



Reconnecting teachers and students: Exploring educator experiences in large online cohorts

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Increasing class sizes in higher education make it difficult to maintain quality. Teaching large cohorts within the context of restrained resources and the limitations of Learning Management Systems impacts the experiences of educators. Research is now examining how educators make sense of this experience to guide stakeholders toward practical directions for future pedagogical and social practices. A review of previous research noted three groups of challenges faced by online teaching: (1) technological, (2) pedagogical, and (3) social. Our study explores the experiences of educators teaching large cohort (500 to 2300 students) undergraduate courses online. This concise paper presents the findings from the social aspects of the challenge. Our qualitative approach explores the experiences of educators at our school who teach large cohorts online. We suggest recommendations to address the social needs of students and educators involved with large cohorts online.

Keywords: Large cohorts, Learning Management System, social needs, educator experience, strategies

Introduction

The massification of higher education to allow tertiary learning to be available to everyone has resulted in escalating numbers of students entering universities and increased opportunities for establishing large cohort classes with high teacher-student ratios (Hornsby & Osman, 2014). In addition, the recent COVID-19 pandemic has encouraged reflection on online teaching strategies across the globe (Ferri et al., 2020). Most modern institutions use a Learning Management System (LMS), for example, Moodle, Blackboard or Canvas, to assist efficient management of materials and larger numbers of students.

Increasing class sizes make it difficult to maintain quality; however, since current practices continue expanding class and cohort sizes (Ryan, 2020), especially online, it is critical to explore how educators face the challenges of teaching large student numbers. Research has shown positive and negative aspects of e-technology, such as the LMS. Kanuka & Rourke (2008, p. 5) argued that "e-learning and its constituent technologies and techniques amplify certain aspects of the teaching and learning environment while reducing others." It is important, therefore, to monitor the experience of teaching and learning in online spaces to take advantage of the technological affordances without losing the social connections mediated communication potentially disrupts. Exploring how educators make sense of this experience will guide educators, institutions, administrators and other stakeholders toward practical and effective directions for future pedagogical and social practices (Al-Freih, 2021; Cutri & Mena, 2020; Kearns, 2016; Kerres, 2020).

Previous research has explored the lived experience of academics teaching large classes specifically, looking at the problematic nature of teaching and learning in large classes. For example, Chikoko (2015, p. 2) stated, "realising and maintaining quality education will only be possible when, among others, there is knowledge about how academics experience their large class teaching." Research is now examining educator experiences, especially considering the recent pandemic, which accelerated a move to totally online learning. Concern has been raised about the impact on educators of the rapid shift online. Ferri et al. (2020) reviewed previous research and noted three groups of challenges faced by online teaching (1) technological, (2) pedagogical, and (3) social. They noted previous literature identified lack of suitable study space at home, and they found social challenges of lack of interaction between educators and students. Mantai & Huber (2021) reported on the experiences of academics teaching large cohort classes in Australia. They found the locus of control for learning with large cohort classes shifts from the educator to the student. This shift, they suggest, may lead to the educator experiencing feelings of disorientation and disempowerment. Considering these study findings, we feel

it is important to explore the experiences of educators in our school to identify challenges and strategies in our context. This paper focuses on the social aspects of the online challenges, although technological and pedagogical aspects also influence the social experience of educators and their interactions with students.

Rationale & Context

This study explores educator experiences teaching large cohort undergraduate courses online. We examine how they meet the technological, pedagogical and social challenges of online delivery. This paper focuses on the social challenges, and the other two are examined in later papers. We take a qualitative approach through focus groups comprised of academics at our school who have experience working on large cohort courses. Many countries commonly maintain quality teaching on a larger scale (Ryan, 2020). We hope to develop recommendations and guidelines for meeting student social needs to better support lecturers teaching large cohort undergraduate courses online locally and internationally.

The location for this study is the [Institution Name, Department Name]. This department within the [Name] provides students with a foundation of knowledge applicable to all other health science majors. Enrolled students complete four courses to introduce them to core topics such as anatomy and physiology, developmental psychology, social and environmental influences on health, and academic enquiry processes. Knowledge of *Te Tiriti* (the Treaty between the indigenous Māori people of Aotearoa/New Zealand and British settlers signed in 1840) and *Mātauranga Māori* (Māori concept of enlightenment), as well as academic skills, are woven throughout these first-year undergraduate courses. Subsequently, students begin their major(s) and minor(s)/electives and continue those through their second and third years of study. Each course cohort's enrolment ranges from 350 to 2300 students and educators (lecturer and above) range from one to four. These courses have traditionally occurred in a blended format with materials and some online assessments combined with face-to-face lectures and tutorials. In addition, the COVID-19 pandemic required these large courses to move entirely online. Furthermore, the university changed the LMS from Blackboard to Canvas in semester 1, 2022. We are also educators on these large courses but were not participants in the study. Our institution granted ethical approval (ref. 21/392).

Methodology

To foreground the participants voices as we explore educator experiences of teaching large cohorts online, we used a qualitative descriptive approach. The qualitative descriptive approach allows the academic educators members to express their experiences in their own words (Sandelowski, 2000). We stay close to the transcribed data in reporting the findings, include many quotes and describe the academic experiences in language similar to their own. The qualitative descriptive approach allows the focus group member's words to speak for themselves and assists us in focusing on their experiences and views. There were 18 potential participants who taught on large cohort papers (excluding the authors).

Data collection

We planned to gather data via online focus groups using Teams, which records the sessions and generates a transcription. Focus groups enable both individual perspectives and reflection on peers' views of their experiences (King, 2004). The first focus group was held in the second week of May 2022 with five participants, and the second in the following week. However, only one participant appeared for that group, so we conducted it as an interview. The focus group and interview included the three researchers. The semi-structured focus group and interview included the following questions:

1. Please tell us about your experiences using technology while teaching large cohort undergraduate classes online? If you experienced challenges, what were they? How did you resolve these challenges?
2. Please tell us about your experiences in applying sound pedagogy while teaching large cohort undergraduate classes online? If you experienced challenges, what were they? How did you resolve these challenges?
3. Please tell us about your experiences in addressing student's social needs while teaching large cohort undergraduate classes online? If you experienced challenges, what were they? How did you resolve these challenges?
4. Is there anything else you would like us to talk about regarding teaching large cohort undergraduate classes online?

Participants were encouraged to voice their thoughts freely and openly. The focus group and interview lasted approximately 60 minutes each.

Data analysis

Following the check of the Teams-generated transcription for accuracy, we printed out the written transcripts to read for gaining familiarity with the content. We used a template analysis process (Brooks et al., 2015; King,

2004) in which we created our initial template based on previous literature and our own experiences. This helped us clarify the definitions among ourselves. In line with our subtle realist stance, the template analysis enabled us to focus on some key reported areas of the experience while also allowing for subjective interpretations to appear. The template also assisted us with a limited interview time and to compare perspectives of educators working across substantially different courses. The highest-order codes were technological, pedagogical, and social issues. The interview guide questions reflected these categories. Table 1 shows the coding template for the social issues dimension.

Table 1: The initial coding template for social issues

Social subthemes	Suitable study space at home Connection between students Connection between students and educators Connection between educators (esp. team teaching)
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Our first round of coding began with the three general categories of technology, pedagogy, and social needs. Within these three categories we also coded text as either positive or negative. We individually coded the text and then came together to compare initial codes. We discussed our coding to reach consensus as we noted some overlap between the three general categories. We reached agreement on where each comment was coded into the three general categories and their overlap. The second round involved coding the subthemes within these categories and overlaps.

Findings & Discussion

Strategies for connections between students and educators

Connections between students and educators occur through synchronous online tutorials, asynchronous discussion boards, email, and announcements. Interactions through these spaces create both positive and negative implications for teaching and learning that require some consideration. Most mentioned was the online tutorial experience. Educators used a range of strategies to engage students. Table 2 shows the positive strategies educators (E1-E6) used and illustrative quotes.

Table 2: Positive strategies used to connect with students online

Strategy	Quote
Lower the power imbalance / share personal life	'Raise your hand. We will talk directly to you. [...]. We're not above them in any way. [...]. You know, bow and scrape to us. We've totally devolved that so that we're not.' 'Sometimes I'll tell them stories about things that have happened to me that were humorous.' (E6)
Humour	'I'm using humour to pull them in. And sometimes I'll banter off with [co-teacher]'. (E6) 'You're trying to be entertaining for keeping them captivated.' (E5)
Authenticity	'One thing that I had to learn very quickly going online was to remain genuine and say to people you know things might change a bit here. We're doing the best we can, so that students feel that it's not um. It's not going to be a beautiful presentation, but I myself try and give of myself in the session as well.' (E4)
Giving hope	'So I basically make them think there's hope and that's back to this whole thing of if you give them hope and a goal, you'll enhance their wellbeing and you when you use compassion in that message, it oils the wheels.' (E6)
Safe & relaxed space	'it's not just imparting the knowledge as a creating a safe space [...for] students to be comfortable with each other to, to share the ideas and to share their chat in an online environment. So [...] asking how you're doing? or an icebreaker at the start of a online session is quite good for that.' (E1)
Affirmative environment	'Right from the beginning, I always put poster welcome into the sessions day as people come in, I say welcome and you know, I don't say turn on your cameras because I know they would if they wanted to so they don't do that. But I say please use the chat session if there is chat feature, please if you feel you want to contribute using your microphone please do so. I actually affirmatively say engage in the ways that work well for you. [...]. At the end I will say I will be remaining in this online room until you will leave. [...] I try and be as expressive as I can with the bits of me that people can see.' (E4)
Include lurkers	'I started calling them lurkers. I said there's 120 of you in this tutorial. (E6)

Sign off connection	That means that 110 of you are lurkers. And I make my face go funny. Are the lurkers learning anything, or are you just here for the entertainment? I mean, is anything happening, and they get on the chat, and they say, yeah, yeah, it's happening.' 'Oh, they always say goodbye and thank you so much. We learned so much. And I'm the chat. The chat box explodes again after I do my little lurker joke thing, you know, are the lurkers learning anything? I give them a little funny face, you know. Are you, are you there?' (E6)
Sharing own social need	'Put your camera on so that I'm not talking to a blank space because I have emotions too and I'm feeling very alone.' (E6)
Using images	'You know, that kind of thing. And I just showed my dog and what I started getting feedback from the students. We so loved these announcements. You're the only people we've ever had where the announcements help us to feel OK about life and what's happening around us. I've sometimes tried to pick different cultural pictures that I know mean something to' [students]. (E6)
Asynchronous connection	'I have agreed with my students whenever they have any question or any concern, they can contact me by email and particularly I'm looking after the [...] Canvas, discussion board. So, I'm just getting quite a lot of questions, something that they don't ask me in the class online class.' (E3)

Ferri et al. (2020) recommended blended learning to mitigate the social challenges in online learning. However, when this is not possible, educators need to make the best of the online environment even in small, but meaningful ways. Our comments show some of the micro moments of online practice. In some comments the social engagement was through comments staff made to students, such as telling personal stories or staying until the last student left. In many other cases, the social interaction was influenced by technology, such as asking for cameras to be turned on, use of a netiquette slide and engaging images. Pedagogical aspects also influenced the social as regarding students a community of practice with peripheral lurkers impacted how one teacher engaged with students. This can also help mitigate the sense of staff powerlessness and loss of control noted by Mantai and Huber (2021). Another teacher was influenced by both technology and pedagogy to connect with students via expanded time with students on the discussion board, though this was only considered "some sort of connection" rather than a deeper one.

We have presented positive strategies teachers used as this offers some practical actions for other educators; however, we also found negative comments about the social affordance of online teaching. One teacher said,

I do most of my undergraduate teaching at South Campus and I must say the students seem excited about being back. There's so much more that goes on down at South Campus than sitting in the classroom. There are people milling around, chatting to each other outside the classrooms, they're eating together. They're doing things together, and I don't think we would ever be able to create that environment online. So, there is something around the social environment actually entering and going there and being there.

Social needs often intertwined with technology and pedagogical issues. Furthermore, there was a balance between positive and negative aspects of these dimensions. For example, although technology enables communication, that communication can seem impersonal (See Figure 1).

In the technological-social balance, online learning offers another way for students to learn; however, the online environment may feel more disconnected. One educator noted online learning was "Quite good for large cohort because it means that we not limited by how many people can come online at the same time um it is a little bit less interactive in terms of not being able to go around and checking what people are, how students are doing, what stage they're up to and so on" (E1). The balance required for social and pedagogy, for example, showed staff are "creating a safe space and also getting students to be comfortable with each other to share the ideas and to share their chat in an online environment" (E6); however, another educator noted "The facilitator still tried to keep it, you know, busy and active, but it was just one dimensional" (E4).

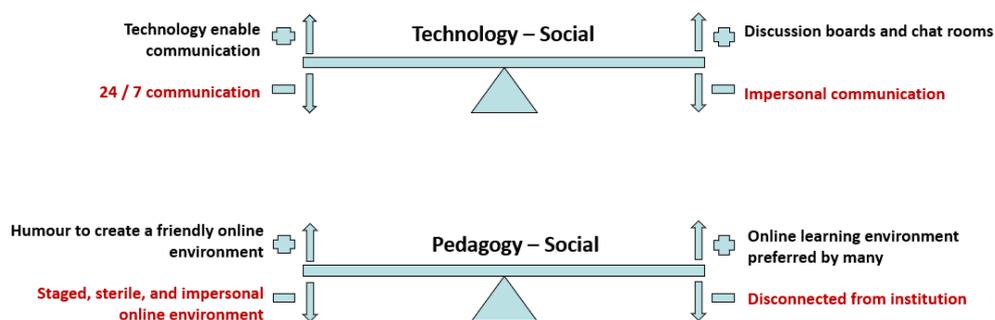


Figure 1: Balances between social and technology and pedagogy domains

Conclusion and Implications for practice

In response to COVID, the university adopted online teaching, Teams meetings and other LMS online collaboration methods to replace traditional classroom-based interactions. The initial reaction for some was to try and put old wine into a new bottle – they tried to recreate the classroom situation online. However, these educators quickly realised that this might not be the best approach. Most educators found that online teaching produced an opportunity to reimagine the learning environment to provide learning opportunities that enabled more flexibility and a more engaging platform to meet their students' social needs. Table 2 showed ten strategies that help educators better meet the social needs of their students: 1) lowering the power imbalance by sharing aspects of their personal life, 2) using humour, 3) ensuring authenticity, 4) giving hope, 5) providing a safe and relaxed space and an affirmative environment, 6) include lurkers, 7) creating a sign-off connection, 8) sharing own social need 9) using images and 10) adding an asynchronous connection. Staff have noticed some engagement with students through these strategies, and future research could explore how students perceive these strategies.

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