

ASCILITE 2023

People, Partnerships and Pedagogies

The LMS in the age of Generative AI: Extending our debate

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Whilst Covid-19 raised a range of questions about the utility of the Learning Management System (LMS) and other technologies for teaching and learning, the advent of Generative AI (GenAI) poses new and fundamental questions about the teaching and learning technology ecosystem of our universities. We argue that these questions extend beyond the impact of GenAI on student learning, the assessment of students and academic integrity. Rather, the impact of GenAI on higher education represents a threshold concept that, once grasped, will entail a paradigm shift in the sector's self-understanding.

Keywords: Generative AI (GenAI); Learning Management System (LMS); Technology Ecosystem; Knowledge Creation; Student Learning; Academic Research; Academic Integrity

Multiple perspectives on the role and utility of the technologies in HE

The authors of this panel discussion proposal have recently published research highlighting the multiple perspectives around whether the Learning Management System (LMS) is still fit for purpose in higher education (HE). The findings of the study identified that this is contingent on what we mean by 'fit for purpose'. The research data was analysed, and the findings written up, during and after Covid-19, a point in history which significantly impacted the use of the LMS. With all teaching in Australian universities moving online almost overnight, the LMS quickly became the main conduit for online teaching, but in conjunction with a range of additional technologies in the technological ecosystem of universities. Given the Covid-19 disruption throughout 2020 and beyond, our research highlighted that the pandemic led to pressing questions about the role of the LMS and other technologies in teaching and learning in HE.

Our intention was to extend this initial research by exploring in more detail the perspectives of the different LMS stakeholders including management, teaching staff, students, and professional staff with responsibilities for supporting the use of technologies in teaching and learning. However, the rapid emergence of Generative AI (GenAI) in the early months of 2023 has resulted in different and much more pressing questions to do with the technology ecosystem of our universities. GenAI necessitates a radical rethinking not just of technology use in HE but, rather, about what it means to learn and to know in this new and fast-changing context. In this respect, our earlier research provides a strong base for the understanding of technologies in teaching and learning pre-GenAI.

The Impact of Generative AI on teaching, learning, and assessment in HE

The ASCILITE audience will be keen on discussion about the practicalities of working with GenAI in the HE sector, and there is no shortage of practical advice and resources in this respect (Russell Group, n.d.; TEQSA, 2023; Webb, 2023). At the same time, there is a much bigger picture within which GenAI needs to be situated to understand its ramifications for HE, not just in terms of practicalities but also in terms of a philosophical implications of GenAI (Beetham, 2023). We therefore point to the perhaps as yet unrealised fundamental paradigm shift in HE, ushered in by GenAI, to questions of "who we are?", "what we do?", and "how we know?", with the "we" extending across a multitude of roles in teaching and learning. The work of Siemens (2005) on 'Connectivism' comes to mind as a starting point for this paradigm shift.

Connectivism understands knowledge as distributed across a vast network of knowing, with the knower being a node in this network. Fast forward to research into GenAI, and McKnight (2021, p.7) writes that instead of: "thinking of humans using technology as separate and subservient tool, it becomes possible to think of a student writer not so much as an individual, but as a being composed of insistent and networked human and non-human presences". Making this shift in understanding can be seen as akin to 'grasping a threshold concept' (Meyer & Land, 2005) as GenAI represents 'troublesome knowledge'. Understanding the meaning of GenAI in teaching and learning necessarily leads to a shift in a person's worldview that cannot be reversed.

In this context, we can question the roles of the academic, the student, the academic developer, and professional staff supporting the use of technologies in teaching and learning. What does it mean for an academic or a student 'to know', when GenAI can produce the same or very similar knowledge at the touch of a button? For

example, what is the role of a learner when one can generate answers to a wide range of standard assessment types, including the ubiquitous essay, using GenAI (Marshall, 2023)? What is the role of sessional staff who do the bulk of our teaching and assessment (Whitchurch, 2018)? What will the role of academic developers be when GenAI can produce learning outcomes, assessment tasks and rubrics at the touch of a button? What role is there for professional staff supporting technology use in teaching?

Panel format and hybrid audience engagement strategies

Our panel discussion will engage with experts in the audience on the sorts of questions that we have raised. The audience is likely to be representative of a wide range of roles in HE, from teaching and learning leaders, academics/teachers, ongoing or sessional, to professional staff supporting the use of technologies, and students. We aim to engage them in both the larger philosophical debate and the debate over the specific and practical challenges that we are presented with.

This symposium will run for 50 minutes, facilitated by a Chair plus panel members onsite and online. We will start with the panel unpacking the research findings (ANON, 2023) of perceptions of the benefits and challenges of the LMS, including its contested space in HE, prior to the pandemic. We will then transition into a debate about the challenges in the new era of GenAI disruption. The debate will be run with panel members taking up competing lenses to replicate the tensions of technology use in the context of GenAI, with a specific focus on the role of the LMS. Following the debate, the floor will be opened for a participatory discussion around this contested space. Audience participation will be captured by roving microphones. For the online audience, the session will have a Twitter hashtag and a session moderator will monitor the questions on Twitter, which will be picked up by the Chair for discussion.

University Human Research Ethics will be obtained to audio capture the event – both the live event and the streamed online event – and to capture the questions and answers from both the panel and the audience (in person and online) including via Twitter. The discussion and recommendations will be thematically analysed, and a subsequent journal article will be drafted for submission to the Australian Journal of Educational Technology (AJET), to feed the debate back to the global community.

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