Delivering quality learning experiences at scale: how to ensure our students feel connected

Introduction

Large-scale delivery of management courses is a common occurrence across the higher education sector and the effective design and delivery of such educational experiences is a challenge faced by many higher education institutions (Kagan & Diamond, 2019).
There are multiple dimensions to this challenge. For both staff and institutions, the challenge is twofold, economic and pedagogical. The costs of magnifying and multiplying education offerings needs to be matched and exceeded by the revenue, whilst at the same time ensuring that the quality of the teaching and learning does not fade with repetition or lose students in a sea of faces (Author, 2022a). The literature tells us our students are often overwhelmed, disconnected and lonely. Their challenge is how to overcome the feelings of social isolation that come with being part of a very large cohort, sometimes over 2000 strong (McEwen, 2021).

How do we ensure our students continue to be engaged and connected in large courses whilst balancing their many competing activities? *Connected learning* recognises the powerful affordances that come from designing a teaching and learning experience that supports students to engage, create, critique, reflect and learn in social settings across a complex ecosystem of networks and engagements. Knowledge is not simply observed or consumed. Individuals are active and collaborative participants in the construction and understanding of their knowledge through how they interact and be social with others (Author, 2022b). At a broader level, connected learning uses approaches that are socially embedded, interest-driven and opportunity oriented (Ito et al., 2013).

The intended outcome of this roundtable discussion is to identify key challenges with connected learning at scale in management education among participants, and work together to share, design and critique potential solutions to some of these challenges using a tried and tested template to capture design patterns for connected learning at scale. Participants will also be introduced to a design patterns resource created at The University <name removed for blind review> Business School that offers a collection of design patterns and accompanying examples that can be adapted by management education colleagues to meet their needs.

The target audience is management education academics and leaders and those working closely with academics to develop learning experiences and courses such as educational developers or learning designers.

Teaching Implications

The discussion in this session builds on a large educational strategic project being conducted at The University <name removed for blind review> called *Connected Learning at Scale* (CLaS)**.** The project aims to transform the teaching and learning experience in all large undergraduate and postgraduate core and foundation units in the Business School (Authors, 2021; Author, 2022b). It is being implemented to allow the Business School to better manage and take advantage of the scale of cohort, and to support, nurture and leverage connections between students, disciplines, industry and society. In other words, not just cope with scale but to better design for scale (Authors, 2022a).

There are many debates over what we mean by 'scale' but no clear definition (Mantai & Huber, 2021). We concur with Maringe and Sing (2014) that any class can be considered large or at scale if the delivery of quality and equal learning opportunities for all students poses both a real and perceived challenge. Indeed, the literature tends towards describing the challenges imposed by scale rather than the benefits. Some researchers argue that as the class sizes grow, higher order cognitive skills, such as problem solving, critical thinking and affective learning become harder for learners to develop (Hornsby & Osman, 2014). In these times of rapid technological change, we believe we have the tools and support mechanisms to enable opportunities for students to be active, collaborative and self-directed in accordance with constructivist (Sheer et al., 2012) and connectivist theories (Siemens, 2005). Learning in authentic and situated contexts, creative problem-solving, critical thinking, team collaboration, and the ability to manage and communicate complexity are skills that are highly valued by employers (Matthews & Wrigley, 2017).

We have therefore utilised three key principles to underpin the CLaS project:
Principle 1: **Information engagement** – where students both individually and collectively engage with discipline knowledge as opposed to having it broadcast at them in a lecture.
Principle 2: **Connected participation and active learning** -where face-to-face teaching time, student learning activities and technology are leveraged to build connections and networks to address, debate and solve critical global and local challenges though innovative pedagogical approaches.
Principle 3: **Relevant and authentic assessment and feed-forward** – where learning is applied and tested through authentic assessment modes supported by opportunities to receive and share feedback from both academics and their peers.

A Co-Design approach

Since 2019, the CLaS project has utilised a co-design process to conduct significant redevelopments of over 50 units in the Business School. These units include core units in the Bachelor of Commerce Program, all Foundational and Capstone units in the Master of Commerce Program, and other units with high enrolment numbers in the Business School. As the co-design process has been conducted as part of a broader design-based research approach, (McKenney & Reeves, 2018) the project team has been collecting evaluative data from students and staff to evaluate developments across these large units. Working with academic partners, alumni, current students and industry partners, we co-design, develop and implement interventions, technology-infused improvements and innovative approaches to learning and teaching. The design patterns generated as part of the project are captured and shared as educational design patterns for connected learning at scale.

The discussion will contribute to effective teaching and learning in management education by sharing key learnings from this large-scale project aimed to improve the student learning experience in large cohorts in management education. It will support participants in thinking about ways they can address their own challenges with scale and share a range of design patterns that participants can adapt to meet their own needs.

Session Description

In this session we will briefly introduce some of the challenges we have been facing in our work with very large management units, then invite discussion on these challenges. The session will utilise small groups of 3 or 4 people to discuss a particular challenge (either provided by a group member or we can provide). We will structure the session as follows:

Timing	Activities	Presenter/participants
10 mins	Introduction to the University of <name removed for blind review> *Connected Learning at Scale* project and some of the challenges we have been facing in our large courses	presenters
20 mins	Brainstorming some of the challenges of learning at scale experienced by participants	Participants in a think-pair-share activity
20 mins	Take one of the 'problems' and in pairs and discuss known solutions (or brainstorm possibilities) with the support of a guiding template designed to capture solutions to problems of scale	Participants in dyad or triad discussions
20 mins	Share back solutions and constructively critique	participants
5 mins	Wrap up and linkage to our design patterns resource (examples and solutions to problems of learning and teaching at Scale)	presenters

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