Leveraging the land grab: Threshold concepts for teaching the digital economy.

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Purpose

This paper explores teaching and learning of the digital economy in higher education. There are few disciplines that have not introduced 'digital' into their curriculum[i] - external observers might perceive a land grab. This piecemeal approach to teaching the digital economy may not serve students well for their future careers. What is needed is a synthesis of threshold concepts (Meyer and Land 2005) and integration of pedagogy approaches such as those proposed by these authors (Gale and Parker 2014, Kong 2014, Laanpere, Pata et al. 2014, Roach 2014, Christie, Carey et al. 2015, Hibbert and Cunliffe 2015, Savery 2015, Clark, Tanner-Smith et al. 2016, Savin-Baden 2016). A pedagogy that transitions students with the skills and knowledge needed to succeed in digital job market. Potentially a movement away from traditional disciplined based programmes to cross discipline teaching using learning design that develops skills and knowledge for employment.

Students select programmes and units that provide them with the skills and knowledge to gain career options, many aspire work in the digital economy or to become an entrepreneur. Their decision is informed by current programme designs and assumptions that the degrees provide the experience, skills and knowledge to secure roles in the future. There are no QAA subject benchmarks at programme level that cover the digital economy or its teaching.

Consequently, threshold concepts and guidance on subject material and its teaching are left to the instincts of programme and unit designers. How do universities prepare students for a future in the digital economy? What are the threshold concepts for teaching and learning of the digital economy?

Methodology/Approach,

A framework of learning and teaching in the digital economy is presented, illustrating the challenges posed to traditional higher education programme and unit designs. The framework explores threshold concepts, current pedagogical and assessment design, future careers, interdisciplinary interfaces and opportunities. Potential threshold concepts for the digital economy are identified. A digital business masters unit pedagogical design used over the last four years is presented and evaluated. The designs of multidisciplinary four-year degree programmes 'with innovation' are reviewed pedagogically. This research of teaching practice provides a conceptual and case-based exploration of threshold concepts and learning designs.

Findings

Transdisciplinary degree programmes with innovation and digital themes with a variety of pedagogical designs can engage students in learning. These findings at a research led institution suggest transdisciplinary programmes are effective in engaging students, delivering experience, knowledge and skills and assist in transitioning students to employment in the digital economy. Threshold concepts for teaching the digital economy were; competitive strategy, business models, managing change, digital economics, innovation, value, customer and process interactions, digital marketing, sustainability, social and mobile interactions, digital ecosystems, platforms, Internet of Things, AI, robotics, big data, analysing data and algorithms, risk, trust and security, citizenship and ethics. In many ways these are troublesome threshold concepts for students and academics.

Originality/Value
There are many opportunities to teach the digital economy, a combination of pedagogy, practice and threshold concepts have the potential to shape students learning and gain employment in the digital economy.

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[i] A search in one institution resulted in 10 units with digital in the title in 6 different disciplines, yet a similar search found no programmes with digital in the title.