

ASCILITE 2024

Navigating the Terrain:

Emerging Frontiers in Learning Spaces, Pedagogies, and Technologies

Scaling-up technology-enhanced authentic learning: Challenges and opportunities

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Authentic learning, enhanced by technology, is a curricular, pedagogical and assessment design approach that has been widely adopted in higher education and has led to positive educational outcomes. Building authenticity into learning activities, approaches and assessments can engage students with real-world problems, issues and analysis and allow them to connect to their discipline. These potential benefits are pronounced within placements, internships and work experience activities; however, these are commonly, and necessarily, enacted at smaller scales. Scaling up authentic learning activities can connect students in larger cohorts to disciplinary practices and enabled through technological affordances; however, implementing these projects requires a considered and collaborative approach across educators, designers and developers. This panel will discuss several initiatives in technology enhanced authentic learning implemented at scale, including inherent challenges and opportunities, and will be of broad relevance to university educators and third-space professionals.

Keywords: authentic learning, scaling-up, TEL projects, project development

Background

Authentic learning can have significant benefits across a range of disciplinary contexts (Dishon, 2021; Herrington et al., 2014; Jopp, 2020), but many activities such as WIL are enacted at small scales (Jackson 2015; Universities Australia 2019). Utilising the affordances of educational technologies can allow a scale-up of activities and assessments that are embedded in real-world contexts, for example using authentic datasets, documents and video media, or through virtual reality or simulations. These present their own challenges in implementation at scale that encompass not just technical aspects, but also factors relating to academic knowledge and capacity, institutional practices, and sustainability (Bone 2022). Projects implementing technology enhanced learning are not simple or linear and often involve a suite of staff with differing specialist expertise across education, design and technology, requiring considered cross-disciplinary collaboration (Bone et al. 2023). Epistemic adjustments and shifts may also be required of educators (Tsai et al., 2013), along with expected capabilities in technology enhanced learning, (Saubern et al., 2020). Furthermore, educational settings are dynamic and multi-faceted, and learning itself is a complex socio-cultural process (Sabelli & Harris, 2015). Each 'scaling-up' endeavour is therefore not only challenging, but also distinct, though the objectives – for example, aiming to create positive learning experiences and outcomes for a large cohort of students through a set of technologically enhanced learning innovations – may be similar.

Context

The University of Melbourne's Flexible Academic Programming (FlexAP) was a strategic initiative with a key aim to enhance the quality of teaching, learning and assessment across the university. To support this goal, FlexAP provided both central funding and in-kind support (from academic advisors, learning designers, media producers and educational technologists) to educators wishing to innovate their curriculum within a single subject or set of subjects. The Foundational Curriculum Stream (FCS) supported improvement within subjects with over 200 enrolments, or clusters of subjects that collectively enrolled >200 students. Within this subprogram, the Authentic Learning priority area sought to improve the authenticity of student learning experiences by creating opportunities for authentic, real-world activities and assessments, in collaboration with external partners and practitioners as required, using models scalable to large cohorts.

This panel discussion brings together academic teaching and 'third-space' staff who have worked on recent

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FCS authentic learning projects, to discuss key questions that reflect on our diverse experiences and learnings across different disciplines and learner groups, and highlight ways to traverse this new terrain in higher education. Projects range across environmental science through audiology and positive psychology, and faced challenges in 'scaling-up' their technology enhanced initiatives across cohort sizes, conceptual complexity and multiple subjects. The discussion will be facilitated by an academic developer and held in a hybrid-enabled venue with a dedicated assistant for online participants to enable broad participation. Attendees to this panel will gain practical tips and guidance for developing their own initiatives and navigating associated challenges. We anticipate the panel will be of broad relevance to university educators designing technology enhanced authentic curriculum for large cohorts, as well as to those working in educational design, academic development and other supporting roles.

Panel Details and Sequence

Sequence of activities (Total 55 mins):

1. Introduction to the session and discussion questions by facilitator (3 mins)
2. Project Perspectives from four panel members (12 mins)
3. Panel discussion questions from facilitator (20 mins)
4. Audience Q&A (15 mins)
5. Conclusions and next steps (5 mins)

Panel presentations:

Perspective #1: Re-orienting assessment and feedback within two foundational audiology subjects in the Master of Clinical Audiology. *Project team:* Peter Carew, Sarah Swann, Dilshan Delgama. **Perspective #2:** Authentic learning designs for landscape analysis in first-year environmental science. *Project team:* Alexis Pang, Beau Picking. **Perspective #3:** Mapping and redesigning assessments across the MAPP. *Project team:* Sue Salamito, Becky Black. **Perspective #4:** Media and digital production in different terrains. *Project team:* Auryn Ona, Quinn Franks, Gordon Yau, Peter Carew, Sarah Swann, Dilshan Delgama

Panel discussion questions:

(1) What were your motivations for building authentic learning opportunities in your subject(s)? How do you see the role of technology in facilitating learning in your discipline?; (2) What have been some of the challenges – and enablers – in developing and supporting these projects? What would you do differently, if you had the opportunity?; (3) How have your students experienced these changes?; (4) What are your longer-term goals for your subject(s)? What are your next steps?; (5) Can you offer any tips for those starting out on building technology enhanced authentic learning at scale?

References

- Bone, E. (2022). Learning from 'failures' in the development of mobile and technology-enhanced learning initiatives. *ASCILITE Publications*, e22097. <https://doi.org/10.14742/apubs.2022.97>
- Bone, E., Oliveira, E., Colla, R., Yang Spencer, S., Farrow, J., Harris, J., Gaitan, L. and Iftikhar, N. (2023). More than the sum of its parts: reflections on a networked program supporting curriculum innovation at a research-intensive university. *ASCILITE Publications*: <https://doi.org/10.14742/apubs.2023.476>.
- Dishon, G. (2021). The new natural? Authenticity and the naturalization of educational technologies. *Learning, Media and Technology*, 46(2), 156–173. <https://doi.org/10.1080/17439884.2020.1845727>
- Herrington, J., Reeves, T. C., & Oliver, R. (2014). Authentic Learning Environments. In J. M. Spector, M. D. Merrill, J. Elen, & M. J. Bishop (Eds.), *Handbook of Research on Educational Communications and Technology* (pp. 401–412). Springer New York. https://doi.org/10.1007/978-1-4614-3185-5_32
- Jackson, D. (2014). Employability skill development in work-integrated learning: Barriers and best practice. *Studies in Higher Education*, 40(2), 350-367. <https://doi.org/10.1080/030750792013.842221>
- Jopp, R. (2020). A case study of a technology enhanced learning initiative that supports authentic assessment. *Teaching in Higher Education*, 25(8), 942–958. <https://doi.org/10.1080/13562517.2019.1613637>

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- Sabelli, N. H., & Harris, C. J. (2015). The Role of Innovation in Scaling Up Educational Innovations. In C.-K. Looi & L. W. Teh (Eds.), *Scaling Educational Innovations* (pp. 13–30). Springer Singapore.
https://doi.org/10.1007/978-981-287-537-2_2
- Saubern, R., Henderson, M., Heinrich, E., & Redmond, P. (2020). TPACK – time to reboot? *Australasian Journal of Educational Technology*, 36(3), 1–9. <https://doi.org/10.14742/ajet.6378>
- Tsai, C-C., Chai, C. S., Wong, B. K. S., Hong, H-Y & Tan, S. C. (2013). Positioning Design Epistemology and its Applications in Education Technology. *Journal of Educational Technology & Society*, 16(2), 81–90. JSTOR.
- Universities Australia (2019). Work integrated learning in universities: final report. Report to Universities Australia. Available at: <https://universitiesaustralia.edu.au/wp-content/uploads/2022/03/WIL-in-universities-final-report-April-2019.pdf> (retrieved Aug 14, 2024).

Bone, E.K., Salamito, S.E., Black, B., Carew, P., Ona, A., Yau, G., Picking, B., & Pang, A. (2024). Scaling-up technology-enhanced authentic learning across a university-wide curriculum innovation program: Challenges and opportunities. In Cochrane, T., Narayan, V., Bone, E., Deneen, C., Saligari, M., Tregloan, K., Vanderburg, R. (Eds.), *Navigating the Terrain: Emerging frontiers in learning spaces, pedagogies, and technologies*. Proceedings ASCILITE 2024. Melbourne (pp. 159-161). <https://doi.org/10.14742/apubs.2024.1160>

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