., & Mahama, I. (2024). Exploring student perspectives on generative artificial intelligence in higher education learning. *Discover Education*, *3*(1), 98. https://doi.org/10.1007/s44217-024-00173-z
- Barrett, A., & Pack, A. (2023). Not quite eye to AI: student and teacher perspectives on the use of generative artificial intelligence in the writing process. *International Journal of Educational Technology in Higher Education*, 20(1), 59. https://doi.org/10.1186/s41239-023-00427-0
- Bearman, M., & Ajjawi, R. (2023). Learning to work with the black box: Pedagogy for a world with artificial intelligence. *British Journal of Educational Technology*, *54*(5), 1160–1173. https://bera-journals.onlinelibrary.wiley.com/doi/10.1111/bjet.13337
- Bearman, M., Dawson, P., Boud, D., Bennett, S., Hall, M., & Molloy, E. (2016). Support for assessment practice: developing the Assessment Design Decisions Framework. *Teaching in Higher Education*, *21*(5), 545–556. https://doi.org/10.1080/13562517.2016.1160217
- Biggs, J. B., Tang, C. S., & Kennedy, G. (2022). *Teaching for quality learning at university*. McGraw-Hill Education.
- Boud, D. (1995). Assessment and learning. Contradictory or complementary? In P. Knight (Ed.), Assessment for Learning in Higher Education, (pp. 35-48). Routledge.
- Bower, M., Torrington, J., Lai, J.W., Petocz, P., & Alfano, M. (2024). How should we change teaching and assessment in response to increasingly powerful generative artificial intelligence? Outcomes of the ChatGPT teacher survey. *Education and Information Technologies*, 29, 15403–15439. https://doi.org/10.1007/s10639-023-12405-0
- Braun, V., & Clarke, V. (2021). *Thematic analysis: a practical guide.* SAGE publications.
- Cervantes, J., Smith, B., Ramadoss, T., D'Amario, V., Shoja, M. M., & Rajput, V. (2024). Decoding medical educators' perceptions on generative artificial intelligence in medical education. *Journal of Investigative Medicine*, 72(7), 633-639. https://doi.org/10.1177/10815589241257215
- Chan, C. K. Y., & Hu, W. (2023). Students' voices on generative AI: Perceptions, benefits, and challenges in higher education. *International Journal of Educational Technology in Higher Education*, 20, 43. https://doi.org/10.1186/s41239-023-00411-8
- Chan, C. K. Y., & Tsi, L. H. (2024). Will generative AI replace teachers in higher education? A study of teacher and student perceptions. *Studies in Educational Evaluation*, *83*, 101395. https://doi.org/10.1016/j.stueduc.2024.101395
- Charlton, N., & Newsham-West, R. (2024). Enablers and barriers to program-level assessment planning. *Higher Education Research & Development*, 43(5), 1074–1088. https://doi.org/10.1080/07294360.2024.2307933
- Corbin, T., Dawson, P., & Liu, D. (2025). Talk is cheap: why structural assessment changes are needed for a time of GenAl. *Assessment & Evaluation in Higher Education*, https://doi.org/10.1080/02602938.2025.2503964

- Cotton, D.R., Cotton, P.A., & Shipway, J.R. (2023). Chatting and cheating: Ensuring academic integrity in the era of ChatGPT. *Innovations in Education and Teaching International*, *61*(2), 228-239. https://doi.org/10.1080/14703297.2023.2190148
- Crawford, J., Cowling, M., Ashton-Hay, S., Kelder, J. A., Middleton, R., & Wilson, G. S. (2023). Artificial intelligence and authorship editor policy: ChatGPT, Bard Bing AI, and beyond. *Journal of University Teaching and Learning Practice*, 20(5). https://doi.org/10.53761/1.20.5.01
- Deakin University (2022). *Deakin curriculum framework*. Retrieved 25 September 2024 from https://www.deakin.edu.au/about-deakin/vision-and-values/teaching-and-learning/curriculum-framework
- Dianova, V. G., & Schultz, M. D. (2023). Discussing ChatGPT's implications for industry and higher education: The case for transdisciplinarity and digital humanities. *Industry and Higher Education*, *37*(5), 593–600. https://doi.org/10.1177/09504222231199989
- Elkhodr, M., Gide, E., Wu, R., & Darwish, O. (2023). ICT students' perceptions towards ChatGPT: An experimental reflective lab analysis. *STEM Education*, *3*(2), 70–88. https://doi.org/10.3934/steme.2023006
- Ghimire, S. N., Bhattarai, U., & Baral, R. K. (2024). Implications of ChatGPT for higher education institutions: exploring Nepali university students' perspectives. *Higher Education Research & Development*, 1–15. https://doi.org/10.1080/07294360.2024.2366323
- Hackley, C. (2019). Qualitative research in marketing and management: Doing interpretive research Projects. Routledge.
- Higher Education Policy Institute (2025, February 26). *Student generative AI survey 2025.* https://www.hepi.ac.uk/2025/02/26/student-generative-ai-survey-2025/
- Ibrahim, H., Liu, F., Asim, R., Battu, B., Benabderrahmane, S., Alhafni, B., ... & Zaki, Y. (2023). Perception, performance, and detectability of conversational artificial intelligence across 32 university courses. *Scientific Reports*, *13*(1), 12187. https://doi.org/10.1038/s41598-023-38964-3
- Kaplan-Rakowski, R., Grotewold, K., Hartwick, P., & Papin, K. (2023). Generative Al and teachers' perspectives on its implementation in education. *Journal of Interactive Learning Research*, *34*(2), 313-338. https://doi.org/10.70725/815246mfssqp
- Kohnke, L., Moorhouse, B. L., & Zou, D. (2023). Exploring generative artificial intelligence preparedness among university language instructors: A case study. *Computers and Education: Artificial Intelligence*, *5*, 100156. https://doi.org/10.1016/j.caeai.2023.100156
- Lawson, R., Taylor, T., French, E., Fallshaw, E., Hall, C., Kinash, S., & Summers, J. (2014). Hunting and gathering: new imperatives in mapping and collecting student learning data to assure quality outcomes. *Higher Education Research & Development, 34*(3), 581–595. https://doi.org/10.1080/07294360.2014.911249
- Liu, D., and A. Bridgeman. (2023, July 12). What to do about assessments if we can't out-design or out-run AI? https://educational-innovation.sydney.edu.au/teaching@sydney/what-to-do-about-assessments-if-we-cant-out-design-or-out-run-ai/
- Lodge, J. M., Howard, S., Bearman, M., Dawson, P, & Associates (2023). *Assessment reform for the age of artificial intelligence*. Retrieved 25 September 2024 from https://www.teqsa.gov.au/sites/default/files/2023-09/assessment-reform-age-artificial-intelligence-discussion-paper.pdf

- Luo, J. (2024). A critical review of GenAl policies in higher education assessment: A call to reconsider the "originality" of students' work. *Assessment & Evaluation in Higher Education*, 49(5), 651-664. https://doi.org/10.1080/02602938.2024.2309963
- Mah, C., Walker, H., Phalen, L., Levine, S., Beck, S. W., & Pittman, J. (2024). Beyond CheatBots: Examining tensions in teachers' and students' perceptions of cheating and learning with ChatGPT. *Education Sciences*, *14*(5), 500. https://doi.org/10.3390/educsci14050500
- Nikolic, S., Wentworth, I., Sheridan, L., Moss, S., Duursma, E., Jones, R. A., Ros, M., & Middleton, R. (2024). A systematic literature review of attitudes, intentions and behaviours of teaching academics pertaining to AI and generative AI (GenAI) in higher education: An analysis of GenAI adoption using the UTAUT framework. *Australasian Journal of Educational Technology*, 40(6), 56–75. https://doi.org/10.14742/ajet.9643
- Odri G.A., & Yoon, D.J.Y. (2023). Detecting generative artificial intelligence in scientific articles: Evasion techniques and implications for scientific integrity. *Orthopaedics & Traumatology:* Surgery & Research, 109(8):103706 https://doi.org/10.1016/j.otsr.2023.103706
- Ogurlu, U., & Mossholder, J. (2023). The perception of ChatGPT among educators: Preliminary findings. *Research in Social Sciences* & *Technology (RESSAT)*, 8(4), 196–215. https://doi.org/10.46303/ressat.2023.39
- Park, J., & Park, M. (2016). Qualitative versus quantitative research methods: Discovery or justification? *Journal of Marketing Thought*, 3, 2-7. https://doi.org/10.15577/jmt.2016.03.01.1
- Perkins, M., J. Roe, and L. Furze. 2024. "The Al Assessment Scale Revisited: A Framework for Educational Assessment." https://doi.org/10.48550/arXiv.2412.09029
- Purvis, A.J. & Crawford, J. (2024). Ethical Standards in Educational Research and Publication. *Journal of University Teaching and Learning Practice, 21*(9). https://doi.org/10.53761/hqnqr710
- Rudolph, J., Tan, S., & Tan, S. (2023). ChatGPT: Bullshit spewer or the end of traditional assessments in higher education? *Journal of Applied Learning and Teaching*. *6*(1) 342-362. https://doi.org/10.37074/jalt.2023.6.1.9
- Salinas-Navarro, D. E., Vilalta-Perdomo, E., Michel-Villarreal, R., & Montesinos, L. (2024). Using Generative Artificial Intelligence Tools to Explain and Enhance Experiential Learning for Authentic Assessment. Education Sciences, 14(1), 83. https://doi.org/10.3390/educsci14010083
- Saúde, S., Barros, J. P., & Almeida, I. (2024). Impacts of generative artificial intelligence in higher education: Research trends and students' perceptions. *Social Sciences*, *13*(8), 410. https://www.mdpi.com/2076-0760/13/8/410
- Smith, C., Holden, M., Yu, E., & Hanlon, P. (2021). "So what do you do?": Third space professionals navigating a Canadian university context. *Journal of Higher Education Policy & Management*, 43(5), 505–519. https://doi.org/10.1080/1360080X.2021.1884513
- Tala, M. L., Muller, C. N., Nastase, I. A., State, O., & Gheorghe, G. (2024). Exploring university students' perceptions of generative artificial intelligence in education. *Amfiteatru Economic*, 26(65), 71–88. https://doi.org/10.24818/EA/2024/65/71

- University of Leeds. n.d. "Categories of Assessments." https://generative-ai.leeds.ac.uk/ai-and-assessments/
- van der Vleuten, C. P. M., Schuwirth, L. W. T., Driessen, E. W., Dijkstra, J., Tigelaar, D., Baartman, L. K. J., & van Tartwijk, J. (2012). A model for programmatic assessment fit for purpose. *Medical Teacher*, 34(3), 205–214. https://doi.org/10.3109/0142159X.2012.652239
- Weber-Wulff, D., Anohina-Naumeca, A., Bjelobaba, S., Foltýnek, T., Guerrero-Dib, J., Popoola, O., Sigutm P., & Waddington, L. (2023). Testing of detection tools for Al-generated text. *International Journal for Educational Integrity*, *19*(1), 26. https://doi.org/10.1007/s40979-023-00146-z
- Weng, X., Qi, X. I. A., Gu, M., Rajaram, K., & Chiu, T. K. (2024). Assessment and learning outcomes for generative AI in higher education: A scoping review on current research status and trends. *Australasian Journal of Educational Technology*. https://doi.org/10.14742/ajet.9540
- Wise, B., Emerson, L., Van Luyn, A., Dyson, B., Bjork, C., & Thomas, S. E. (2024). A scholarly dialogue: writing scholarship, authorship, academic integrity and the challenges of Al. *Higher Education Research & Development*, *43*(3), 578–590. https://doi.org/10.1080/07294360.2023.2280195
- Zhai, Xiaoming. (2022). ChatGPT user experience: Implications for education. Available at SSRN 4312418 http://dx.doi.org/10.2139/ssrn.4312418