Pedagogy for Higher Education Large Classes (PHELC20) Co-located with 6th International Conference on Higher Education Advances (HEAd'20) Universitat Politècnica de València, València, 2020 DOI: 10.5281/zenodo.3893426

Moving large classes online: Principles for teaching, learning and assessment

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Abstract

When approaching the issue of large class teaching it is important to acknowledge that under normal conditions these types of learning spaces often pose significant challenges for lecturers in delivery and for students in learning. The present pandemic, COVID-19, is anything but normal and adds a complicating factor in approaching large class teaching. This is largely due to the fact that most institutions of higher education have ceased face-to-face instruction and are rapidly pivoting courses online, at least until the end of 2020.

Under normal conditions, large classes are often synonymous with a lack of student engagement, bad performance, and few opportunities to develop important skills like critical thinking (Ehrenberg et al., 2001; McKeachie, 1980; Cooper and Robinson, 2000; Mulryan-Kyne, 2010). Under conditions of online learning, the possibilities for these challenges to be compounded is real if pedagogical strategies that reinforce passive learning are adopted, or opportunities for direct contact with students are avoided, and the use of summative types of assessments are privileged.

Therefore, the purpose of this short essay is to frame and offer some principles to adopt in moving large classes online and developing assessments

Keywords: Large Classes; Online ;COVID-19; Teaching; Learning; Assessment

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1. Introduction

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Despite the form and mode, the broader opportunity and social purpose of teaching in higher education continues. It is well established that university education has real material benefit to not just individuals, but to broader society as well. Societies that have more university educated citizens are better at addressing inequality and poverty, have robust and heathier populations, are committed to ensuring transformation and the establishment of just and democratic societies. University education is critical to the establishment and success of knowledge and innovation based economies (Bloom et al., 2005; OECD, 2008:4; World Bank, 2012).

Teaching also matters to students as they benefit from being inspired to take responsibility, to think differently and to develop higher order cognitive skills. Students also benefit when teaching provides coherence to disciplinary traditions and when they are given chances to develop methodologies useful in learning.

The whole underlying principle of education is to make the world a better place by fostering understanding, sharing knowledge, and capacitating future generations to dig deeper, go further and to not make the same mistakes that have been made in the past. Thus in approaching large online classes, it is important to challenge one's own perceptions of large classes and to not allow the form/size to dictate a set of pedagogical strategies adopted. Under such a frame, it is possible to argue that the problem of large classes is not embedded in the form, per se, rather in the pedagogical approaches that are chosen. Imagine the possibilities for large classes if pedagogical strategies that seek to engage students, frame and establish clear pathways for student success, and place important higher order cognitive skill development alongside the delivery of disciplinary content? It is within the power of a lecturer to organize these spaces to be meaningful experiences. Even in a context of a pandemic where most large classes are moving online.

2. Six Principles for Teaching, Learning and Assessment in Large Online Classes

Teaching and assessing under the context of the COVID-19 pandemic feels and is different from normal processes for developing and undertaking online courses. Smith and Hornsby (2020) note that the move is unique in so far as it has been swift, under resourced and done without much planning. Most universities around the world are preparing for the delivery of online education at least until the end of 2020. This includes large classes. But what are some guiding principles that can be maintained in such a moment as lecturers ponder pedagogical approaches within an online mode? Six principles are offered as provocations when considering how to develop teaching, learning and assessment strategies.

The first principle is Active Learning. Just as in face-to-face classes, active learning is often seen as the best way to address concerns over student engagement (Grunert, 1997). Students often thrive in contexts where they can be more self-directed, work in groups of peers, engage in the course via a mix of synchronous and asynchronous events or activities. They respond well to formative assessments that get them to apply their knowledge as opposed to drawing on recall of information through summative assessments (Taras, 2005). In moving courses online it is therefore important to avoid passive teaching and assessment approaches in online spaces such as lecture capture or summative assessments. As Ira Shor (1992: 19) notes: "Passive curricula help prepare students for life in undemocratic institutions."

The second principle is equity and inclusion. It is important to acknowledge that our students are not experiencing the pandemic, the pivot online, or even just university education in a common way. Assessment strategies need to be adapted to take this fact into account. Few high stakes assessments in large classes are often the norm because it is easier to mark. But students do better when they are assessed frequently and under low stakes conditions as they can correct mistakes and seek to cheat less (Holmes, 2018).

Appreciating equity and inclusion also recognizes that it is important to integrate flexibility into completing assessments and other course material. Students will not all be in the same time zone, or equipped to cope with online spaces in the same way. Their home environments may not be evenly suitable to doing course work or students may need to be balancing work with study. All of these need to be taken into account as assessments are approached in large online courses. Adopting more asynchronous strategies for course delivery is important here. Moving large classes online: principles for teaching, learning and assessment

The third principle is student success. The assessment strategies adopted in large classes matter to student success (Hornsby and De Matos Ala, 2013). Developing ways to foster incremental improvement where students can make and rectify mistakes fosters greater engagement by students; and engagement is directly linked to success. Frequent low stakes assessment can also help with understanding where students are getting stuck, enabling pedagogical adjustments to be made to ensure concepts are clarified. Feedback is also integral to student success (Carless, 2015) and needs to be carefully structured into large online classes in ways so that it does not always just fall to the lecturer. Small group work and peer learning can be particularly effective as a strategy to achieve this principle.

The fourth principle is adopting an ethos of care. Not only for yourself but for your colleagues and students too. Focusing on personalizing experience builds interpersonal dependence, bolsters confidence and drives deeper engagement for students. The importance of community in learning spaces regardless of size or mode should not be forgotten as the sense of welcome and inclusion contributes to collective well-being, whilst also bringing tangible benefits to student learning (Felten and Lambert, 2020). Think about how this would look in an online learning environment. Is it more time for assignments? Less summative assignments and more formative or the other way around? Is it online synchronous drop-ins or asynchronous discussion boards?

The fifth principle is that learning is not just about assessing for content but also about developing skills, attributes and proficiencies that are integral for citizenship. What is emphasized now will have tangible effects going forward regarding what students think is important and how best to respond. What are the types of citizen's that are needed coming out of this pandemic? Active and engaged or passive and disinterested? Working for transformation and societal betterment or agnostic to the plight of others? These require explicit consideration and embedding in course design and assessment strategies.

Arvanitakis and Hornsby (2016) have developed a framework through which to consider attributes and proficiencies called the Citizen Scholar. It is a framework where skills inherent to scholarship and democratic citizens can be embedded in pedagogical approaches. The Citizen Scholar framework orients students towards their responsibilities as citizens in their various communities, as well as helping them be prepared for the changing nature of information and the world of work.

The sixth and final principle is pursue alternative approaches to grading. As argued earlier, assessment in large classes is already a problem. The challenge for online assessment in large classes is compounded if it is not seen as dual purpose; on the one hand to provides a measure of success in achieving the learning outcomes for the student and the professor but also to provide an opportunity to learn from mistakes. But how can this be achieved when the reality of grading in large classes is so significant?

Table 1 outlines five approaches to consider adopting either in whole or in part that can help in overcoming this challenging aspect.

Grading Rubrics and Likert Scales	Developing these in advance can be helpful in providing
	meaningful feedback for students on the basis of their response. Requires a degree of understanding of the possible range of responses possible with the assessment.
Marking Assistance	Large classes require more resources. Teaching assistants offer a chance to give students more get more detailed feedback that is so important to their continued intellectual development. Further, this lightens the load on faculty.
Learning Management System Quiz and Test Functions	Of course, this privileges summative types of assessments like multiple choice quizzes and short answers, but this is still possible to integrate as one or two assessible moments in low stakes/continuous assessment type of approach. This can be done using automation and offers a straightforward way to mark and give feedback.
Specifications Grading (Nilson, 2015)	This approach enables students to know what they need to do, in advance, to achieve a particular grade. Focus here is more on completing a set of tasks which should align with your learning outcomes
" <u>Ungrading</u> "	Promoted by Jesse Stommel – peer assessment and feedback, self-assessment, portfolios etc are all options, reducing our role in the actual mechanics of grading whilst instilling important reflection skills that we know are integral to our disciplinary environments.

Table 1: 5 Alternative grading approaches

3. Conclusion

It is often the case that faculty worry about how to make large classes meaningful learning environments. This is only compounded as colleagues shift to online learning as a result of the present pandemic. Large classes are too often treated as spaces where passive learning techniques are practised. This serves no one and should not be treated as a stricture of form or size. The present paper has sought to argue that the way teaching, learning and assessment in large classes is approached is a matter of pedagogical choice. By following a set of principles and strategies that emphasize active learning, equity and inclusion, student success, an ethos of care, higher order cognitive skills development and pursuing alternative Moving large classes online: principles for teaching, learning and assessment

approaches to grading, it is possible to have large online courses be effective spaces for learning.

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