

SCHOLARSHIP OF TECHNOLOGY ENHANCED LEARNING

SoTEL Symposium 19 April 2024

Enabling TEL capacity across complexity

Elisa Bone

The University of Melbourne

Keywords: academic development; curriculum innovation; community building.

Abstract

Embedding technology is now a necessary part of higher education teaching and learning policy and practice, owing to cascading effects of technological advancements and the pandemic-driven disruption of traditional teaching and learning modes (Rapanta et al., 2020, 2021). Well-designed technology enhanced learning (TEL) spaces and activities can provide experiences that are authentic, learner-centred, flexible, and equitable (Cochrane et al., 2017; Dunn & Kennedy, 2019).

Despite growing supportive evidence of these benefits, university teaching and learning systems often retain legacy structures and practices where technology-enhanced, creative and flexible activities are not easily integrated or well supported (Bridges et al. 2023). These issues may be exacerbated by the perceived comfort — by both academics and institutions — offered by a 'snap back' to pre-pandemic settings (Bryant 2022). As institutions rethink the ways in which they enact TEL (García-Morales et al., 2021; Rapanta et al. 2021), understanding and navigating potential barriers and enablers of innovative TEL design (Bone 2022) becomes important. Within this presentation, I draw and reflect on recent projects to consider how academic development programs might facilitate TEL initiatives that are targeted and sustainable.

For individual academics, approaches to teaching and learning can vary, with flow-on effects into the ways they teach, and the learning outcomes of their students (Trigwell & Prosser, 1997, 2004). In challenging, high-pressure environments, academics who teach may not have the capacity to adapt their approaches to a rapidly changing context (Bone 2021). Indeed, impacts of the pandemic highlight that academic development during times of crisis needs to be more holistic and provide adequate support for innovative change (Bone et al. 2021; Sumer et al., 2021; Mulder et al., 2022; Bone et al. *in review*). Enacting such holistic academic development in higher education institutions, which are highly complex (Knight 2001) but increasingly fragmented and siloed (Becher & Trowler, 2001), requires approaches to design and delivery of programs and supports that mimic and respond to this complexity (Bone & Ross 2019), and are responsive to the intents and priorities of both academics and management, and the learning needs of students.

Embedding technologies into this complex curriculum environment in ways that are sustainable and equitable requires approaches that both build incentives and drivers from leadership (top-down), and reward and harness the existing enthusiasm and capacity of academics (bottom up) (Bone 2022). Building networked approaches to enable curriculum design, development and innovation can involve communities of practice, mentoring or other knowledge-sharing activities across disciplines and roles (Bone et al., 2023). Enacting these across institutional boundaries can bring together those interested in specific aspects of TEL (Narayan et al., *in press*) who may also feel isolated within traditional hierarchical institutional structures (Bone et al., *in press*).

Knowledge sharing and community building has clear potential to drive positive change. As a TEL community, we must continue to advocate for teaching, learning and development spaces that emphasise collaboration and collegial knowledge-sharing, and to push for greater recognition as we work together to build the future of higher education teaching and learning.

References

Becher, T., & Trowler, P. (2001). *Academic Tribes and Territories*. Open University Press: Buckingham. Bone, E.K., French, S., Deneen, C.D. and Prosser, M. (*in review*). Examining academics' changing teaching and learning perspectives in response to the COVID-19 disruption: a phenomenographic approach. Under review at *Teaching in Higher Education*.

Bone, E.K., Huber, E. Lys, I., Gribble, L., Dickson-Deane, C., Campbell, C., Yu, P., Markauskaite, L., Carvalho, L. & Brown, C. (*in press*). A community-based practice for the co-development of women

- academic leaders. *International Journal of Academic Development*, special issue: 'Beyond Academic Development as Institutional Practice: Advancing Community-led Approaches'.
- Bone, E.K., Oliveira, E., Colla, R., Yang Spencer, S., Farrow, J., Harris, J., Gaitan, L. & 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*, ASCILITE Conference 2023. https://doi.org/10.14742/apubs.2023.476
- 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.K. (2021). Teaching academics are shouldering the load to transform the university experience. *Sentry* magazine. National Tertiary Education Union. https://doi.org/10.26188/15597375
- Bone, E.K., French, S., Deneen, C.D., & Prosser, M. (2021) Disruption as a catalyst for change? Effects of COVID-19 on the perceptions and approaches of academics in their teaching. Society for Research into Higher Education Conference 2021, United Kingdom. https://doi.org/10.26188/25538575
- Bone, E.K. and Ross, P.M. (2019). Rational curriculum processes: revising learning outcomes is essential yet insufficient for a twenty-first century science curriculum, *Studies in Higher Education*, https://10.1080/03075079.2019.1637845
- Bridges, S. M., Chan, C. K. Y., Ceperkovic, R., Nguyen, U. N. T., Prosser, M., Bone, E., French, S., & Sharifi, S. (2023). International Perspectives on the Transformation of Teaching in the New Normal. In D. Kember, R. A. Ellis, S. Fan, & A. Trimble (Eds.), *Adapting to Online and Blended Learning in Higher Education: Supporting the Retention and Success of the Expanded and Diversified Intake* (pp. 259–295). Springer Nature. https://doi.org/10.1007/978-981-99-0898-1 13
- Bryant, P. (2022). '...and the way that it ends is that the way it began': Why we need to learn forward, not snap back. *Peter Bryant: Post Digital Learning*, November 4, 2022.
- Cochrane, T. D., Cook, S., Aiello, S., Christie, D., Sinfield, D., Steagall, M., & Aguayo, C. (2017). A DBR framework for designing mobile virtual reality learning environments. *Australasian Journal of Educational Technology*, 33(6). https://doi.org/10.14742/ajet.3613
- Dunn, T. J., & Kennedy, M. (2019). Technology Enhanced Learning in higher education; motivations, engagement and academic achievement. *Computers & Education*, 137, 104–113. https://doi.org/10.1016/j.compedu.2019.04.004
- García-Morales, V. J., Garrido-Moreno, A., & Martín-Rojas, R. (2021). The Transformation of Higher Education After the COVID Disruption: Emerging Challenges in an Online Learning Scenario. *Frontiers in Psychology*, 12. https://www.frontiersin.org/article/10.3389/fpsyg.2021.616059
- Knight, P. T. (2001). Complexity and Curriculum: A process approach to curriculum-making. *Teaching in Higher Education*, 6(3), 369–381. https://doi.org/10.1080/13562510120061223
- Mulder, R., Bone, E., French, S. & Connelly, F. (2023). Navigating the transition to online teaching at the University of Melbourne during COVID-19: approaches, reflections and insights. Occasional Paper, Melbourne Centre for the Study of Higher Education, The University of Melbourne. https://www.doi.org/10.26188/24098064
- Narayan, V., Cochrane, T., Stretton, T., Chanane, N., Alizadeh, M., Birt, J., Bone, E., Cowie, N., Deneen, C., Hinze, M., Sinfield, D., Worthington, T., Goldacre, P. & Vanderburg, R. (in press). A model for nurturing a networked academic community: #ASCILITEMLSIG mobile learning special interest group. *International Journal of Academic Development*, special issue: 'Beyond Academic Development as Institutional Practice: Advancing Community-led Approaches'.
- Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2020). Online University Teaching During and After the Covid-19 Crisis: Refocusing Teacher Presence and Learning Activity. *Postdigital Science and Education*, 2(3), 923–945. https://doi.org/10.1007/s42438-020-00155-y
- Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2021). Balancing Technology, Pedagogy and the New Normal: Post-pandemic Challenges for Higher Education. *Postdigital Science and Education*, 3(3), 715–742. https://doi.org/10.1007/s42438-021-00249-1
- Sumer, M., Douglas, T., & Sim, K. N. (2021). Academic Development through a Pandemic Crisis: Lessons Learnt from Three Cases Incorporating Technical, Pedagogical and Social Support. *Journal of University Teaching and Learning Practice*, 18(5). https://eric.ed.gov/?id=EJ1325729
- Trigwell, K., & Prosser, M. (1997). Towards an Understanding of Individual Acts of Teaching and Learning. Higher Education Research & Development, 16(2), 241–252. https://doi.org/10.1080/0729436970160210
- Trigwell, K., & Prosser, M. (2004). Development and Use of the Approaches to Teaching Inventory. *Educational Psychology Review*, 16(4), 409–424. https://doi.org/10.1007/s10648-004-0007-9