Threshold concepts about online teaching: Progress report on a five year project

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The burgeoning expansion of online education has presented the challenges of articulating an appropriate pedagogy for online education (Stevens, 2003; Runnels et al., 2006; Gosselin, 2009) while also contending with perceived and real deficits in lecturer competence (Shephard, 2007). Conceptually, the identified areas of concern are viewed as troublesome knowledge (Perkins, 1999), or knowledge that is counter intuitive to traditional teaching face to face teaching.

To meet the emerging difficulties of new modes of distance teaching, researchers have focused on transformative learning using threshold concepts, or new portals, that allow understanding of concepts through new modes of thinking (Meyer & Land, 2003). Northcote and her colleagues used findings from their research into threshold concepts of online teaching to develop a tailored staff development training program (Northcote et al., 2011; Northcote et al., 2013). By identifying troublesome knowledge and threshold concepts, several unique benefits have been realised that include: 1) a focus for professional development programs; 2) a clearer understanding of the processes and resources needed to facilitate development; 3) support from institutional leadership; and 4) increased competence and confidence for online course developers.

The project sought to identify staff skills, conceptual understanding and attitudes to online learning by utilising a mixed methods multiphase design (Creswell & Plano Clark, 2011). Each stage uses systematic reflective diaries, which largely focused on the problematic issues and troublesome knowledge (Meyer & Land, 2003, 2005; Perkins, 2006) that staff encountered as they designed and taught online courses. These were compared with data from an adapted *Online Teaching Self-Efficacy Inventory* (Gosselin, 2009) questionnaire, identifying areas where teaching staff felt confident in their online teaching skills.

A study in 2010 at Avondale College of Higher of Education identified developing threshold concepts that unsettled tertiary lecturers in moving to an online environment. This permitted a targeted training and support programme to be implemented which improved the competence and confidence of online lecturers.

Subsequently, two additional studies were undertaken to provide comparative information. The first was a cross-continental project comparing the learning needs of faculty at ACHE and The University of Texas at Tyler. This investigation provided cultural comparisons and enriched the understanding of how these comparisons can inform both broad and customised online training programs (Gosselin & Northcote, 2012). The second investigation explored what expertise and confidence had been developed, and what new issues arose as lecturers advanced in online learning delivery. The emerging trends were compared with current theory from literature on professional development of online teachers (Northcote et al., 2013).

During the third stage of the study, data were gathered to further inform the ongoing design of the professional development program for online course design and online teaching skills. As well as documenting how the staff now hold a more extensive set of threshold concepts about their online teaching skills compared to earlier stages of the study, the results of the third stage of the study have also revealed the importance of threshold *skills* and *attitudes* in association with online course design and online teaching.