

SoTEL Symposium 18-19 February 2021

Microcredentials: Designing innovative pathways to and beyond degree offerings

Keith Heggart
University of Technology Sydney
keith.heggart@uts.edu.au

Camille Dickson-Deane
camille.dickson-deane@uts.edu.au

Keywords: microcredentials; course design; learning design; higher education; design.

Abstract:

Higher education has faced, and will continue to face, significant challenges in the future (Bradley et al., 2009). Some of these challenges are foreseeable, for example, increasingly diverse student cohorts, many of whom are the ‘first in family’ to come to university. In addition, students today are more likely to have other responsibilities such as multiple jobs or caring duties whilst pursuing their studies (Kift et al., 2010). In addition, students’ expectations about how they will learn at university are changing, with learning technologies playing a bigger role than in the past (Dvoretzkaya et al., 2018). These expectations include the use of technology to facilitate learning, more choices in learning approaches and subjects that are directly relevant and immediately translate to career pathways.

In the face of these challenges, institutions are adopting a range of different and innovative measures, including experimenting with the use of technological affordances (Jeong & Hmelo-Silver, 2016) to allow for course restructuring and modifications. While some have long called for these changes (Preston et al, 2010), it could be argued that COVID has provided further stimulus for universities to investigate and trial these new ideas. One such modification is the development and implementation of microcredentials and short courses that exist both as stand-alone courses but also directly feed into terminal degree offerings (Ehlers, 2018). While the notion of microcredentials is not new (DeMonte, 2017), the entry of tertiary institutions into this space is, and is, in part, a response to the offerings of non-higher education providers. However, developing, implementing and advertising these new courses is not without its own challenges including how these might ‘stack’ meaningfully into larger qualifications (Hall-Ellis, 2016).

This presentation describes the innovative development and implementation of eight learning design microcredentials within the Faculty of Arts and Social Sciences at the University of Technology Sydney. The challenges faced by faculty and learning designers responsible for the design and delivery of these microcredentials are analysed, including; multiple entry and exit points for students; the intensity of the short time frame of the courses; the requirement to find the right mix of synchronous and asynchronous delivery; the best way to ensure facilitation throughout the student experience and, most importantly, creating a sense of belonging beyond the bounds of a single microcredential.

This presentation then examines the creative structure and nature of the eight microcredentials, the blended learning theories that underpinned their design, the articulation pathways that they offered, and the design decisions that informed the development of the microcredentials, including the decision to focus on experience over expertise, situate the course close to industry and practice, manage an internship-like experience, and assess students’ achievements through a competency-based portfolio. It also describes the way that technology enhanced learning approaches provided the pedagogical basis for the design of the microcredentials. The paper concludes with a summation of the learning design principles that will inform the development of future microcredentials as pathways using innovative program designs into terminal degree opportunities.

References

Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). *Review of Australian higher education: Final report*. Department of Education, Employment and Workplace Relations (DEEWR). <http://hdl.voced.edu.au/10707/44384>.

DeMonte, J. (2017). *Micro-credentials for teachers: What three early adopter states have learned so far*. American Institutes for Research (AIR). <https://www.air.org/resource/micro-credentials-teachers-what-three-early-adopters-have-learned-so-far>

Dvoretzkaya, E., Mishchenko, E. S., & Dvoretzky, D. (2020). Mobile Technologies in Education: Student Expectations – Teaching Reality Gap. In M. E. Auer & T. Tsiatsos (Eds.) *The Challenges of the Digital Transformation in Education*. (pp. 946–957). Springer International Publishing.

Ehlers, U. D. (2018). Higher Creduation–Degree or Education? The Rise of Microcredentials and its Consequences for the University of the Future. In *European Distance and E-Learning Network (EDEN) Conference Proceedings* (No. 1, pp. 456-465). European Distance and E-Learning Network.

Hall-Ellis, S. D. (2016). Stackable micro-credentials—a framework for the future. *The Bottom Line*, 29(4), 233-236. <https://doi.org/10.1108/BL-02-2016-0006>

Jeong, H., & Hmelo-Silver, C. E. (2016). Seven affordances of computer-supported collaborative learning: How to support collaborative learning? How can technologies help?. *Educational Psychologist*, 51(2), 247-265.

Kift, S. M., Nelson, K. J., & Clarke, J. A. (2010). Transition pedagogy: a third generation approach to FYE: a case study of policy and practice for the higher education sector. *The International Journal of the First Year in Higher Education*, 1(1), 1-20.

Preston, G., Phillips, R., Gosper, M., McNeill, M., Woo, K., & Green, D. (2010). Web-based lecture technologies: Highlighting the changing nature of teaching and learning. *Australasian Journal of Educational Technology*, 26(6). <https://doi.org/10.14742/ajet.1038>