# ASCILITE 2026

***The Future is Connection:***

*Collaboration, Creativity and Compassion in a Digital Society*

# From technology adoption to purposeful technology orchestration: Designing human-centred learning journeys in higher education

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Higher education has never offered educators more technology choices. Artificial intelligence, immersive simulations, collaborative platforms, digital storytelling and social media continue to expand the possibilities for technology-enhanced learning (TEL). Yet the challenge is no longer choosing technologies, but determining why, when and how they should be orchestrated to strengthen meaningful learning and student engagement (Bond et al., 2020; Laurillard, 2012). Building on learning design and classroom orchestration (Dillenbourg, 2013; Goodyear, 2005), this poster explores how technologies can be purposefully sequenced across a learning journey rather than implemented as isolated innovations.

The poster draws on the redesign of a large first-year undergraduate marketing course at an Australian university, enrolling students from Marketing, Commerce and a broad range of non-business disciplines. The redesign was guided by one overarching question: What human learning relationship should this technology strengthen at this point in the learning journey?

The learning journey begins before students enter the classroom through weekly digital storytelling announcements and podcasts that extend teacher presence beyond scheduled teaching (Robin, 2008). Rather than delivering additional content, these stories connect marketing concepts with authentic lived experiences. One story begins with preparing children's lunchboxes before school and evolves into a discussion about social judgement, food labelling and consumer psychology. Students are encouraged to recognise marketing in their own lives and arrive at lectures curious to explore the week's concepts. Students then engage with authentic sustainability and social marketing cases, including the Boomerang Coffee Cup initiative and the Barbie campaign, before transforming their written analyses into a two-minute TikTok presentation. This authentic learning design connects disciplinary knowledge with meaningful, real-world contexts (Herrington et al., 2014).

The learning journey continues through Padlet and Slido, where student contributions are revisited throughout the semester and incorporated into subsequent course communications. This strengthens peer connection, demonstrates that learner contributions matter and positions students as active contributors to the course narrative.

The journey culminates in an AI-mediated virtual reality customer-service simulation. Introduced after students have developed conceptual understanding, the simulation provides a psychologically safe environment to rehearse empathy, professional judgement and customer interactions. Students use the SERVQUAL framework to evaluate service quality through reliability, responsiveness, assurance, empathy and tangibility, followed by tutor-facilitated reflection. Drawing on experiential learning (Kolb, 2015), immersive learning (Radianti et al., 2020) and self-determination theory (Ryan & Deci, 2020), the poster argues that technology's educational value lies less in its novelty than in its pedagogical purpose. It concludes with a transferable design approach for strengthening teacher presence, student voice, peer learning and authentic professional practice.

*Keywords:* technology-enhanced learning (TEL), learning design, purposeful technology orchestration, human-centred learning, authentic learning, digital storytelling, immersive learning, student engagement, higher education

## References

Bond, M., Buntins, K., Bedenlier, S., Zawacki-Richter, O., & Kerres, M. (2020). Mapping research in student engagement and educational technology in higher education: A systematic evidence map. *International Journal of Educational Technology in Higher Education*, 17(2), Article 2. https://doi.org/10.1186/s41239-019-0176-8

Dillenbourg, P. (2013). Design for classroom orchestration. *Computers and Education*, 69, 485–492. https://doi.org/10.1016/j.compedu.2013.04.013

Goodyear, P. (2005). Educational design and networked learning : patterns, pattern languages and design practice. *Australasian Journal of Educational Technology*, 21(1), 82–101. https://doi.org/10.14742/ajet.1344

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* (4th ed.), pp. 401–412). Springer. https://doi.org/10.1007/978-1-4614-3185-5_32

Kolb, D. A. (2015). *Experiential learning: Experience as the source of learning and development* (2nd ed.). Pearson Education.

Laurillard, D. (2012). *Teaching as a design science: Building pedagogical patterns for learning and technology*. Routledge. https://doi.org/10.4324/9780203125083

Radianti, J., Majchrzak, T. A., Fromm, J., & Wohlgenannt, I. (2020). A systematic review of immersive virtual reality applications for higher education: Design elements, lessons learned, and research agenda. *Computers and Education*, 147, Article 103778. https://doi.org/10.1016/j.compedu.2019.103778

Robin, B. R. (2008). Digital storytelling: A powerful technology tool for the 21st century classroom. *Theory into Practice*, 47(3), 220–228. https://doi.org/10.1080/00405840802153916

Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, Article 101860. https://doi.org/10.1016/j.cedpsych.2020.101860

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