Challenges in Lecturing Sport and Exercise Technology using Online Platforms during the COVID-19 Pandemic

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Abstract: This article details the development of transitioning of in-person diploma lecturing to online lectering through the course of the COVID-19 pandemic. Due to the practical components of the course, specific challenges emerged involving course desing and pratical leanring. This article considers the problem-solving process and strategies for remotely teaching, discussing and experiencing the global exercise trend. Specifically, accessibility, adjustments and attitudes as important pedag.

Keywords: COVID-19, Sport and Exercise Technology, accessibility, adjustments, attitudes.

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1. INTRODUCTION

One of the challenges faced in the pedagogy of higher education is our tendency to cling to habits, rituals, and routines. Lecturers tend to attribute students' lack of success to a deficit in their ability to cope with various delivery modes. The core objective of the Sport and Exercise Technology Diploma programme is to inspire conscious and physically active students, enabling them to think for themselves about different procedures and which procedure to use when working with clients. The overnight digitalisation of teaching and learning has had a major impact on access to education for students (Ivemark & Ambrose, 2021).

A once theoretical and practical diploma, where students had lectures face-to-face, followed by a visit to the laboratory, gymnasium or field for practical's, had overnight changed into a completely digitalised program, which meant no face-to-face lectures or practical's. With this sudden change in the mode of delivery, the staff lecturing the Sport and Exercise Technology Diploma programme only had a fortnight to figure out new methods to be implemented as the 'new normal', for the diploma had a major practical component which still needed to be attended to. The global Coronavirus pandemic also known as COVID-19 pandemic forced staff to look for other methods beyond the normal face-to-face method that has been implemented thus far. Both lecturers and students were required to migrate to a pedagogy

dialogically platform with specific times, spaces, and technologies available.

Stabilisation of the academic programme in the wake of COVID-19 was prioritised, to be able to continuously deliver the curriculum. Furthermore, an online technological solution was implemented by the University to assist students and lecturers to continue with the curriculum. While implementing the 'new normal', students' readiness to cope with online lecturing became the focus of course designers and managers. However, a major problem faced by students in South Africa is poverty and digital dis-connectivity, which is yet to be addressed in a highly disjointed social system (Maringe, 2017). The most important questions posed regarding the students changing to the 'new normal' were, how would the students embrace the shift to alternative pedagogical modes of delivery? what forms of adjustments were needed? and are there orientation sessions required? Furthermore, how would this new pedagogical mode influence our own attitude towards our new roles and responsibilities as higher education curriculum specialists and designers of our own pedagogy for future practice?

This study reflects on the adaptabilities of the lecturers, to optimally lecture and teach the Sport and Exercise Technology Diploma programme in the middle of the COVID-19 pandemic, and how the online mode of delivery was embraced through the use of Moodle, the official University of Zululand's online teaching and learning platform. Furthermore, this article centres three main

concerns, the conceptualisation of accessibility; emphasising adjustments towards the 'new normal'; and concluding with a view on shifts in attitude to continue with quality higher education teaching.

2. MATERIAL AND METHOD

2.1 Search strategy

To ensure that a thorough review of literature was performed with regards to the challenges in lecturing a variety of programs using online platforms, an electronic search was conducted using the following databases: CISTI Source (2018–June 2022), International E-Catalogues, Current Contents, Science Direct, Cochrane Database of Systematic Reviews, EBM Reviews, PubMed (2018–June 2022), and Google Scholar. A keyword search yielded MeSH headings: "teaching", "learning", "teaching using online platforms", "learning using online platforms", "teaching and learning", "teaching and learning during the online pandemic", "accessibility to online platforms", "adjustments to teaching and learning to online platforms", "attitudes of using online platforms for teaching and learning", which were fused and exploded. The searches were limited to peer-reviewed articles written in English. For the literature review and discussion, original articles were identified and grouped.

2.2 Data extraction

All the data that was relevant to the study was collected and compiled by the first author, which included the challenges in lecturing a variety of programs using online platforms. Additionally, research that clearly did not meet the inclusion criteria was excluded, and whenever there was an abstract from which a firm decision could not be made, the research was provisionally included for full-text analysis. Furthermore, the first author was also responsible for checking the eligibility of research papers for inclusion based on an analysis of full-text papers After which final validation was performed by at least one of the co-authors to make a final choice on inclusion. Any issues that were raised with regards to the inclusion of a paper was debated until a and agreement was reached.

Each study included was classified as being relevant to the challenges in lecturing a variety of programs using online platforms and was based on the journal or conference they were published in, as well as the associated keywords. The extraction of the data collection information was then performed. Window selection was used in order to effectively extract the data, after which analysis techniques and spatial aggregation features were used to review the contributions of all studies to the components of feature construction and modelling & analysis. Additionally, the problem definition or goal of the study was always kept in mind when extracting information to review the interpretability of all included studies. Lastly, a single framework was used to categorize all of the findings, which in turn will give context for our literature review and discussion.

3. RESULTS

This study used 9 full-text English-language papers from 105 citations found through electronic searches.

Table 1. Challenges in Lecturing Sport and Exercise Technology using Online Platforms

Challenges:	Description:	References:
Accessibility	Even though there was a wide spread of internet connectivity and devices for teaching and learning, it's still found to be lacking in many households, especially in low-income households.	Bower & Chambers, 2017); Hubackova & Semradova, 2016); (Jowsey et al., 2020) (Woo et al., 2008); (Anderson & Kumar, 2019); (Asch, 2020); (Bali & Liu, 2018); (Ashour, et.al. 2021);
Adjustments	Adjustments had to be made by both lecturer and student once the pandemic started to impact the academic year in 2020. The government enforced lockdown regulations, which included student attendance, traveling limitations and no mass gatherings, which made face-to-face contact impossible.	(Godber & Atkins, 2021); (Murgatrotd, 2020) (Rodríguez-Triana et al. 2020); (Nordmann et al. 2020)
Attitudes	Lecturers treats the new form of pedagogy as temporary, as they believe it will only last for as long as Covid-19 is still around. Even though the learning approached goals were experienced as a positive challenge for lecturers, and useful for competence development, there is still a sense of avoidance of goals in situations that were seen as threatening.	(Chandwani et al, 2021); (Lee et al, 2015); (Emmanuel, 2020); (Akcil & Bastas, 2021); (Algahtani, 2011); (Edwards & McKinnell, 2007)

4. DISCUSSION AND CONCLUSIONS

4.1. Accessibility

In 2019, the world was hit by the COVID-19 pandemic. In March 2020, South Africa started to experience the effect of the pandemic, which was a major turning point for a lot of universities. Students and lecturers that has never used online teaching, suddenly overnight had to become a custom with the 'new normal', as face-to-face teaching and learning was not possible due to most countries going into a lockdown period (Ashour, et al., 2021). Suddenly, the students that were used to teaching and learning taking place in person was forced to change into a distance learner. Even though the use of online teaching for higher education is becoming more popular in Universities (Woo et al., 2008), there were

immediate red flags, which raised concerns. According to Anderson & Kumar (2019), even though there was a wide spread of internet connectivity and devices for teaching and learning, it's still found to be lacking in some majority households, especially in low-income households. We also experienced this with our Sport and Exercise Technology students, as some of our students were living in un-urban areas and connectivity was a major concern. Connectivity will be available one minute and not available the next. Some students also mentioned that they don't have laptops or tablets to access the nodes, which made real time or synchronous online teaching very difficult in the beginning of the pandemic. According to Asch (2020), lecturers started questioning if it's fair to hold students that is only familiar with face-to-face teaching accountable for deadlines as some students were unable to access essential course work and materials. Additionally, the pedagogical changes embrace the need for students to take ownership for their own learning needs to assert agency over the curriculum (Bowyer & Chambers, 2017; Hubackova & Semradove, 2016; Jowsey et al., 2020). Furthermore, Bali & Liu (2018), also found that online courses offer less opportunities for interaction with other students and with the lecturer. With this said, we discussed the best way to assist the students taking in account connectivity and device problems. Some students did have connectivity and devices to access course material and synchronous online teaching, which enabled us to have live classes for the students in their normal timetable slots (timetable according to face-to-face classes). For the students that had interrupted connectivity, device problems or both, we developed voice embedded PowerPoints and voice embedded video PowerPoints. Other challenges followed, including that that some students also struggled to have accessed to Moodle. Fortunately, in these cases we developed WhatsApp groups for each module, where we posted all course work and PowerPoints, to give accessibility to all the students. As it was a requirement off the University to use the Moodle platform for tests, assignments and examinations, the students needed to gain access to Moodle. As we still had to consider that some students might have interrupted connectivity, we made all our assessments over two days and two attempts in case they lose connectivity while attempting the assessment. To stop students from assisting one-another, we added criteria to the assessments where there will be a time limit once they have logged in and all questions were randomly selected and shuffled by the system for each student.

4.2. Adjustments

Adjustments had to be made by both lecturer and student once the pandemic started to impact the academic year in 2020. The government enforced lockdown regulations, which included student attendance, traveling limitations and no mass gatherings, which made face-to-face contact impossible. This section will discuss the range of adjustments that the lecturers had to make, to make teaching and learning possible. This includes the pedagogical activities designed in preparation for the course, prior to and during the modules, and additionally placing attention on negotiating with students with regards to their own personal and public technological literacy spaces (Rodríguez-Triana et al. 2020; Nordmann et al. 2020). According to Godber &

Atkins (2021), the emergency shift to a remote teaching environment was complicated, as the response to a crisis's satiation has little resemblance on developing your own online teaching and learning platform. Furthermore, Murgatrotd (2020), found that there were some challenges that came with the sudden, unplanned e-learning responses to a global pandemic. The following changes has been highlighted by research, flexibility, life-long learning, affordability, educational policy, accessibility, and the learning pedagogy. To make it slightly easier on our staff and to enable them to optimally prepare for their modules, the University started to offer a series of *staff-capacity development workshops* which were offered to assist lecturers to embrace online, blended learning approaches, and to be digitally flexible. Although there was the option of attending these developing programmes, a collective decision was made to attend as many courses as possible to assist ourselves, one another and to be able to assist the students to the best of our capabilities. Some courses we attended utilized the Zoom program to get their information across. The use of Moodle was also encouraged as a more interactive pedagogy, to redesign alternative assessment strategies online. Attending these online courses expanded our confidence to use these alternative models of delivery effectively. Due to us being placed in the role of the student, it allowed us to gain first-hand experience as to the vulnerabilities they had to address, as we had to start embracing the new learning and teaching modalities ourselves. We used our own pedagogical and curriculum design experiences to harness the technological potential of these new digital means. We collaborated with one another discussing what we have learned from these courses and what the best step forward will be to improve the online teaching methods. A realisation occurred during which we found that we also had to incorporate this kind of adjustments and connecting of our students' potential. Overall, we found that the pedagogical space became progressively more relaxed due to the focus being shifted from the technology towards foregrounding interest in learning deeply from the interaction of the learning/teaching moment. With this said, we found that the students were more present if we had online classes, and not merely to mark the attendance register as some did with face-to-face classes. Overtime, the students started adjusting themselves to see this space not just as a performance space where they were assessed, but also their own "technological space". Due to us being the facilitators of the teaching project, our personal experience became essential in noting that all learners move in and out of participation (due to different reasons). Being the hosts of the platform allowed us to "haul them back into the classroom interactivity learning mode". This caused students to become more alert, since they were unlikely to predict when they would be chosen to participate in a certain section of the content. We did this, as we found that some students in the early online classes will log on into a class with their cameras off and disappear. This highlighted the fact that the most important activity that ensures quality learning is not based on the technology alone, but the lecturer is essential in mediating that technology for his or her learners.

Although the global pandemic did force countries to adjust online teaching and learning at a rapid pace, some positives

did develop from this. We as lecturer's and our students were forced to learn a 'new skill', using new digital platforms and systems like Google Classroom, Microsoft Teams, Zoom, Moodle and social media (WhatsApp groups) in a short period of time, which most likely would still have been push to the side if not for the pandemic. Furthermore, the pandemic forced us to think out the box and create initiatives to overcome some of the limitations of virtual teaching.

4.3. Attitude

Due to the COVID-19 pandemic, institutions all over the globe were forced to ensure that learning does not get altered, which indorsed online teaching. Online teaching has been considered as the best substitution for lecturing learners across different places (Chandwani et al, 2021). Although, online teaching has been found to be the best alternative to face-to-face teaching, the 'new normal' cannot replace face-to-face teaching, as some modules will always have a practical component and in case of a professional course (Chandwani et al, 2021). Many lecturers seem to approach the shift towards the new form of pedagogy as a temporary measure to deal with the COVID-19 (Akcil & Bastas, 2021). The learning approach was found to be directly linked to the positive experience of online teaching and learning, while competence development as well as performance avoidance goals were seen as threating to these learning situations. The lecturers who suffered burnout experiences, and provided learning opportunities of less quality (as assessed by student), were the ones whom felt threatened by online teaching during the Covid-19 pandemic. Training for online teaching became a priority for the University to assist the staff, as some staff felt that the online teaching made them negative and that they don't know what the next step will be (Algahtani, 2011; Edwards and McKinnell, 2007). According to Lee et al. (2015), a negative attitude towards e-learning had a 180-degree shift once staff started doing training and started developing and understanding the different digital platforms and systems like Google Classroom, Microsoft Teams, Zoom, Moodle and social media (WhatsApp groups). Furthermore, communication on new developments and new online courses from the faculty also played a major role to decrease stress and anxiety, which developed a positive attitude amongst the lectures that was still in two minds about online teaching.

As with South Africa, other countries experienced that a large part of the population does not have access to smart devices. Learners overnight suddenly needed smart devices to meet their academic needs, which made this a major problem for parents and guardians with low-income jobs. Leaners experienced the online teaching similar to the lecturers lecturing them, as some found it easy and others a nightmare and wished the days past to be back at the University. This is seen by the unfortunate report of a girl, in Malappuram district of Kerala which committed suicide due to her inability to attend online classes (Emmanuel, 2020). Furthermore, Chandwani et al, (2021) reported of a 15-year-old student in Western Assam's Chirang district, which allegedly committed suicide, after he failed to attend online classes and examinations in the absence of a smart phone. With these tragic incidences, we can see to what extent the

smart divide has become, for uniform delivery of e-learning amongst learners around the world.

5. CONCLUSION

This article aimed to give major insight to the variety of methods that was used during the COVID 19 pandemic by a group of lecturers from the Sport and Exercise Technology diploma program. The COVID 19 pandemic has indeed been a revolutionary destabilising of the routines of our everyday world of university education. It has assisted lecturers and students in reassessing the values we hold dear and allowed us to re-question the foundational principles which underpin our practices. It has allowed us to test a variety of teaching methods that was not being used during normal face-to-face teaching. On a mundane level, it has required that university lecturers find a balance between the technology, their pedagogy and the content knowledges of our present times. But on a more profound level, this operational world will soon become unravelled by the dawn of a future era of multiple uncertainties and pluralities of technological revolutions. This will force both lecturers and students to come of age and use the variety of online tools at their disposal. We are rebuilding our beliefs, rethinking the knowledge we have gained over the years, as well as acknowledging our levels of under-preparedness to tackle the new world of a technological revolution. We have to re-educate ourselves to be willing to adapt when we do not know what to do or what the future will hold. Our success will not lie in whether we graduate hordes of existing graduates, or how we prop up our nationalistic or disciplinary pride or geographic xenophobic or culturally bounded prejudices, but by making sure that quality education is provided to the graduates that need to transition successfully into the work force.

5.1. Epilogue

The COVID 19 pandemic has forced lecturers and students to move into the future of teaching and learning at a very rapid rate. We acknowledge that not all parties involved were ready for the changes, however adjustments need to be made, as this will be how teaching and learning will be conducted in years to come. Whether conditions will ever return to normal remains to be seen, however by ensuring that the foundation is laid in terms of accessibility to online tools, as well as have the willingness to make the necessary adjustments, while doing so with the correct attitude, both the lecturer and the student will be ready for anything that happens in the future.

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Conflict of Interest

The authors have no conflicts of interest to declare.

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