Personal account of remote teaching for tertiary education in a South African context

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Abstract

The COVID-19 pandemic has impacted education at all levels worldwide. This personal account documents some of the details of the shift to remote teaching in a South African context and discusses some opportunities and challenges present in this shift. The focus is on those issues that specifically apply to developing countries and some of these challenges created from a teaching perspective. Unexpected opportunities from the change in teaching methods are also discussed, which may provide insight for further directions of study.

Keywords

Teaching; remote teaching; developing country; South Africa; personal account;

Introduction

The COVID-19 pandemic has had a significant impact on teaching institutions across all levels worldwide. Developing countries face some unique challenges due to a variety of reasons, including:

- access to technology and technological infrastructure
- notable variation in socioeconomic status between students
- pre-existing health and healthcare concerns and their impact on policy pertaining to teaching and learning in the COVID-19 pandemic.

On 15 March the South African government announced regulations which prohibited any type of gathering of more than 100 people (South African Government, 2020b), which required teaching institutions, such as the University of Pretoria where I am a staff member, to drastically rethink their teaching approach. Furthermore, on 23 March 2020 the South Africa government announced a nationwide "lockdown" (South African Government, 2020a), which required all citizens to stay indoors. As of the time of writing, these lockdown restrictions have been significantly eased up, allowing for more freedom of movement, exercise times, etc., but the restrictions still prohibit a more traditional model of tertiary education to take place (South African Government, 2020c).

The details of the teaching reforms differ on a case-by-case basis across university faculties and departments, so I am only discussing those pertaining to the degree which I am partly responsible for teaching. Regarding the delivery of content, lectures were recorded as narrated PowerPoints and uploaded to Blackboard. It is worth noting that the University of Pretoria has made arrangements with South African network cellular providers, such as Vodacom, Cell C, and MTN, to allow students to access any context on Blackboard without incurring a data cost (Kupe, 2020; Panyane, 2020). As such, students are able to access university content for free using their mobile phones. Regarding assessment of content, sit-down, theory-based tests were replaced with long-form open-book assignments that require students to apply the knowledge from various themes from their curriculum in some specific context. For example, "Imagine you are tasked with creating a mobile app that solves some problem in your community. Explain how you would use [x concept from theory] to address this issue in the design of the app.".

The remainder of this article will discuss some of the opportunities and challenges that arose during this shift toward teaching remotely in a developing country.

Opportunities

As mentioned, the shift to remote teaching for my courses involved replacing theory-based tests with take-home assignments. This included what would have otherwise been unannounced class tests focusing on theme-specific theory content. Having completed approximately half the semester using either method, some advantages of these take-home assignments have become clear:

- Theory assignments require students to engage with the content in their own way, such as having to apply the theory in their own context rather than recall content from the notes. This is especially true for assignment components that required students to come up with ideas of their own, such as "in the context of your app idea, how would you improve the functionality by including an internet of things (IoT) application?".
- These assignments also allow students to express themselves to a degree. For example, one assignment discussing crowdfunding required students to select an actively ongoing crowdfunding project they would consider funding (for whatever) reason and discuss some aspects of the theory in the context of said project. Students' choice of projects varied significantly and expressed a range of interests or concerns, form niche hobbies, to social

and environmental efforts. By selecting their own choice of context to which to apply the theory, students could express aspects of their lives they consider important in these tumultuous times.

- Part of the motivation for moving to these types of assignments and for allowing a high degree of personal freedom was to avoid plagiarism, since the lecturer could not enforce a lack of communication between the students for the purposes of the assessment. This method, however, is not entirely fool proof, as some of the work turned in by students still bore strong resemblances to each other in some cases, for example, when asked to come up with an app idea that addresses a problem in their community, many students, unsurprisingly, focused on issues relating to COVID-19 such as the lockdown measures in place in South Africa and the well-being of their communities.

A notable challenge with regards to this assessment method is a significant increase in required marking time. However, in spite of this, this method, brought on by circumstance, seems fitting for a theory-heavy module and the high quality and enthusiasm of some students' work when asked to apply knowledge in a real-world context suggests that this could be a more appropriate assessment method for engagement with the theory content.

Another interesting opportunity for remote teaching relates to the use of a Blackboard-specific tool for teaching and collaboration called Blackboard Collaborate. Among other functionalities, such as screen sharing and file sharing, this application allows the session moderator to share a "Whiteboard" which allows each participant to draw or write text on. This tool was first used as a screen placeholder before class, but it became evident that students were making widespread use of the tool for various reasons. Of special interest were some collaborative drawing efforts (resulting in some impressive drawings!) and competitive gameplay, such as games of tic tac toe and dots and boxes. While allowing this to happen during class contact sessions presents some notable disadvantages, such as being a source of distraction and occasionally resulting in some borderline offensive content being drawn, it also presented the advantage of allowing students to collaborate and partake in co-creative efforts in a time of separation, isolation, and anxiety. As such, I decided to leave it on during many classes and always saw students co-create and express themselves creatively (although I always had to keep an eye on the contents being drawn). The use of such tools presents an opportunity for research into co-creative practices in class and the effects thereof, especially in such circumstances as students find themselves during the COVID-19 pandemic.

Both these opportunities relate to a common theme of allowing for a higher degree of autonomy, in other words, allow for behaviours that students find self-endorsing and align with their interests and/or values (Niemiec & Ryan, 2009). By allowing students to select topics to apply theoretical concepts around or to freely express themselves and co-create with their classmates, students are given a sense of control over their work, which is often connected with higher levels of motivation and self-esteem (Niemiec & Ryan, 2009).

Challenges

Although there were many different challenges in the shift to remote teaching, they tended to share one main concern: uncertainty. Two main problems relating to uncertainty were that of trying to find and adhere to best practices for remote teaching in a developing country and the difficulty of planning ahead with limited and changeable information.

Although the impact of disruptive events on being able to provide contact teaching is not entirely new (for example, the #feesmustfall protests that took place in South Africa in 2015 and 2016 also limited the possibilities for contact teaching), there is still limited research and guidance on how

tertiary education institutions and education providers in developing countries are expected to continue teaching during such disruptions. One of the main hurdles toward shifting to remote teaching is that students are often limited in terms of access to technology and infrastructure, such as computers, internet, or even a stable supply of electricity. However, the extent of this problem and by extension the appropriate manner in which to respond to this per degree programme is still unclear and requires further research. Different degrees have different requirements in terms of access to technology and/or facilities, which complicates policy matters in this regard. From my own point of view as a lecturer, however, this was one of the biggest hurdles in trying to adapt the degree content appropriately during the COVID-19 pandemic.

The second hurdle relates the fact that information about the pandemic and, by extension, institutions' reactions were constantly in flux, which made planning ahead quite difficult. For example, when South Africa's national lockdown was first announced, it was planned to last for three weeks. However, two weeks after the initial announcement, the duration was extended to five weeks. In the midst of all this uncertainty with regards to how teaching requirements would change for the rest of the year, how long the pandemic would last, etc. it not only became difficult to plan ahead, but I found myself more and more reluctant to do so, since, in my experience, any plans made were subject, if not likely, to change in the weeks or days ahead. Combined with the uncertainty regarding students' access the technology and infrastructure, this included any and all details about teaching and assessment, such as schedules and timetables, teaching methods, and assessment methods. It is difficult to say what might address this issue, since there was no shortage of information about the current state of the pandemic at any given time (and because asking for clarity about the larger issues, such as when the pandemic will end seems unreasonable). In fact, what I experienced was not a shortage of information but rather an information overload, with constant updates to teaching policies, timetable changes, etc. A solution to this problem might thus take the form of a method of provisional planning which affords more flexibility in being able to adapt to an environment of ever-changing information.

Conclusion

Although the changes introduced in my module were brought on by circumstance, they revealed some changes that are likely to benefit the module on the longer term. Allowing students to make more autonomous decisions presents the potential to positively affect motivation and might allow for a greater degree of self-expression. However, as with the challenges mentioned, they also call for research to be done, especially with regards to co-creative practices. The challenges mentioned also emphasise the vital role of contextual information in planning and provision, since uncertainty regarding best practices for remote teaching in a developing country make it difficult to determine the best course of action in the face of many challenging factors and the deluge of changeable information hampers and disincentives productivity in the longer term.

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