Navigating the Terrain:

Emerging Frontiers in Learning Spaces, Pedagogies, and Technologies

Upskilling academics for Gen AI: The role of third space workers

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The arrival of ChatGPT in late 2022 and the subsequent explosion of Gen AI tools and apps has had a significant disruptive effect in the higher education sector and has required a rapid response across the higher education sector. This response is needed at the institutional level of policy, as well as quality assurance. However, responses are also required at the level of learning design, with a particular focus on assessment. While the focus has largely been on implications for academic integrity and potential changes to assessment, this position paper explores the role of third space workers, such as learning designers, academic developers and educational leaders, in developing and updating the skills required of academics to stay current and to maintain and ensure education quality in the era of Gen AI. While responses to Covid-19 have shown the potential for rapid upskilling of academic staff, the emergence of Gen AI requires a more fundamental rethink of what and how we design for learning and assessment. The expertise of third space workers is crucial in this process.

Keywords: generative AI, third space workers, academic development, learning design, assessment, academic integrity

Introduction

In a recent report prepared for Australian Universities Accord Review Panel (Young, 2023), several disruptions are identified that affect higher education. Apart from climate and the environment, and geopolitics, the key disruption identified is Artificial Intelligence (AI) and Digital Environment. The author notes: "the second foundation of the revolution is the emerging ability of AI to summarise, interpret and produce knowledge. This is rapidly taking the information economy further away from being a purely human enterprise, to becoming a hybrid human-machine activity" (Young, 2023, p. 8). While this has a major impact on universities as knowledge-based organisations, the important point to make is that its effects and impacts permeate throughout society and across all disciplines, with significantly different impacts depending on the discipline. The latter has important implications for educational approaches in the context of Gen AI, for these responses need to go well beyond redesigning assessment to include the integration of discipline-based changes to practice that integrates Gen AI. For example, disciplines that rely heavily on the essay as a form of assessment will be impacted differently from the creative arts such as dance, drama, and creative writing. Moreover, such practices are not static but are dynamic and subject to constant change and innovation. This dynamic element in particular puts significant pressure on higher education institutions that have traditionally been rather slow in their change processes, and particularly, their quality assurance processes. For example, making changes to assessment in a course can take a considerable amount of time to go through the various institutional approval processes, which is time we do not have if fast-changing industry contexts demand rapid changes in the way we assess particular learning outcomes, such as where Gen AI is being used in new and emerging ways in the workplaces where our students will be employed.

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Given the importance of assessment as a way of assuring learning outcomes, it should come as no surprise that the overwhelming focus has initially been on assessment-based responses to Gen AI (Knight et al., 2023; Lodge et al., 2023a; Perkins et al., 2024). However, Gen AI potentially affects the educational enterprise as a whole and should therefore not be restricted to assessment (re)design alone. As Cardona et al. (2023) have pointed out, "AI technologies are grounded in models, and these models are inevitably incomplete in some way. It is up to humans to name educational goals and measure the degree to which models fit and are useful or don't fit and might be harmful" (p. 54). This goes beyond assessment alone and requires value judgements on the part of academics to inform the (re)design of assessment and learning more generally, as well as research.

Indeed, Gen AI can be seen as affecting all parts of an academic's job, as well as the roles of professional staff who support teaching and learning. As such, this requires holistic approaches, which in turn suggests a need for significant up- and/or re-skilling of academics and a holistic approach to academic development (Doherty et al., 2024; Sutherland, 2018). Cardona et al. (2023) go on to warn that "the romance of technology can lead to a 'let's see what the tech can do' attitude, which can weaken the focus on goals and cause us to adopt models that fit our priorities poorly" (p. 54). In other words, our responses to Gen AI and the way we incorporate it into our day-to-day disciplinary practices requires a shift in attitude and a constant updating of our expertise, not only to stay current, but also to get the most out of what the technology offers and to apply that in a productive and ethical manner. Such an approach would take us beyond a narrow focus on the risks, to a more balanced focus on both opportunities and risks, as well as resources required to take advantage of the opportunities (Knight et al., 2023).

Recent research by Jensen et al. (2024) suggests relatively positive attitudes towards AI in higher education: "while being perceived as a disruption of the status quo, [...] generally frame AI as a catalyst for existing agendas, e.g. assessment reform, personalisation, or inclusion" (p. 1). However, Jensen et al. (2024) propose a more critical interrogation of Gen AI, and caution against overoptimism and 'AI solutionism' (Lindgren & Dignum, 2023) towards a more critical and holistic approach that would incorporate both responsive actions and proactive approaches to leverage the opportunities of Gen AI and guard against its potential to do damage. This approach partly relates to the role of third space workers, as it may take considerable investment in such workers if universities are to meet the challenge of upskilling academics for Gen AI, which would be required to move beyond 'AI solutionism'.

In this paper, we explore the kind of upskilling required for academic staff, and the role of third space workers in that process, as academics do not necessarily hold teaching qualifications (van Dijk et al., 2020) and quality teaching (and quality teachers) featured prominently in the recent Australian Universities Accord (Australian Government, 2024). We define third space workers following Whitchurch (2009) as those working in the blended space between academic and professional domains. Assessment is the obvious starting point reflecting the scholarship in the area, but a holistic approach involves a lot more than assessment alone.

Assessment: Risks and opportunities

As noted, the initial response to the arrival of Chat GPT has been, and still is to a large extent, a focus on assessment. The anxiety related to academic integrity (Cotton et al., 2024) was often couched in war-like metaphors, such as ensuring that our assessment is 'robust under assault from Gen Al', and it is still not uncommon to hear such language being used in discussions about assessment. Fortunately, however, more considered approaches have begun to appear, which suggest a more critical and evidence-based response to assessment design in the age of Gen AI. In addition, it is increasingly being recognised that addressing the Gen

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Al challenge requires a course- or program-wide wide approach that will scaffold students in making productive and ethical use of Gen Al.

In the Australian higher education context, the Tertiary Education Quality and Standards Agency (TEQSA) responded fairly quickly with a set of guiding principles for assessment reform for the age of artificial intelligence (Lodge et al., 2023b), which reflected the idea of a holistic course- and program-wide approach. The two guiding principles are:

- 1. Assessment and learning experiences equip students to participate ethically and actively in a society where AI is ubiquitous
- 2. Forming trustworthy judgements about student learning in a time of AI requires multiple, inclusive and contextualised approaches to assessment. (Lodge et al., 2023b, pp. 1-2)

These are followed by a number of discipline-based examples, which provide some suggestions on how those guidelines may apply in specific disciplinary contexts.

Liu and Bridgeman's (2023) 'two-lane' approach has been particularly influential in the drive to rethink assessment. They suggest a two-pronged approach that firstly involves diagnosing and addressing the impact, i.e. "what are the immediate actions you need to take for your assessment?" This is then followed by making a choice about whether a specific assessment fits into Lane 1 (assured assessment of learning) or Lane 2 (human-AI collaboration in assessment as learning). They very usefully provide a wide range of examples of the types of assessments that may be required in either lane. This has been a great starting point, but in many cases, it would require considerable learning and teaching-related expertise on the part of the academics to re-design their assessments in this way, not to mention a considerable investment of time in a context where workload models are ever tighter. Therefore, the challenge is both assessment-related and learning design-related because assessment changes will require changes to teaching and learning and academics are likely to require considerable support from third space workers to effect the required changes.

More recently, Steel (2024) has problematised the two-lane approach by expanding the concept into 'six lanes', designed to clearly communicate with students what the assessment is about, and the role that Gen AI may play in it, or not as the case may be. The six lanes range from 'no assistance' (of Gen AI) (1) via 'simple editing assistance' (2) and 'planning/design assistance' (3) to 'assistance with attribution' (4), 'generative AI software-based assessments' (5) to 'not applicable' (6). This echoes Perkis et al.'s (2024) AI assessment scale, which has five scales: No AI; AI-assisted idea generation and structuring; AI-assisted editing; AI task completion, human evaluation; and full AI. In each case, considerable pedagogical expertise and judgement is required to firstly make decisions about which lane - or scale - would be appropriate to assess a particular set of learning outcomes, and secondly, additional learning design expertise is required to design an appropriate assessment that not only fits the lane or scale but is also authentic for the discipline, and current at the time that is deployed. Thus, while this appears to be about assessment design, there is a 'backwash' to overall learning design. Staying current places a significant burden on academics, as they need to stay up to date with the technology to have a clear understanding of what opportunities the ever-changing technology presents, but also stay current in relation to developments in discipline-based industry contexts in order to design appropriate assessments that reflect the way Gen AI is being used, or might be used, in the workplace. This is of course on top of their research, which may also be significantly affected by Gen Al. In short, academics face a considerable cognitive load issue, which is where third space workers come in. At the same time, it is also important to consider that Gen AI has the potential to lighten the service component load of academics (and third space workers), for example when used in reviewing curriculum changes. All of this points to a need for holistic and course- and program-wide approaches that affect the overall learning ecology; tinkering around the edges of learning and teaching will not suffice.

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The third space to the rescue? Holistic academic development and learning design

Early in 2023, Lodge et al. (2023a) mapped out a research agenda for Gen AI in tertiary education, which foreshadowed the importance of a holistic approach, as Gen AI potentially affects all aspect of the academic enterprise. They identified the following critical research areas:

- Sense making how does Gen AI work, and how does each new version and tool change the Gen AI landscape and applications?
- Assessment integrity how can we ensure we assess the intended learning outcomes?
- Assessment redesign if we cannot ensure the assessment of the intended learning outcomes, how can we redesign assessment for a dynamic and constantly changing context?
- Learning and teaching how can Gen AI be integrated into the learning and teaching process in meaningful and productive ways (e.g. through course- and program-wide approaches)?
- Ethics and AI how can we ensure ethical practice in both learning and teaching and research?

This is a useful set of elements to consider, and they point to the wide range of areas where third space workers (including academic developers, learning designers, student support workers, learning advisors, and educational technologists) can add value and help to decrease the cognitive load of discipline-based academics in the context of the changing educational environment outlined in this paper. We deliberately include student support workers and learning advisors in the category of third space workers (McIntosh & Nutt, 2022), as they often work closely with student partners and have their ear on the ground of where students are at, including their expectations and fears related to Gen AI (Matthews, 2024; Sáez-Velasco et al., 2024). This is another part of the overall learning ecology of which Gen AI increasingly an integral part.

From an organisational point of view, recognising both the risk of cognitive overload of academics in the face of what is required in the age of Gen AI, as well as the investment required into the development of third space workers, or 'integrated practitioners' (McIntosh & Nutt, 2022), to ensure that they stay current, needs both a rethink of the learning ecology itself (Kek & Huijser, 2017) and an investment to support the continuous evolvement of that ecology. This may seem a daunting prospect, and it needs considerable vision and courage, but the stakes are high and the risk for higher education includes a slow decline into irrelevance, where universities that are not aligned with the needs of their students and potential employers face a significant risk that they become irrelevant in a landscape of networked learners who are nodes within a network of Gen AI knowledge generation. In this context, third space workers are well-placed to work across disciplinary boundaries in an agile manner and to assist in not only keeping higher education relevant but also driving innovation in the age of AI.

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