ADAPT OR PRESERVE: LECTURERS' EXPERIENCES OF TEACHING AND LEARNING DURING THE COVID-19 PANDEMIC IN SOUTH AFRICA AND THEIR SELF-DIRECTEDNESS

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ABSTRACT

The COVID-19 pandemic that has engulfed the whole world has given rise to a number of previously disguised challenges to higher educational institutions (HEIs). In the blink of an eye, lecturers had to facilitate learning in remote environments without any prior training. What aroused the interest in this study was the need to know how lecturers at one university dealt with the sudden shift to remote teaching during the pandemic. The way in which lecturers dealt with the shift may reveal their self-directedness. Using a qualitative open-ended questionnaire, we explored lecturers' experiences of facilitating remote learning during the pandemic with the aim of uncovering their experiences and exploring how these experiences revealed lecturers' self-directedness. The findings suggest that lecturers had both positive and negative experiences about facilitating online learning in their remote areas. We concluded that, even though lecturers experienced challenges in facilitating remote learning, most of them were able to introduce solutions to those challenges, indicating some element of being self-directed learners.

Keywords: self-directed learning, remote teaching, lecturers' experiences, COVID-19, online learning, remote learning

INTRODUCTION

The world has been hit by a surprisingly challenging pandemic of a respiratory system-related disease called the coronavirus (COVID-19), which was declared a pandemic by the World Health Organization (WHO) in March 2020. This pandemic triggered a countrywide lockdown in South Africa, which adversely affected the status quo at universities, because lecturers were forced to work from home and students to learn at home as well. The declaration of a lockdown in South Africa caused a temporary disruption of educational activities. After some deliberation,

universities adopted online or remote¹ learning as the panacea to ensure that educational activities are continued during the pandemic. However, facilitating remote learning requires essential resources, technology-inclined lecturers and an equitable consideration of the backgrounds of students and lecturers (Mahlaba 2020; Scherer et al. 2021). This then begs the question whether South African higher educational institutions (HEIs) were ready for a complete move to remote learning, specifically regarding the competence of lecturers in facilitating remote learning.

The instant requirement to adapt teaching and learning in response to a pandemic has meant that the education workforce and students had to be prepared to respond effectively to these changes. Several studies have suggested methods to deal with the COVID-19 pandemic in universities, and what seems to be the common suggestion is the importance of self-directed learning (SDL) for both lecturers and students (Mahlaba 2020; Zhu and Liu 2020). Even though most lecturers are not trained to teach remotely because they usually facilitate learning through face-to-face interactions, their motivation to learn how to teach remotely on their own, and hence their self-directedness, is an important factor that could influence their transformation. Their readiness can be expressed as a state of mind, and their adaptation to this new normal of teaching and learning can be related to their willingness to do so (Jacobs et al. 2019). Even though it can be a bumpy road, lecturers' resilience is important in facilitating the process of adapting to this "new normal".

THE PROBLEM, AIMS AND QUESTIONS

Challenges related to lecturers' transformation to remote teaching and learning during the COVID-19 pandemic have been explored in various countries with conclusions suggesting that transforming to online learning should be a carefully planned cumulative endeavour (Bryson and Andres 2020). Given that face-to-face teaching and learning are still not envisaged by universities in 2021, lecturers need to adapt even quicker to facilitating remote teaching (Schlenz et al. 2020). The main problem that aroused the need for this study was the need to understand how lecturers tackled the sudden switch to remote teaching during the COVID-19 pandemic. We aimed to explore lecturers' experiences of adapting to remote teaching, and how these experiences revealed lecturers' experiences of adapting to online learning during the COVID-19 pandemic are and how these experiences reveal their self-directedness.

THEORETICAL AND CONCEPTUAL FRAMEWORK

The competitive environment within which HEIs find themselves requires that they grow

continuously in terms of adaption, survival and performance (Shafait et al. 2021) within the ever-changing landscape. A key role player in the adaption and growth in performance of HEIs is academic staff. Staff should be willing, capable and equipped to be self-directed, and should constantly take responsibility for their own academic and professional development. "Self-directed learning advocates the autonomy, responsibility and growth of individuals which are the core components of higher education" (Shafait et al. 2021, 2). Loeng (2020, 1) is of the opinion that self-directed learning is a "well-suited reflection basis" for the required transformation in higher education from the "authoritative role" of the lecturer to the role of "facilitator of learning". HEIs should thus take note of the capabilities and abilities of their academic staff to grow in their own self-directedness.

This section of the article discusses the self-determination theory (SDT) as the theory that underpins self-directed learning. Furthermore, the tenets of SDL are discussed, followed by research conducted on technology associated with SDL. Thereafter, barriers to online teaching and learning are discussed. These main three focal themes accumulated to form the conceptual framework for this study within a higher education landscape.

Self-determination theory

SDT is focused on understanding how environmental conditions could affect human development in specific tasks, based on whether these conditions provide support or cause a hindrance to the individual's needs in a specific task (Power and Goodnough 2019). SDT focuses on understanding how humans develop and function within a specific social context, and analyses the extent of their self-determination in carrying out specific tasks (Deci and Ryan 1980; 1985; Power and Goodnough 2019). To give a clear account of motivation in SDT, Deci and Ryan (1980) differentiate between two motivated behaviours: those that involve consciously making choices based on extrinsic or intrinsic needs (self-determined behaviours) and those that are chosen unconsciously (automated behaviours). Motivation is extrinsic if it is elicited by a certain reward or pressure from some external authoritative voice, but intrinsic if it is elicited by an individual's relationship with the task, the goals of the task or the joys related to the activities of the task, because individuals independently chose to identify the task as part of their development (Deci and Ryan 1980; 1985; Power and Goodnough 2019). Furthermore, Ryan and Deci (2017) extend their explanation of motivated behaviours to cater for some individual behaviour without purpose. A motivated behaviours are neither intrinsic nor extrinsic, but passive and usually ineffective. They are performed to maintain social status by individuals who believe that the outcomes of certain actions are not within their control, or they see themselves as unable to perform a certain task Ryan and Deci 2017).

SDT is a prominent theory for studying motivation in different social contexts, such as education (Huang et al. 2019; Power and Goodnough 2019). In their explanation of SDT, Deci and Ryan (1980; 1985) and Ryan and Deci (2017) are clear that self-determination rests mainly on intrinsic motivation. That is, individual actions are based on their autonomy, and are guided primarily by the intrinsic gratification of performing specific actions in the task. In accordance, it has been shown elsewhere (see Orr, Williams, and Pennington 2009) that motivation and appropriate support are the key driving forces for lecturers to succeed in conducting online teaching and learning activities. SDT suffices to underpin SDL research, because of its tenet of intrinsic motivation and autonomy directly related to SDL.

Self-directed learning

Self-directed learners are those who diagnose their current learning needs, formulate goals needed to gain this required needs and identify the resources they can use in this regard, determine strategies that can be used to reach the goal, and finally to evaluate whether the set goals had been achieved or not (Knowles 1975). One of the main essentials of SDL is motivation (Long 2000), and intrinsic motivation is the main driver of self-directed learners. It is the drive and the desire that encourage a self-directed learner to gain the necessary knowledge and skills to complete a particular task in his or her learning (Long 2000). Self-directed learners make informed choices and they rely on their awareness of the control and competence based on the task. The first author recently discussed why SDL is important during the COVID-19 pandemic. Amongst other reasons, he asserted that self-directed lecturers continuously change their teaching and learning strategies based on current situations and issues to ensure that quality and success are maintained (Mahlaba 2020). Similar to other studies, Mahlaba (2020) argues that self-directed lecturers are required in universities to ensure the continuation and success of academic activities. Lecturers must adapt to changes and preserve quality in teaching and learning by utilising innovative strategies that are readily accessible and developing new teaching and learning opportunities that will benefit students.

Research on technology connected to SDL

As posited in the past (see Ng'ambi et al. 2016), the demand for online learning will increase over the years requiring specific innovative strategies to cater for the learning needs of detached students. The outbreak of the current pandemic has certainly proved this point to be valid. Even before the pandemic, technology has been shown to have a considerable effect on learning, but it has always been coupled with some challenges (Kebritchi, Lipschuetz, and Santiague 2017). During this pandemic, it has become clear that the usage of technological artefacts in

synchronous and asynchronous ways is the main way to continue teaching and learning at universities (Chick et al. 2020), and this is likely to be the new normal for most global universities, even after the pandemic (Zhu and Liu 2020). Even though the rise in the significance of remote education is thought to be a political move to stratify students according to their socioeconomic status (Bonilla-Molina 2020; Hall 2020), during the pandemic, universities are left with no choice but to implement remote education and try to cover the socioeconomic gaps that might exist between different students (Mahlaba 2020). It is acknowledged that the rapid move to emergency remote education required that both students and lecturers be trained on how to navigate these uncharted waters for success (Zhu and Liu 2020). Readiness for change is also a critical measure of success in this ever-changing world and this readiness directly relates to SDL.

The application of technology for teaching and learning purposes has been shown to have positive effects on students' SDL and learning engagement (Rashid and Asghar 2016). Technology allows for interactions between students and lecturers to further academic endeavours. In most cases, students see their lecturers as playing a critical role in enhancing their learning (Kidane, Roebertsen, and Van der Vleuten 2020; Lai, Li, and Wang 2017). They see lecturers as helpful in providing guidance on how to use technological resources for learning and encouraging student independence in their learning (Lai 2015). Most importantly, the support to enhance students' self-directed use of technology inside and outside the classroom should cater for the contextual differences that exist between students (Lai et al. 2017). Such contextual issues might include access to technological tools (a computer) and a reliable internet connection to use technology effectively. This could limit students' exposure and willingness towards online learning (Mahlaba 2020). Technology-rich environments provide students with opportunities to be self-directed in their learning as these environments require students to be skilful not only in terms of selecting particular resources for learning, but also in terms of how to use and manage the information obtained from these resources (Fahnoe and Mishra 2013). Furthermore, in blended learning environments, SDL has been shown to influence students' cognitive presence (Geng, Law, and Niu 2019), while Curran et al. (2019) report that digital technologies are important in supporting SDL. However, since the move to remote teaching and learning during the pandemic forced the utilisation of technological tools, little has been revealed about the role of technology on lecturers' SDL.

Barriers to online teaching and learning

The emergency remote education (Bozkurt et al. 2020) implemented by universities during the pandemic might carry many challenges for lecturers due to the unpreparedness of universities

and academic staff. Given these challenges, not all lecturers responded in the same way to these changes because some were better equipped and more motivated, experienced and self-directed than others. Numerous challenges towards online teaching and learning have been experienced by lecturers at universities. Prior to the pandemic, research evidence suggested that lecturers had a concern about their job security because of the rise in online teaching (Fox and Helford 1999). Some pre-COVID-19 studies have indicated that lecturers who previously did not use technology for online teaching and learning, perceived considerable barriers to implement online teaching and learning and even show resistance to online teaching and learning (Lloyd, McCoy, and Byrne 2012). These barriers might be related to age, gender or culture (Al Gamdi and Samrji, 2016; Lloyd et al. 2012; Zamani, Esfijani, and Abdellahi Demaneh 2016). The most common barriers for lecturers in terms of online learning relate to unreliable access or an altogether lack of internet access, lack of training and technical support, inadequate availability of suitable technologies and software, additional time spent to develop online courses, the fact that students expect lecturers to be available 24/7, the lack of institutional support, students' lack of culture for dialogue and collaboration, and the additional workload for lecturers (Al Gamdi and Samrji 2016; Bozkurt et al. 2020; Orr et al., 2009; Rizvi et al. 2017; Zamani et al. 2016). In their study, Polly, Martin, and Guilbaud (2020) found that a lack of time to plan, design and learn about online technologies were some of the major barriers for lecturers when using digital technologies for teaching and learning. They also reported that lecturers complained about the ever-changing technologies and software updates, with which they could not keep up (Polly et al. 2020). Trauma, psychological pressure and anxiety add to the emotional barriers, which play a major role in online experiences of lecturers. None of these barriers should however be a real challenge for self-directed learners who will be motivated to take responsibility for their own personal learning and development.

The pandemic has forced lecturers to migrate to an *all-online* mode of teaching and has put pressure on lecturers who believe in face-to-face lecturing (Steel and Hudson 2001).

A wealth of research evidence indicates that most university lecturers are inexperienced and insecure to teach using online technology (Shelton 2017; Watermeyer et al. 2020). While most lecturers are considered subject specialists because of their expertise in content knowledge and pedagogy, they rely mainly on face-to-face interactions with their students to facilitate learning. Lecturers mostly prefer to use online learning platforms to complement their face-to-face instruction (Maor 2006), instead of using it as the only platform for instruction. Hence, they require support for the move to online learning (Polly et al. 2020). While literature proposes innovative solutions for using online technology to keep educational activities going during the pandemic (Chick et al. 2020), there is no empirical evidence that South African

lecturers are competent in implementing these solutions in their courses. Online learning requires lecturers to deliver instructional information effectively to students (Bao 2020), but this cannot be guaranteed in HEIs where lecturers do not take the responsibility for their own learning as self-directed learners. Rapanta et al. (2020) point to the significance of online learning-related pedagogical content knowledge (PCK), which lecturers who facilitate learning in online environments should possess. In the South African context, where most lecturers rely mainly on face-to-face interactions with their students, this sudden change could be detrimental to all HEIs if academic staff are not willing to take responsibility for the required knowledge and skills. Furthermore, students usually find online learning boring and not engaging and do not make time to do it (Dhawan 2020), which means that lecturers need to create content that will keep students engaged and motivated to learn. Hence, the content uploaded by lecturers to online learning tools need to show some level of creativity and innovation to entice students' motivation and focus.

EMPIRICAL INVESTIGATION

The following section explains how the empirical investigation for this study was conducted in order to collect data that was useful in answering the research questions posed earlier in the study.

METHODOLOGY

Pragmatism as a research paradigm rejects the existence of absolute truth (Kaushik, Walsh, and Lai 2019), and adopts an epistemological standpoint of multiple realities open to empirical investigation (Morgan 2014), which can be explored through studying human experiences in a particular environment (Creswell and Clark 2018). As a paradigm, pragmatism rejects a metaphysical view of reality and situates reality in what works in a particular situation (Kaushik et al. 2019). The pragmatist paradigm was fit for this study as it concerns itself with gathering the viewpoint of different participants without expecting to obtain one single or absolute truth, but rather respect the multiple experiences of participants. Hence, we adopted a pragmatic approach, collected qualitative data and applied the interpretivist paradigm to analyse this qualitative data obtained through an open-ended-questionnaire.

Sampling

All academic staff members involved in undergraduate online teaching and learning in the Faculty of Education at North-West University (NWU) ($N = \pm 232$) formed the population for this research. We used purposive sampling to invite all academic staff from the Faculty of

Education at all three campuses of NWU to participate in this research. Willing participants (n = 23) completed a consent form indicating their willingness to participate voluntarily in the study.

Data gathering

We used an independent assistant to inform all the staff members about this research and through this independent assistant, we obtained the anonymous consent of all willing participants. After obtaining consent, the participants were asked to complete an open-ended questionnaire electronically and submit it to the independent person. The questionnaire focused on questions where lecturers were required to reflect on their experiences of online teaching and learning during the COVID-19 pandemic. These comprised the following open-ended questions:

- How did you experience the switch to remote/online learning during COVID-19?
- Explain how you go about to ensure that you are skilful enough to implement online teaching and learning during this time.
- What was your biggest challenge when implementing online learning during the COVID-19 pandemic?
- How did you overcome these challenges?

Data analysis

Data was checked by the researchers before coding through ATLAS.tiTM. We utilised the coding guidance provided by Saldana (2016) to code the data from the open-ended questionnaires systematically and to generate themes that we used to analyse the data. These themes were generated based on their patterns within the data and their richness in possessing characteristics that could help in answering our research questions. The data was coded by each researcher individually using ATLAS.tiTM and then at a later stage, the researchers met to discuss the codes and themes that each researcher had generated. In this meeting, the codes and themes were agreed upon by both researchers and were finalised, and accepted as the main tools to analyse. Thus, to understand lecturers' experiences of online learning during the pandemic and to determine how these experiences revealed their self-directedness, we utilised the codes and the themes generated from the coding process. Since the process of qualitative data analysis has been defined as "subjective" (see Hsieh and Shannon 2005), we recognised our subjective role in the process of analysing the data.

Trustworthiness

We designed our own open-ended questionnaire that did not have a predetermined measure of reliability. Hence, to strengthen the validity and reliability of this questionnaire, we gave it to five senior people within the Faculty of Education who continuously and directly deal with the management of online teaching and learning on a daily basis. These senior people within the faculty were not directly involved in this study and were also not involved in any online teaching and learning. However, their experiences of managing online learning reported to them by the lecturers on a daily basis provided them with the necessary knowledge to validate or invalidate the questions asked in the open-ended questionnaire. Furthermore, they were well positioned to capture any other important questions that might have been missing from our questionnaire and add these to enhance the depth of the questionnaire and allow for the collection of data that would directly reflect real experiences of the lecturers involved in online teaching and learning within NWU. Furthermore, the fact that researchers coded the data separately and met to discuss and agree on codes and themes also strengthened the trustworthiness of this study.

Ethics

Due to social distancing laws, face-to-face data collection methods were not permitted during the COVID-19 pandemic; hence, we collected our data through online technology. To obtain an indication of the willingness to participate in this research all participants had to submit a consent form prior to completing the questionnaire. An independent assistant was used to inform lecturers about this research. To ensure the anonymity of the participants, the independent assistant provided pseudonyms for each response before handing the data to the investigators. Permission to conduct this research was obtained from the Research Ethics Committee of the Faculty of Education, the Dean of the Faculty of Education, as well as the Research Data Gatekeeper Committee (RDGC) at NWU.

LECTURERS' EXPERIENCES OF ONLINE TEACHING AND LEARNING DURING THE COVID-19 PANDEMIC

From the data analysis, it was observed that lecturers had both positive and negative (challenging) experiences about the move to online teaching and learning during the pandemic. This section presents findings on both these experiences as reported by lecturers. We considered both the positive and challenging experiences, we studied how lecturers solved these challenges and, finally, we reached a conclusion by reflecting on how these lecturers' experiences revealed their self-directedness.

Lecturers' positive experiences

From the data analysis, it was clear that lecturers with previous experience of online teaching and learning experienced the move to remote or online teaching in a positive way. Please note, all responses are reproduced verbatim and unedited.

- L3: "As I am teaching in distance education, the experience was more or less the same as always. I have previously used eFundi as a teaching platform. So my experience was quite positive."
- L7: "I felt that teaching ODL [open and distance learning] students prepared me for online teaching to an extent."
- L20: "I am also teaching distance mode as well as contact mode, thus I am used to teach remotely and to communicate in such a way."

One lecturer, who had already applied the strategy of blended learning, felt that the change was advantageous. L18 mentioned, "For me the change simply went full-scale given that I had agitated for blended teaching and learning approaches and the use of social media technology to deliver content to students". Other lecturers also reflected on students' practice as seen in the case of L17 who said, "For me it was exciting to note that students can be masters of their own learning via online modes". Other positive experiences were strongly associated with SDL, as seen in the case of L14 who replied, "I found a way that worked for me, unlearn and relearn". For L23, the move to online teaching during the pandemic allowed reflection on practice and the realisation of own responsibility to provide the best possible support to students in the online environment.

L23: "It forces me to reflect on my practices, in terms of what I do to support students to enhance their learning. Not all the applications and online tools necessarily promote students' agency or learning, and it is a huge responsibility to try and establish best online practice."

It is often mentioned that the electronic student data management system used by NWU, eFundi, as well as blended learning approaches and continuous assessment, used in face-to-face classes before COVID-19, made it quite easy to move fully to an online system as lecturers now only had to utilise it extensively. In the words of L5, "the change was easy, I used eFundi extensively before COVID". L13 mentioned that it was an "easy conversion, I already started moving content online for most modules". L19 further elaborated, "having designed online materials and lessons as preparation tools for class, it was an easy switchover to full online" while L5 also confirmed that it was not an effort to adapt to the new environment, and said, "I also

engaged in continuous assessment before COVID."

Furthermore, other lecturers felt that the switch to online teaching was difficult at first, but they mentioned that they had to adapt and as they engaged with it further, it got better. As seen in the case of L6, the switch to full online teaching was "a learning experience". These positive experiences mostly came from lecturers who relied on previous experiences of online teaching or who had already included blended approaches in their face-to-face classes. They indicated that the switch was not difficult as they were comfortable using technology, while those who experienced difficulty at first showed that they used reflection, as one of the abilities of a self-directed learner, to manage and adapt to this new way of teaching. Some lecturers studied best practices and applied it in their classes to ensure that their learning was effective during the pandemic. For example, L7 mentioned, "keeping the video lessons short" while L11 said she was "efficiently putting across explanations and discussions sessions".

Lecturers' challenging experiences

The data analysis, however, also revealed that most lecturers who participated in the current study experienced challenges with the switch to online learning. This is evident from lecturers' utterances that referred to the move to online teaching as "extremely cumbersome, tedious, frustrating, anxiety-generating" (L1), "very labour intensive and stressful" (L21), and "it was stressful to meet deadlines" (L22). Other lecturers characterised this move as "very difficult" (L11) while some felt "it was difficult at first" (L10, L14, L22, L23). Out of these numerous challenging experiences, the most dominant ones were challenges related to increased workload, challenges related to knowledge about technology, and challenges related to connectivity. Most lecturers felt that the switch to online learning increased their workload and required them to spend more time on the computer than they usually did during face-to-face teaching and learning. For example, L1 mentioned, "online teaching and learning more than trebled my own workload – also in terms of the time spent on device within any 24-hour period". Most of these lecturers felt that the experience was time consuming which increased their workload drastically.

- L1: "this is extremely time-consuming and most exhausting."
- L21: "very labour intensive and stressful."
- L23: "still takes a lot of time preparing and supporting students and also continuous assessment takes a lot more time and effort. All assessments now need to be rethought and redesigned ... this takes time."
- L22: "related technologies are available but need time for an individual to do self-orientation."
- L8: "doing a class recording consumes more than double the time you would have spent when

teaching face to face. Preparation for online class was also very time-consuming because you cannot answer questions immediately or see on some of your students faces question marks."

L12: "the administration system is ... time consuming. After dealing with admin there is sometimes little time and energy left to put into online teaching development and research."

Some lecturers lamented about their lack of experience and understanding of using online technology, and also of insufficient knowledge of using technological gadgets and software. L1 mentioned, "Not knowing what to do with computer software programmes that I have never encountered before in my life" was a big challenge. This is evidence that L1 had very poor knowledge of using technological gadgets and software and this was the biggest challenge during the switch to online learning. Evidence of lecturers with an other-directed orientation, complaining about a lack of guidance in solving technical issues was also visible, which shows that they were not self-directed. The technology-related challenges from the lecturer participants are summarised in the quotations below.

- L1: "technologically most challenging."
- L15: "it is not the switch to online teaching, it is the additional challenges, the technical problems
- L8: getting familiar with my new environment and sorting out all the technicalities of setting up a recording studio."
- L11: "learning online tools."
- L14: "mastering the technology and finding the software and hardware to suit my needs."
- L15: "technical issues if you have to wait for somebody to call you back or to guide you with technical issues."
- L21: "laptop cameras and microphones are not adequate to compile quality videos and sound, and I had to buy them myself to produce a good standard of work for my students. Some programs even need specific cameras (AVer), and then it becomes a frustration."

Another challenge mentioned by L1 related to giving individualised feedback to students as L1 said, "The ability to answer each student according to his or her perceived or real need by way of e-mail" was a challenge. Lecturers also reported challenges related to electricity problems and connectivity. They were concerned that students were delayed in their learning because of the lack of connectivity in their remote areas.

- L15 and L22: "connectivity challenges."
- L3: "student access to internet."
- L13: "unequal access of students."
- L18: "my greatest challenge was students who got left behind because of lack of connectivity."
- L21: "a reliable internet connection."

L8: "not all of my students had access during office hours to the internet or eFundi. [...] Load shedding also took a toll on me ... you plan for a class recording, just to encounter electricity problems."

While lecturers received data per month from the university for internet access, L21 mentioned that this data was not enough to keep the activities of online learning going for the whole month. Because of the unreliability of the internet connection, lecturers might not have been able to reach all of the students. L15 mentioned, "It was extremely difficult to reach all students" and L8 said, "I found that students were difficult to reach at the start". Furthermore, students struggled with data for connectivity as L8 mentioned, "The unavailability of data for use during their learning process". There was a lack of interaction between the students and lecturers, as L5 lamented, "[the] lack of contact and interaction with students" was a challenge. While there might have been other factors involved, the lack of internet connectivity and insufficient data might have been the reason why some students were non-responsive when lecturers tried to communicate with them. This might also have been the reason why some students did not submit their assignments, as mentioned by L22. Most lecturers did not have any experience of a fully online mode of delivery, and a number of them preferred the face-to-face mode instead, showing a lack of motivation to learn new technologies for online learning. As a result, some lecturers argued that they struggled because they did not have experience with online learning. Some of their remarks are summarised below.

L2: "I did not have much experience except for utilising eFundi with regard to sharing module study resources and online tests."

L12 and L13: "little experience."

L16: "did not do much online teaching before Covid19."

L23: "I did not have a lot of experience in online teaching."

Furthermore, some of the biggest challenges for lecturers were that students struggled with utilising technology. L3 mentioned that one of the challenges was "students' basic computer literacy". Hence, some lecturers recognised that their students struggled to cope with the switch to online learning. L8 said, "Most of my students really struggled to cope and adjust to the new way of teaching and learning", while L16 was concerned that "some students do not comprehend fully what is expected of them". L14 complained that the training provided by the Centre for Teaching and Learning (CTL) was not adequate for the subject, as L14 mentioned, "CTL did not provide me with solutions specific to my subject field." This is another indication of an other-directed orientation without the motivation and willingness to take responsibility for own learning.

Another area where lecturers experienced challenges was that of communicating with their students. While some lecturers felt that online platforms were not transparent enough to allow them to get their message across to the students, others felt that network, data, electricity issues and inadequate IT skills of students all contributed to insufficient interaction and communication with students. Some lecturers mentioned that they had to depend on more innovative ways to ensure communication with students, as email feedback to students was too time-consuming and ineffective.

- L21: "communication was a challenge."
- L6: "to keep students in the flow."
- L8: "I had to try new and innovative ways to communicate and convey my knowledge."
- L11: "efficiently putting across explanations and discussions sessions."
- L13: "having very little conversation with students."
- L19: "online communication problematic, too many emails and messages."
- L3: "communication with large numbers of students."
- L21: "communication was a challenge; I feel that students abused the situation in some cases."

Some lecturers experienced challenges with marking assignments using technological artefacts and setting appropriate assessments for students in remote environments, while one lecturer experienced challenges of students cheating in their assessment tasks. Lecturers felt that the lack of formal examinations did not only increase their workload in designing suitable continuous assessments, but was also a concern regarding the quality of the content learnt by the students. Other challenges related to assessment include:

- L10: "marking assessments using PDF marker."
- L22: "submission of assignments, marking and students copying and reproducing duplicated work of others."
- L23: "all assessments now need to be rethought and redesigned."
- L22: "does not fairly produce reliability and assurance that the student as participant has done an independent work and acquired necessary skills, students copying and reproducing duplicate work of others."

This means that lecturers were cognisant of the fact that students might cheat and present copied work as theirs; hence, the assertion by L23 that most of the assessment had to be redesigned to make sure that students do not duplicate others' work. Furthermore, lecturers in this study also reported that online learning did not allow them to cover practical and laboratory work with their students. L2 said, "My biggest challenge is lack of practical laboratory experiments" and

L21 complained, "My subject is very practical, and distance learning during Covid mostly nullified that aspect of teaching and learning". Another challenge was that lecturers struggled with changing their mind-set to full online learning and felt that they were not doing enough to support their students in an online environment as they could have done during face-to-face interactions.

- L20: "not seeing them! Especially my honours students a small group where we work very intensively, and the content is rich and deep and asks for application skills."
- L22: "unable to cover the required syllabus fairly."

The working environment from home when schools were closed and children were forced to stay at home, was a challenge for L7 because children wandered around the house, caused distraction and sometimes required attention. L7 mentioned, "personal circumstances (especially during the time when schools and pre-schools were closed, and children had to stay home. It was difficult to focus on work for extended periods of time, as my attention was divided)".

Lecturers' self-directedness

The way in which lecturers dealt with the challenges provided some indication of their self-directedness. Self-directed learners set their own learning goals, find their own learning resources, make informed choices and reflect on their learning. It was evident from the data that most of the lecturers realised their lack of knowledge and skills and sought help and assistance from colleagues, and attended online webinars, courses and scheduled training sessions to learn new and innovative online technologies for teaching and learning. Some examples of participants' responses to how they overcame the challenges are:

- L2: "During the pandemic, [the] Centre for Teaching and Learning [CTL] provided lecturers with more than enough training to cope with the change."
- L3: "equipping myself through CPD [Centre for Professional Development], attending online seminars and workshops presented by CTL."
- L5: "I make use of the webinars of CTL."
- L7: "I attend all the CTL training sessions and learn from best practices from my colleagues. I have also read some blog posts from teachers who have switched to remote teaching, especially tips on how to engage students."
- L9: "I did extra eFundi training and teaching and learning online courses."
- L21: "followed guidelines and help seminars on NWU site."
- L8: "all the training offered by the university did assist."

Attending training sessions is an action of being self-directed, because the training was only offered to individuals who wanted to take the initiative to attend; it was not expected of all lecturers to attend. In adapting to the new normal of online learning, some lecturers indicated that they sought advice from other sources, which is also typical of a self-directed learner.

- L10: "I had to adapt to the change by communicating with other colleagues."
- L1: "I try to ask advice from other people."
- L12: "exchanged ideas with colleagues."
- L16: "consulting with colleagues to gain better understanding."
- L23: "talking to colleagues, asking for help, reading."
- L10: "I did ask colleagues to assist me."
- L18: "I work closely with the eFundi teaching and learning support division."
- L15: "eFundi helpline."
- L8: "I am fortunate to have a very competent partner at home who has a passion for IT, who helped and assist me with my Zoom video class recordings."

For some lecturers, the internet provided good sources of how to cope with the change to online teaching and learning. These lecturers took the initiative to search the internet for possible solutions for dealing with online learning and tried to identify the resources they could use to improve their learning practice.

- L7: "I have also read blog posts from teachers who have switched to remote teaching, especially tips on how to engage the students."
- L14: "I watched YouTube videos in search for solutions that would suit my subject."
- L21: "YouTube tutorials."
- L23: "reading on the best practices ... trying to keep up to date with trends in online learning."

Some lecturers actively reflected on and implemented innovative ideas to enhance communication and to give and receive feedback. They indicated that they relied on the feedback from their students to improve the quality of online teaching and learning. The act of considering feedback from students indicates the initiative to reflect on practice and improve the learning practice to suit the needs of the students, an act of a self-directed learner.

- L14: "I rely on feedback from my students."
- L20: "I also work on the feedback from my students to plan ahead."
- L23: "asking students how they experience the outline and suggesting how it can be improved to better support them in their learning journey."

- L8: "part of my success is the fact that my students could communicate with me and I could sort out problems immediately."
- L2: "I also communicated with my students on WhatsApp to understand their satisfaction with regards to my online teaching and their challenges."
- L23: "It also helps to reflect on your eFundi sites, for example asking students how they experience the outline and suggesting how it can be improved to better support them in their learning journey."

One of the acts of best practices and an indication of self-directedness was seen in the case of lecturers who mentioned that they used different methods of communication to reach their students. L3 mentioned, "with communication I used the eFundi chat function as well as email and occasionally WhatsApp with postgraduate students", while L20 said, "I used WhatsApp groups, eFundi and also e-mail. Thus, various methods of contacting my students and staying in touch and on the cutting edge with content." Those lecturers who could not communicate with their students for various reasons, also showed self-directedness by making innovative plans. Upon realising that some students were getting left behind because of the challenge of connectivity, L18 said they "had to resort to dispatching paper-based teaching and learning activities to enable them to cope with the process". These lecturers utilised innovative ideas to establish good communication with the students to reflect on their teaching practice, listen to students' challenges, and to support and guide students in their learning.

- L20: "I believe in frequent and very clear communication."
- L5: "I use WhatsApp a lot more now and provide the learning material in PDF format on WhatsApp."
- L8: "my students could communicate with me on WhatsApp at any time."
- L9: "I created WhatsApp groups, I phoned students just to support them."
- L13: "scheduled conversation sessions weekly."
- L19: "started using communication channels such as WhatsApp with students."

The importance of access to good technology was noted when L7 remarked they "utilised video editing software to reduce the size of my video lessons and compress the videos so that students don't need to use as much data". L8 further said:

"[I]f you do not have the tools to present a quality lesson, it will only be a lot of interesting information. I believe the method that I had chosen to do my online teaching connected the students to me, in that they could see me when I explained difficult calculations ... I am very lucky to have a recording studio at home, with access to excellent tools and a green screen, web camera and lighting to do my class recordings. I work on One Note where I can share my screen and students can still see me teaching."

Another method used by lecturers to cope with the change to online learning was "trial and error", as some mentioned that they had to find a method that worked best for them. Trial and error means that they implemented particular strategies and when these strategies failed, they adapted and tried different strategies, perhaps strategies that were within their students' suggestions as some mentioned that they relied on the feedback from their students.

L14 and L16: "trial and error."

- L23: "implementing something and if it doesn't work, going back to the drawing board and redesigning it."
- L19: "continually experiment with current and new lesson tools."
- L13: "experimentation with alternative assessment means and lesson content transmission, [...] experimentation with alternative assessment means and lesson content transmission."
- L19: "continually experiment with current and new lesson tools."

Focusing on practical examples, reflection, saving time through taking shortcuts, resolving technical difficulties, limiting the time of video recordings for students, and time management were amongst measures, which lecturers indicated they took to adapt to full online learning.

Furthermore, there were findings that were directly related to the tenets of self-directed learning that were used by lecturers during the switch to full online learning. Some lecturers preferred learning methods that are associated with self-directed learning, while others mentioned traits that resembled being self-directed in their learning. Cooperative learning (discussions) and PhET simulations (L2), flipped classrooms (L3), blended learning (L3, L6, L7), demonstrations and interactive group work (L5), videos followed by a discussion (L13) and active teaching, learning and assessment (L23) were amongst some preferred methods of teaching that resembled traits of self-directed learning. Furthermore, individual traits such as "NEVER GIVE UP! Perseverance!" (L1) and "persistence, unlearn relearn" (L14), also show that some lecturers had to be self-directed in order to adapt to the change of full online learning. L23 felt that the pandemic was necessary for them to learn more about online learning and stated that "it is an ongoing learning curve for me – and I do not think that my own learning trajectory in terms of online teaching, learning and assessment would have increased so rapidly if it wasn't for the pandemic".

Some lecturers displayed characteristics of not being able to deal with the challenges of online learning and most of these lecturers did not respond to the question "how did you overcome these challenges" in the questionnaire. This implies that the lecturers who did not reply to this question probably did not deal with the challenges and were still in the dark about

what to do during online teaching and learning. L2 mentioned that the "challenges were not addressed" and L9 felt that the challenges were not addressed by saying, "I don't think we really did." L1 tried to imitate other lecturers' practices without fully understanding the reasons behind these practices or why they were effective for said lecturers. L1 remarked:

"I try to ask advice from people whom I think might know how particulars actions are operationalised online and then I try to copy them exactly, without necessarily understanding why they might have done what they have, in fact, done."

Although this was a small number of participants (23), it is evident that, at the time of this research, not all lecturers applied self-directed learning to overcome the challenges they faced.

DISCUSSION

Lecturers' experiences of adapting to online teaching during the COVID-19 pandemic varied depending on their previous experiences of online learning, their own self-directed orientation and other technology related problems. Lecturers exhibited both positive experiences and challenges with the shift to online learning, with most of them experiencing challenges. Previous experiences with online teaching prepared some lecturers well for the switch to full online teaching and learning during the COVID-19 pandemic. Lecturers who were already using or planning to use online learning (blended learning) felt that the switch was easy. It was evident that most participants tried to find the best method that works for a particular learning scenario. The move to online learning forced them to reflect on their practices and to request feedback from their students to design better lessons in the future. However, similar to the findings of Lloyd et al. (2012), lecturers who did not have previous experience of using technology for online learning perceived more challenges. This might however also be related to lecturers' SDL readiness as most of them are used to teach in a face-to-face environment where the need to learn more about technology for online learning was not necessarily a priority.

The current study also found that the switch to full online teaching and learning was frustrating, stressful and very difficult for some of the lecturers. Similar to Bozkurt et al. (2020), we found that the switch was time-consuming and it increased the individual workload of lecturers. Lecturers faced challenges, such as the lack of reliable internet access, insufficient training and support in utilising the available technology, unavailability of software and advanced technologies needed, and difficulty to communicate with students. However, most of the lecturers found their own solutions to these challenges, which is an indication of their self-directedness. These challenges are similar to the findings from studies, such as Orr et al. (2009), Al Gamdi and Samrji (2016), Zamani et al. (2016), Rizvi et al. (2017) and most recently Bozkurt

et al. (2020). Findings from Shelton (2017) and Watermeyer et al. (2020) reveal that lecturers were inexperienced and insecure using online technology and the findings from the current study confirmed these findings to a great extent. Lecturers also indicated that some students were not responding to communication and not submitting assignments because they resided in areas with very poor internet access. This lack of reliable internet access and data made it difficult for lecturers to reach students. Thus, the communication between lecturers and students was also a challenge. Some lecturers were also concerned about students cheating and submitting work that was not their own, while other lecturers felt that the lack of laboratory practical work was a further challenge.

Despite these challenges, most of the participants displayed some characteristics of being self-directed by designing strategies to mitigate these challenges. For example, some lecturers indicated that they had to reflect on their teaching, and that they had to redesign and re-think some assignments in order to combat the challenge of student plagiarism. They initiated discussions with their colleagues about best practices, attended workshops, webinars and training sessions and used the internet as a resource.

From the results of this study, it is evident that the sudden change to online learning caused some tension and anxiety among lecturers who do not show high levels of SDL abilities, especially those without any previous experience of online learning. The researchers concur with Watermeyer et al. (2020) who found that the COVID pandemic forced lecturers to migrate to online learning. For those who are not highly self-directed it resulted in a stressful and ineffective working environment.

CONCLUSIONS

This article reported on the experiences of lecturers at a higher education institution in South Africa after adapting to online learning as a result of COVID-19. We found that lecturers used to a blended learning approach adapted much better to this sudden change, compared to those with no previous experience. Most of the lecturers, as self-directed learners themselves and realising that they did not have any other choice, put action in place to address the challenges that they initially experienced. They initiated innovative ideas, experimented with best practices and requested feedback from students to adjust and improve. Unfortunately, not all lecturers show the SDL abilities to identify and address their own learning needs. They identify a number of problems but seem unable to address them by using new and innovative strategies. HEIs should take note of this and initiate support for those lecturers – not to provide them with solutions, but rather to assist them to create their own unique solutions to their problems as self-directed learners.

Stressful and ineffective working environments in higher education are not conducive to the competitive environment in which HEIs find themselves. They have to ensure that the relevant support is provided to academic staff to develop themselves as self-directed learners who can adapt to new situations and identify and address their own learning needs.

Furthermore, we reported on positive as well as negative experiences, but also on ways in which lecturers addressed these challenges as self-directed learners. We hope that these experiences as well as the actions taken to overcome challenges will energise, encourage and motivate lecturers in the same situation to overcome their challenges and learn from their peers' experiences. This study indicated the importance of self-directed learning in adapting to sudden changes in their educational landscapes. Thus, HEIs should ensure they transform their lecturer's mind-set to be self-directed practitioners who adapt their teaching approaches to suit theirs and students' needs. We need lecturers with an internal drive and desire to gain the necessary knowledge and skills, make informed decisions and choices to deliver online classes successfully. HE management should take note and support and instil SDL abilities in their academic staff for their own survival in this competitive environment.

NOTE

1. "Online" and "remote" teaching will be used interchangeably.

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