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COVID -19 CRISIS AND TEACHERS' MICROPOLITICS OF ONLINE LEARNING IN ONE TERTIARY EDUCATION INSTITUTION IN LESOTHO

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ABSTRACT

In 2020, because of the educational crisis caused by COVID-19 pandemic, one tertiary education institution in Lesotho decided to migrate teaching and learning to an online format. Such a shift sparked debates and controversies within the teaching staff of the university via both physical institutional spaces and online forums.. This study examines the content and nature of teacher talk as represented in online forums to critically analyse the concerns they raised, and to explain their response to the institutional decision using the conceptual lens of teachers' micropolitics The study used a qualitative approach for data collection and analysis. Three teachers' *WhatsApp* forums constituted the data source following ethical approval and participants' consent to use same. The transcripts were composed of about 60 000 hits that combined text, images, audio and video. This data was cleaned up to remove unwanted content which were hits in media formats other than text, and the content that was not related to institutional decision. Content analysis was applied to 2000 text hits that were found to be relevant for this study. The findings revealed that teachers were concerned about the institutional decision because they believed it was not well-thought out and was not taking into account their aptitude to teach online, and their limited access to ICT infrastructures and resources. From these findings, the study concluded that teachers were unhappy about online migration and therefore were unprepared to implement the institutional decision.

Key words: teachers' response, micropolitics, online migration, online platforms

INTRODUCTION

When governments imposed lockdowns and curtailed human movements because of the COVID-19 crisis, many learning institutions found themselves stranded and frustrated as they were not able to continue with their core business activities of teaching and learning. As a result, many of them, including the one which is the focus of this study, saw online learning as a solution to this crisis. This institution made a decision to migrate teaching and learning to online platforms. This was mainly to save and maintain annual curriculum schedules.

Before COVID-19 pandemic crisis, online teaching and learning was not common in this institution. Teaching and learning relied mostly on face-to-face delivery mode. It is evident therefore that online teaching and learning was new to many teachers and students of the institution. As such, both teachers and students had concerns about the decision to migrate teaching and learning online.

When teachers have concerns relating to their work and profession, they talk and discuss these among themselves in the formal and informal forums (Cuban, 2010). It is likely these discussions can reveal how teachers intend to respond to the issue. Thus, the focus of this study was to establish how teachers talked and discussed the decision about online migration, to describe the issues they raised in their politics, and to predict their response towards the migration.

BACKGROUND

National lockdowns, travel restrictions, and social distancing strategies have been viewed worldwide as the most effective ways to curb the spread of COVID-19 (Murano *et al.,* 2021). However, these strategies affected many education systems in an exceptional manner. This was first reported in the United Nations' *Policy Brief: Education during COVID-19 and Beyond* (August, 2020). The report indicated that the COVID-19 pandemic had created the largest disruption in the education sector ever recorded in human history. According to this document, all education systems worldwide had somehow been affected by the COVID-19 crisis. For example, schools and other learning institutions were closed because of government impositions of the national lockdowns, travel restrictions, and social distancing strategies. About 1.5 billion learners (which is about 94% of the student population worldwide) were affected. Of this percentage, about 99 percent were from low and lower-middle income countries (UN, 2020).

Many learners in the developed and rich countries were not affected much during the COVID-19 crisis because they could still access learning through online platforms. The integration of digital platforms as another mode of curriculum delivery had already made teaching and learning processes flexible and accessible to most of these learners (Islam *et al.*, 2012). That curriculum implementation no longer relied on the face-to-face mode of teaching only meant that these restrictions had minimal disruption on the processes of teaching and learning. Only a small percentage of learners from disadvantaged and rural communities in these countries were negatively affected (Hamidi *et al.*, 2011 & Pravat, 2020).

In contrast, a large number of learners in poor and developing countries were negatively affected by COVID19 crisis (UN, 2020). This is because technology integration in teaching and learning in these countries is not as pronounced as it is in the rich and developed countries. National ICT infrastructures are elementary, sporadic, and have therefore failed to promote online learning (Hamidi *et al.*, 2011). Actually, when comparing the integration of ICT in education in the developed and developing countries, Hamidi *et al.* (2011) concluded that learning institutions in developed countries have already been reaping the benefits of ICT integration, while those in developing and poor countries have been lagging behind. Specifically comparing Europe and Africa, Hamidi *et al.* say that while European countries create and use ICTs in an advanced manner African countries are not using even those available for basic teaching and learning. Thus, when COVID-19 crisis hit Africa, teaching and learning in the education systems was still dependent on the face-to-face mode of delivery (Makafane & Chere-Masopha, 2021). Thus, the closure of schools and other learning institutions when COVID-19 crisis reached the African education systems meant "no access to teaching and learning" to both teachers and their students. In addition, as observed by Pravat (2020), learning institutions in developing countries, and those located in the disadvantaged and

rural communities of developed countries, experienced challenges when the COVID-19 crisis hit. The ICT resources they had access to limited the ways in which these learning institutions could respond to the teaching and learning crisis brought about by the COVID-19 pandemic.

Online teaching and learning crisis in Lesotho

The national lockdowns imposed by the government in 2020 as a response to COVID-19 pandemic forced schools and other learning institutions into a total shut down. These institutions were forced to find alternative strategies that would enable them to manage their closure; to maintain the continuity of teaching and learning until the restrictions were lifted; to build resilience for future crises; and to see this an opportunity to reform their curricula World Bank (2020).

Lesotho is one of those countries whose education systems were profoundly affected by COVID-19 pandemic. When this pandemic hit the Lesotho education system, teaching and learning were still relying heavily on the face-to-face mode of delivery. The integration of ICT in teaching and learning was spasmodic, haphazard, and mainly practised by technology enthusiasts. This means that when schools and learning institutions were closed, both teachers and learners had no access to teaching and learning. Like learning institutions elsewhere, learning institutions in Lesotho searched for alternative teaching and learning delivery modes that would enable them to maintain the continuity of teaching and learning during the lockdowns.

Despite the challenges of ICT infrastructures and resources experienced by these institutions, many of them considered migrating teaching and learning to online platforms as a plausible solution to their problems (see Makafane & Chere-Masopha, 2021). With no time to prepare for this new mode of teaching, the institutions hurriedly instructed teachers to migrate teaching and learning to online platforms.

The institution studied for this paper, provided short and haphazard courses for teachers and learners on the basic skills required to use the institutional learning management system (LMS). These courses were developed and provided to equip teachers and learners with basic skills needed to participate effectively in online teaching and learning on the LMS or other online platforms. The institution made arrangements with Internet service providers in Lesotho to zero-rate selected online learning platforms and websites (Makafane & Chere-Masopha, 2021). The institution also negotiated with the government to increase student stipend to cover some of the ICT-related costs the students were likely to encounter.

Objectives of study

Following from the preceding discussion, the objective of this study was to investigate the micropolitics of online learning in one tertiary education institution in Lesotho. It explored, from a micropolitics perspective, how teachers in this institution talked about the institutional decision to migrate teaching and learning online, the issues they raised in their discussions, and based on their discussion how they were likely to respond to the change. Hence, the main research questions of this study were: (1) What were teachers saying about the institutional decision to migrate teaching and learning online, and which issues did they raise; and (2) based on the issues raised, how were these teachers likely to implement the institutional decision.

This paper continues in this section with a review of the literature dealing with issues to do with teachers and curriculum changes- Section 4. This is followed by a discussion of data used for the study and the methodology adopted for the analysis in Section 5. Section 6 presents the results of the study, together with a discussion of these results. The final section contains concluding comments.

LITERATURE REVIEW

Teachers and curriculum change

Teachers are often not happy when they are not involved in the planning of curriculum changes, particularly those that affect their professional practices. As observed by (Chere-Masopha, 2018 and Labbo, 1995), teachers' classroom practices are often informed by their classroom experiences of many years. Therefore, when changes are brought into their professional practices, with limited preparation, these changes destabilise their Zone of Proximal Comfort (ZPC) (Labbo, 2005). As a result, where teachers have not been properly prepared, they often appear to be resistant to the curriculum changes. This is in line with Terhart's (2013) view that teacher resistance to change is a recurring phenomenon which all learning institutions have to deal with. Thus, understanding teachers' behaviour, and the influencing factors, particularly towards curriculum change, has therefore become important.

Various methods have been used to investigate teachers and their work. Qualitative methods such as teachers' stories and narratives have been popular for this kind of research (Blasé, 1997). These methods have been used to collect and analyse data that would lead to the understanding of teachers' behaviour and the influencing factors towards change (Cuban, 2010). These methods have been used to investigate the influence of such aspects as teachers' knowledge, skills and beliefs on teachers' classroom practices, and their general participation response to change (Carrington, Deppeler & Moss, 2010). Many of these studies have established that these aspects are influential on teachers' professional behaviour.

In contrast to these findings, some studies, such as Terhart (2013), still believe that teachers are resistant to change and that they always use "excuses" such as the following to justify their avoidance (Terhart, 2013, p.493):

- *The 'No time!' – argument:* teachers complaining about having not enough time to deal with duties that are added to their heavy workloads and other daily demands;

- *The 'I am innocent!' – argument:* teachers having different perspectives to the problems seen by those proposing change. In this case, they view problems not relating to their own practice but to other groups such as parents, administrators or the system itself;

- *The 'I have seen it before argument' – argument:* teachers benchmarking against the past reforms which failed to bring any changes rather created more problems.

- *The 'two worlds' – argument:* teachers complaining about the reformists who are ignorant about their world and being unrealistic about the reforms.

- *The 'biographical' – argument:* The attitude of the older generation of teachers that they have done their bit and the reforms should target the younger generations.

- *The 'lack of personal benefit' – argument:* Teachers considering the personal benefits they would gain from the reforms

compared to the school administrators, school supervisors, and other stakeholders.

Unlike Terhart (2013), Cuban (2011) is of the view that it is unjust to view teachers as being resistant towards change without understanding their world and reality of work. According to Cuban (2011), this lack of understanding is undermining teachers' intellect and capability. As professionals, teachers are intelligent and have a deeper understanding of their world of work than anybody else has. Teachers often behave in a particular manner because they often consider their own professional realities, their classes, and their colleagues who they use as a background for their interpretations of their professional world (Cuban, 2011). They use this as a platform from which they assess the value and the usefulness of change and the demands that are made on them. With teachers, it is all about what works, not about what they are told by outsiders in their professional world. In their consideration of any proposed change they always have these questions in mind (Cuban, 2011):

- How will the change help me as an individual practitioner to solve problems I face now or in my daily practice?

- Do I have energy and time to effect this change even if it may benefit me and my students?

- How can I adapt these changes to fit the needs of my particular students?

Scholars such as Blasé (1997), Chere-Masopha (2018), and Chere-Masopha and Bennett (2007) have established that what influences teachers' response to change is more complicated than factors that are often cited in many studies. They explain that the factors that influence teachers are interrelated and exist in the different landscapes of teacher professional identities. Chere-Masopha (2018) and Chere-Masopha and Bennett (2007) identify these landscapes as personal and professional, situational, and contextual.

Personal and professional landscapes of teacher identities comprise aspects that are personal and professional to teachers and are unique, and attributed to individual teachers. They include teachers' gender, knowledge, attitudes, likes and dislikes, cultural norms and values, work satisfaction, and commitment.

Situational landscapes of teacher identities comprise aspects that exist and form a teacher's professional and working environment. These are, but not limited to, school management and policies, culture and climate, interactions with other teachers and students, school infrastructure and resources. Situational landscapes could also be viewed as a space where teachers discuss issues relating to their job. Teachers and micropolitics are further discussed later in this paper.

Contextual landscapes of teacher identities comprise aspects that form and shape the external environments of the learning institutions in which the teachers work. They include national and local community policies, economies, resources and infrastructures. Contextual landscapes are more about the external environments in which the educational systems and the learning institutions exist and operate.

The influence of these landscapes on teachers' response to change can best be learnt in a natural setting where their aspects could be observed as they play out.

Teachers and micropolitics

While at work, teachers interact to talk about things that matter to them as

professionals. Cuban (2010) argues that everyday interactions among teachers and between teachers and other members in their working environment about their profession can be viewed as teachers' micropolitics. According to Blasé (1997), studying teachers through the lens of micropolitics can reveal a lot about teachers and their profession.

Despite this argument, teachers' micropolitics has not been widely used in research to understand teachers' response to change. Investigating teachers through this aspect can address the concern by Chere-Masopha (2018) and Chere-Masopha and Bennett (2007) that the research methods used to study teachers should take into account the complexity of the relationships between the factors that have influence on teachers. Hence, the micropolitics perspective was adopted in this study.

This is not the first study to investigate educational issues through micropolitics. For example, Willower (1991) investigated the role of micropolitics in a school setting and concluded that there were political processes in a school that embedded micropolitics and as such, understanding micropolitics in a school is important. Achinstein (2000) studied the role of micropolitics on teacher collaborative reforms, focusing on how conflict, border, and ideology played out in teacher professional communities. Sarason (1990, p.7), also investigated the role of micropolitics in school reforms and concluded that, school systems are political organizations in which power is an organizing feature. Therefore, if power relationships and their underlying rationale are ignored the existing system will defeat efforts to reform it. This will happen not because there is a grand conspiracy or because of mulish stubbornness in resisting change or because educators are uniquely unimaginative or uncreative but rather because recognizing and trying to change power relationships, especially in complicated, traditional institutions is among the most complex tasks human beings can undertake.

Sarason (1990) is supported by Iannaccone (1991) who, in a meta-study of micropolitics in education concluded that the framework of micropolitics has been used by scholars from different disciplines in search of deep understanding of what goes on in their fields.

Theoretical Framework: Micropolitics

Many definitions of micropolitics exist in the literature because of the lack of consensus on the definition. For example, Pfeffer (1981) views micropolitics as a specific perspective in organizational theory while Ball (2012) defines it as the negotiation of interests and the legitimacy of authority that are often the focus of the political perspective in an organization. Ball further claims that in an organization, members (as individuals or groups) use micropolitics strategies to serve their interests. This view is supported by Cuban (2010, p.1) who concludes that the decision about "who gets what, when, and under what circumstances [in an organisation] to achieve desired objectives is the classic formula for [micropolitical] behavior".

Micropolitics in schools are part of the professional lives of teachers. When teachers don't teach or manage students, they engage in politics (Cuban, 2011). Consequently, Cuban argues that micropolitics cannot be separated from daily professional practice of teachers: daily decision-making about who to teach what, when, how and why, and how to allocate resources in the classroom are part of micropolitics. Usually, these decisions by

teachers are often viewed as part of instructional processes; however, in reality they embed politics. Other micropolitical activities that teachers engage in while at school are interactions with school leaders and parents when bargaining or negotiating on issues relating to their learners, resources and their work (Cuban, 2010). Teachers also interact with their colleagues to express their concerns about their working conditions; school management and leadership, and perhaps about management decisions with regard to their working conditions, or new changes that are brought in their workplace. All these interactions involve micropolitics and form part of the daily professional lives of teachers. Realising the importance of micropolitics in learning institutions, Terhart (2013) cautions against ignoring the weight of human interactions in the teaching profession because it plays an important part on the teachers' behaviour. The view expressed in Terhart (2013) is supported by Cuban (2021) and Seidl and Whittington (2014) who acknowledge a teacher's political behaviour as a natural part of his or her professional practice. As such, studying micropolitics can assist in understanding and valuing the realities that these practitioners experience every day. Seidl and Whittington (2014) also points out that the influence of micropolitics can be observed in a situation where an institution introduces policies or changes that have not been well-thought through because the haphazardness, ambiguity and uncertainty of such policies can cause confusion, misperceptions and dissents that often result in micropolitics. Kelchtermans (1996, p.88) also observed that in the working conditions that, "teachers consider necessary or desirable to perform their professional tasks properly and effectively they engage in micropolitical actions to establish, safeguard, or restore their professional interests". Teachers also engage in political actions when conditions are undesirable and have the potential to destabilise their professional practices. Thus, generally, teachers' micropolitics are about:

- acquiring or having access to teaching and learning resources;
- garnering support from others to drive their own interests;
- trying to develop deep understanding of policy decisions and goals; and aligning their practices accordingly;
- trying to understand and abide by the institutional demands, rules and regulations; and;
- negotiating with parents and others on matters that affect children and the school.

METHODOLOGY

This study used a qualitative research approach to explore teachers' micropolitics of online learning in one institution of higher learning in Lesotho. Because qualitative research is exploratory and investigates issues in their natural setting, it is considered appropriate for this study. Researchers use this approach when their intentions are about unearthing and understanding underlying issues such as reasons, opinions, and behaviour of individuals or groups (Patton, 2002). Those who ascribe to this approach believe that, in a natural setting, an object or a person behaves normally and generates data that is authentic and that has not been pre-planned for research. Qualitative approach is said to enable a researcher to understand the reality of the participants through methods such as narratives and stories that reveal their views, hopes, concerns, frustrations, fears, and aspirations. According to Patton (2002) a researcher that uses this approach is able to

view the world through the eyes of the participants, gaining a deeper understanding of the issue that is under investigation. Qualitative research has been found suitable for studying people's realities such as their experiences, beliefs, and attitudes by observing, interviewing or reading and analysing documents. Thus, a qualitative research approach is associated with such methods as interviews, focus group discussions, content analysis, and observations.

Research design and methods

This study used content analysis as a research design and method of data collection and analysis. In line with Constable *et al.* (2012), content analysis is an interpretive and naturalistic approach that is observational and narrative in nature and that relies less on the scientific research elements such as reliability, validity and generalizability. Berelson (cited in Constable *et al.*, 2012) suggests that although little attention is directed to reliability, validity and generalizability in this approach, the research technique maintains objectivity and it is systematic during the analysis and description of the communication content.

In qualitative research, content analysis is carried out to understand meanings and relationships of certain aspects such as words, themes, or concepts within a given text or picture (Hsieh & Shannon, 2005). As a research technique, content analysis focuses mostly on the analysis of text and other media formats such as pictures. It is often used to describe the attitudes of individuals or groups towards change, and the intentions of the institutions and how the attitudes influence the behavioural responses of those involved (Constable *et al.*, 2012).

Data collection

In qualitative research, sources of data for content analysis include interviews, open-ended questions, field research notes, conversations, essays, discussions, speeches, pictures, and historical documents, speeches, conversations to mention a few. Data for this study was the conversational transcripts collected from three social forums on the *WhatsApp* platform which teachers from various faculties and departments of the institution under investigation subscribed to.

WhatsApp as a digital platform for data collection

Data used in this study was collected from *WhatsApp* forums. *WhatsApp* is a mobile messaging technology that is mostly available on the smartphones and is globally popular for instant communication (Kumar & Sharma, 2017; Rosenfeld *et al.*, 2018). This technology has become popular mostly because it is cheap, flexible and uses various media formats. The technology allows users to share, from one to one, or among group members, text, images, video and voice messages.

Communication on *WhatsApp* platform can happen in real time or over a period of time. As a result, time and space does not inhibit communication. *WhatsApp* also allows voice and video calls. Audio and video conferencing tools have recently been added, making it more appealing than before. Various groups (professional, social, religious, political, learning) have taken advantage of this technology to create digital social forums. Depending on the agendas of these groups, the forums could be of the short-term or long-term. *WhatsApp* is also preferred by the users because, other than the cost of internet access, it has no additional financial costs (Singer *et al*., 2020)

Recently researchers in various fields have started viewing *WhatsApp* as a digital platform from which they can collect qualitative and quantitative data. The fact that *WhatsApp* allows communication in real time and over a period of time is considered as a real advantage. Another advantage of *WhatsApp* platform is that it accommodates inclusive participation. According to Chen & Neo (2019), the platform can accommodate the research methods that include discourse analytic approach, focus group discussion, interviews, and questions.

Teachers used these *WhatsApp* forums for discussing and sharing their feelings, concerns, frustrations, experiences, and observations about issues that concern their lives. The issues included politics, economics, current affairs, religion and education. According to Blasé (2002), teachers sometimes create social forums as informal spaces where they consciously or unconsciously form or break alliances to support or discourage each other. Therefore, it was not a surprise that teachers have also taken advantage of *WhatsApp* platforms to create their social forums.

The forums from which data for this study was downloaded were conveniently identified based on the accessibility. The researchers were subscribers to these forums. Consequently, negotiating permission to access information was easy as the rules and regulations surrounding issues of confidentiality and ethics relating to downloading, distributing or using the generated materials outside these forums were known to the researchers. Permission to use material from these forums was sought from the administrators, who also sought approval from other subscribers. Once all the regulatory procedures set by these forums were observed and permission granted, three transcripts from three forums were downloaded for analysis. A caution has also been taken in the presentation of the results that teachers views are presented objectively and constructively.

It should be noted that, the researchers in this study, as active subscribers of these forums also participated in the issues being researched. Therefore, they excluded all their posts and the posts of others who appeared to be the direct responses to the researchers' contributions. Despite this precaution, the researchers are aware that the possibility that their discussion may have influenced other members' contribution cannot be completely ruled out.

The three transcripts that were downloaded from the *WhatsApp* forums contained about 60 000 hits (posts) in total. A hit in this study is viewed as a post made by a member. Once downloaded, this data was cleaned by removing non-text material such as audio clips, video clips, and images (that included photos and emoji's). The hits that contained information on issues considered not to be relevant to the institutional decision to migrate online learning were also removed. This process is demonstrated in Figure 1. The clean-up also removed names and telephone numbers that appeared in the content as to ensure anonymity and confidentiality. The clean-up of data resulted in 2, 000 hits being considered relevant for content analysis for this study.

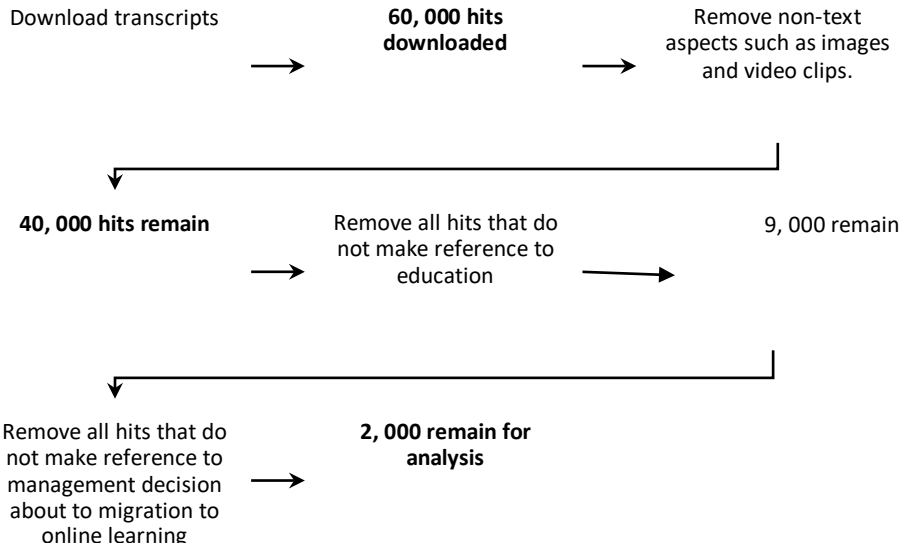

Figure 1: Pre-data analysis stage

Content analysis

The next stage of analysis was to read the text to make sense out of it. The text was read a number of times to allow the researchers to familiarise with the content and to identify the themes that emerged from the text. These themes were given unique codes as indicated in Table 1.

Table 1: Themes and codes

THEME	**CODE**
External and Organisational issues	WO
Curriculum and pedagogical issues	CP
Infrastructure and resources issues	IR
Teachers and students preparation	TSP
Teachers and student resistance	TSR

All the 2000 scripts were coded and classified in this manner. Where a script contains more than one theme, it was coded more than once. An example is the hit below (labelled S6). Table 2 demonstrates how this process was carried out.

S6: Management forgot teachers existed! Some teachers were locked out on that fateful day when the university closed without notice! Without breaking the COVID regulations, those teachers can't access their offices to access teaching materials including desktops.

Table 2: Raw data translated into themes and codes

STATEMENT	THEME	CODE
Management forgot teachers existed	communication between the Management and teachers	WO
Some teachers were locked out on that fateful day when the institution closed without notice!	Teacher preparedness	SSD
Those teachers can't access their offices to access teaching materials including desktops	Teachers' access to teaching and learning materials	IR

RESULTS

The results show that teachers were unhappy with the institutional decision to migrate teaching and learning online for many reasons. First, the government and institution had delayed responding to the crisis of teaching and learning and as a result, the migration of teaching and learning to online was not well-thought out. The decision was also inconsiderate of teachers' aptitude to teach online and their access to ICT infrastructure and resources. The issue of teachers and students being resistant to change also emerged from the discussions.

The government and institutional response towards the crisis

Teachers started talking about COVID-19 crisis and how it was going to affect teaching and learning long before the first case of COVID-19 was reported in Lesotho. At the beginning of their discussions, teachers were concerned about the government and the institution's relaxed attitude towards the crisis. They were of the view that the government and institution should have been proactive, with plans in place before the COVID-19 hit the country. This would have given the institutions of higher learning an opportunity to work on their own specific plans in a timely manner. Extract (S1[1]) Below is an example of this concern.

S1: [I] Hope we will soon hear about the Minister of Education & Training plans too in relation to HE [higher education] - or should we be proactive and tell her what we expect from her ministry...

According to the teachers, the government appeared not to be concerned about how the institution was going to be affected by the crisis. They were also of the view that the government sometimes deliberately excluded the institution when making decisions regarding teaching. For example, see S2 and S3.

S2: As you are busy trying to figure out how to rescue teaching and learning of [this institution], someone in government is deciding on how to dampen all that and make you worry more about the future of the country as opposed to preparing efficient personnel to run it.

[1] Statement is shortened for S and it means the content that was posted by a member. The number (e.g. 1) just indicates the order in which the extracts appear in this paper)

S3: Amazing that it [this institution] always comes as an afterthought when it should be the first name on paper during times like these.

In addition to what appeared to be a poor working relationship between the government and the learning institution studied, teachers also viewed the government to be chaotic in its operations, particularly with regard to responding to crises and making policies. They complained that this often negatively impact those that are the main target of the decision (see S4 and S5)

S4: In which country do you announce a lockdown extension on the day when the first phase ends? Only in Lesotho. An announcement of this nature further reflects the shambles we are in…. It means Lesotho's administration is chaotic.

S5: Hei ntate! But re ile nne ra makala tjena ha [we had been similarly surprised when] the then Minister of Education … introduced SMS to access school exam results etc. But it worked and evolved into online communication etc.

There was also a suspicion raised that sometimes the institutional response to the crises were throttled by the bureaucracy. This is reflected in S6.

S6: They [the institution] probably are trying to be politically right by awaiting the national announcement regarding the closing of learning institutions in the country.

Another view was that the government decision to close schools and learning institutions, which was implemented instantly after the announcement was made, gave the schools and learning institutions no time to plan and prepare for the shutdown. As thus, this sent the institutions into a chaotic state as teachers, students and support staff were given just view hours to vacate the campus (see S7).

S7: Management forgot teachers existed! Some teachers were locked out on that fateful day when the [institution] closed without notice! Without breaking the COVID regulations, those teachers can't access their offices to access teaching materials including desktop computers.

Even though in their discussion teachers appeared to be sympathetic about how the government treated the institution, their view was that the institution did not do enough to save the situation. As such, it also contributed to the chaos. They particularly complained about the management's limited communication with the teachers and students (see S8).

S8: Institutional communication continues to be in ICU. Is there anything that can be done to take it to an ordinary ward? Without good communication, cultivating good is difficult. However, we need to move past this crisis together as students & teachers.

Teachers also raised the issue of being left out by the management in the deliberations concerning migrating teaching and learning online. This view is reflected in the S9 to S15.

S9: Do I have to mention that our concerns as teachers have not yet been responded to as this plane is taking off.

S10: Probably you can without mentioning the plane taking off because it was not addressed to teachers.

S11: Notwithstanding, the plane cannot take off without teachers on board! By the way 'today' means this plane has already taken off, who was on board?

S12: If it cannot take off without teachers it simply means it hasn't.

S13: Does the 'if' imply you don't agree with the statement? Well I'm not against the online deposit of learning materials since I do that for all my courses. I'm just bothered by the approach, it's like teachers have no stake in this, has this been discussed with no full Senate? What happens to the sciences that have practicals? You certainly can't learn how to swim from reading a manual.

S14: Not at all, just to underline your point that it can't take off without teachers.

S15: Apart from the fact that teachers were not involved, how do you suggest teaching and learning should take place?

Although teachers in these statements talked in riddles about the plane that was "taking off" without teachers, basically they were lamenting about being left out of the decision-making processes relating to migrating teaching and learning to online platforms, even though they were key to the implementation of the decision. These teachers claimed to have been just told to migrate their courses to online learning platforms without further explanations. However, there is a dissenting view about teachers' involvement in the deliberations to migrate courses to online platforms. The view was that the management had made some efforts to engage teachers before the decision about the migration to online was made (see S16).

S16: I am not aware of the issues raised by teachers. My Dean requested me to share with other members how we can effect teaching under the circumstances and I did.

Teachers' aptitude to teach online

The analysis of the content also shows that teachers were concerned about their aptitude to teach online. They complained about their limited exposure to online learning through training and practice; and their limited knowledge and skills relating to online teaching. Their concerns were supported by the questions asked by others about the appropriate strategies for online teaching and the explanations that others provided. For example, the extracts below (S17 to S 19) give examples of the questions that were asked and how they were responded to by other teachers.

S17: I suppose my question is how to counter resistance in large groups? Dare I say, from students who might be putting up resistance only because they know they are failing.

S18: Perhaps now is not the right time to be thinking about how to deal with that category. We need to experiment in normal times. Members, anyone who has used our LMS portal with large groups? Please share experiences.

S19: I have posted readings on [LMS] for one class and received 100 percent response on the assigned essay. In another class we are going to have readings and lecture notes sent by email. In another class we are going to try Skype lectures because I have few students. We don't have the best purpose fit infrastructure but we can evolve from the experience.

According to the results, there were some teachers with basic knowledge and experience about online teaching and learning who willingly shared their experience with others.

Availability of and access to infrastructure, facilities and resources

Teachers also expressed their concerns that the decision that was made by the institution about migrating teaching online did not reflect the fact that institutional ICT infrastructure and resources were not fit to deliver online learning. Furthermore, the limited ICT resources were inaccessible because of the national shutdown that restricted human movement. (S6 & S19). There was also an indication that those who claimed to have been teaching online relied on the free resources and platforms such as emails, *WhatsApp*, *Google Meet* and *Skype*. This appeared to support the teachers' claims about the poor and elementary status of the institutional ICT facilities and resources.

Teachers and students' resistance to change

The resistance of teachers and students to change also emerged from the discussions. Some teachers felt that others were raising concerns just because they were merely resisting change. This is reflected in the following statement (S20).

S20: Colleagues I have noticed with great disappointment that no matter what efforts one does some people will always come with excuses to have projects derailed. Some people will just point problems without solutions.

These teachers listed the following as the excuses that they thought could easily have been dealt with:

- Not being able to afford a SIM card;
- Not been involved in the process of decision-making about online learning;
- Not having access to ICT resources and facilities;
- Having challenges with zero-rated online learning platforms and webpages.

The implications of the preparedness of teachers to implement intuitional decision

The results indicate that teachers were unhappy about their institution's decision to migrate teaching and learning online. In their politics they raised many issues which in their view, were likely to influence how they would respond to the institutional decision. They first complained about the relationship between the government and their institution, which appeared to negatively influence how their institution was responding to the crisis of teaching and learning. They were also concerned that they were excluded when the decision to migrate online was made. As such, their lack of access to ICT, and lack of competence to teach online seemed to be completely ignored by the decision.

All the issues raised by the teachers indicated that they were not happy with the change and were reluctant to implement it. Therefore, it can be argued that these teachers were likely to put a minimal effort to make online teaching successful: they were likely to just upload and dump instructional materials for learners to read, with minimal active learner engagement.

DISCUSSION

The study reported in this paper used teachers' micropolitics as a frame to investigate the response of teachers to the decision by their institution to migrate teaching and learning online. The main questions asked in this study were: (1) what were teachers saying about their institution's decision to migrate teaching and learning to online? Which issues are they raising? And, (2) based on their politics, what were the implications on these teachers' response to this decision.

How teachers talked about their institution's decision and the issues raised

The teachers started discussing the COVID-19 crisis in their educational system long before the government and their institution announced what was to happen about teaching and learning during the crisis. They were concerned that the failure of the government and their institution to respond proactively towards the crisis was going to cause chaos in teaching and learning. They felt that the government's delay paralysed their institution's response. For example, they referred to the institution as being in "ICU" (intensive Care Unit) and needing to be taken out into "the ordinary ward" so that it could become active.

When the government finally acted, the decisions were hurried and implemented instantaneously, leaving no room for institutions to make well-informed decisions. The result was that the institution's decision was also hurried, chaotic and confusing to the teachers, with no regard to the desirability of teachers to be involved in decisions concerning their work. One consequence of this is that the decision of the institution completely ignored their aptitude to implement change, and the availability of and access to ICT infrastructures, facilities and resources.

How teachers were likely to response to the institution's decision

With the issues that teachers raised when they talked about the decision made by their institution to migrate online, it became evident that teachers' were unhappy, confused, and unprepared to implement the change. This was in line with Seidl and Whittington (2014) referred to previously, that the introduction of policies or changes that have not been well-thought through, could cause confusion, misperceptions and dissents that often results in micropolitics.

There was no consensus on all the issues discussed, with some who thought some of the concerns raised by teachers being authentic and honest and being in line with those often raised in the literature and those who view them as mere excuses to justify resistance to change mirrors the situation that exists in the literature. See Blasé (1997), Chere-Masopha (2018), Cuban (2010 & 2011), and Terhart (2013).

CONCLUSIONS

The results in this study reveal that investigating teachers' issues through the frame of micropolitics can generate the results that provide a comprehensive picture of how teachers are influenced in their practices. This approach has shown the complexity of the various elements of professional landscapes that influence teachers in their practices. Some of these elements are their views on their aptitude to implement change and their access to resources. The type of engagement the government has with the learning institutions in their operations also appears to have direct and indirect influence on teachers' practices and response to change.

RECOMMENDATIONS

Even though the government is key to providing direction during national crises, this study has shown that it is important that the government respects its role in the operations of learning institutions, particularly those owned by the public. It is therefore important that the government develop clear guidelines on the processes and procedures for these institutions to follow during crises. These guidelines are likely to provide the learning institutions some flexibility to make decisions regarding

teaching and learning crises and not wait for the government's direction.

It is also important for learning institutions to recognise the importance of the issues that have been raised in this study and their influence on the teachers' response to their decisions. The institutions should realise that the "quick fix" approaches to solving curriculum problems may not always be appropriate when it comes teachers. Equally important is the need for the institutions to engage teachers when making decisions that affect teachers so that teachers' opinions are co-opted.

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DO WE NEED 'TRIGGERS' TO EMBRACE ONLINE TEACHING AND LEARNING IN HIGHER EDUCATION? A REFLECTION PAPER

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ABSTRACT

Owing to technological advancements, online teaching and learning have been perceived as a promising approach to reform the educational landscape worldwide. However, South Africa seems to be moving slowly in adopting technology and embracing online teaching and learning. The purpose of this paper is to reflect on the adoption of online teaching and learning in South African Higher Education Institutions (HEIs): to argue that these institutions seem to be relying on triggers in embracing online teaching and learning. Using a reflective research method, we describe examples of these triggers. Furthermore, we highlight how the first trigger should have served as a 'wake-up call' for the South African HEIs. We argue that relying on triggers and not learning from them could easily result in 'pseudo-online teaching and learning'. As a result, these HEIs may not truly be competitive with regard to educational reform, posing negative implications for the state of education in HIEs.

Keywords: Triggers; online teaching and learning; higher education institutions; fees must fall; COVID-19, technology adoption

INTRODUCTION

Since the advent of the fourth Industrial Revolution (4IR), technological advancements have permeated South African Higher Education Institutions (HEIs) just as in other industries (Catro-Benavides et al., 2020). HEIs had to start embracing these technological advancements by incorporating technology into teaching and learning or even migrating to blended or online learning as a response to issues of access to education in HEIs (Geith &Vignare, 2008). According to Bagarukayo and Kalema (2015), there has been a slow pace in embracing technology through blended or online teaching and learning in the South African HEIs. Several factors such as finances, disciplinary content demand, and student socio-economic backgrounds may be attributed to this slow pace (Nungro, 2017). According to King and Boyatt (2014), students' expectations also influence the adoption of blended and/or online teaching and learning. Still, when faced with circumstances, institutions are 'forced' to move to online teaching and learning. These circumstances could be

perceived as triggers[2]. Using a reflective research method, we argue that South African HEIs seem to depend on triggers to integrate technology in teaching and learning. Furthermore, we argue that they fail in perceiving them as 'wake-up calls' and use them as opportunities to learn, plan for, and mitigate the impact of future triggers or circumstances. We further argue that the idea of being reactive to triggers – swiftly responding to them – might have resulted in 'pseudo-online teaching and learning' and/or a pseudo-embracement of technological advancements.

CONCEPTUAL PERSPECTIVES

The purpose of this paper is to reflect on the adoption of online teaching and learning in South African HEIs and to argue that HEIs in South Africa seem to be relying on triggers in embracing online teaching and learning. Technology adoption in HEIs depends on what can be considered external and internal factors (Nungro, 2017). According to Nungro (2017), internal factors include leadership, technology users, resources availability, and the organisational culture, and external factors include technology trends, information technology products (e.g., the impact and benefit they bring to the HEI), competitiveness, and the government in terms of regulations. Straub (2009) argues that technology adoption depends on an array of aspects and decision-making at different levels of leadership in individual organisations. In this paper, we argue that as much as technology adoption and embracing online teaching and learning could be placed on an individual level, the structures put in place and how HEIs respond to triggers are key factors. We take Nungro's (2017) view that embracing online teaching and learning is largely influenced by the leadership and the organisational culture and how the government arrogates this adoption as a regulating body.

Furthermore, embracing online teaching and learning is influenced by how well the stakeholders accept the developments in technology. This is in line with Davis's (1989) model of technology acceptance, which identifies two main variables: perceived usefulness and perceived ease of use. Perceived usefulness deals with how lecturers find the use of technology to be making their jobs easier. In contrast, perceived use of ease is about the extent to which the use of technology is found to be easy or difficult. In this paper, we concur with Nungro (2017) that the adoption stems from HEIs' leadership. We extend this assumption to claim that lecturers play a role in the sense that it is their behaviours that could propel this adoption as they experience the triggers. As Abrahams (2010) alluded, perceptions and beliefs of lecturers are highly influential in technology adoption; however, the adoption of technology cannot solely rest on them alone as HEIs' management and government reform play a central role.

Blended and online teaching and learning

The introduction of online teaching and learning in South African HEIs is traced back to the early 1990s: e-learning was used as a tool for accessing information and the interaction between lecturers and students (Mlitwa & Van Belle, 2011). When South Africa became a democratic country in 1994, policies were enacted to accelerate online learning to promote equal access to education (Department of Higher Education and Training, 2014). From the mid-1990s, universities began to incorporate online learning using learning management systems (LMS) to run distance education

[2] In this paper, triggers are those incidents in life that have the capabilities of propelling a significant change. In other words, they serve as determinants of turning points.

courses for off-campus students. HEIs such as the University of Pretoria, University of South Africa, and University of Cape Town were amongst the first institutions to use the LMS to disseminate notes and post announcements (Bakarukayo & Kalema, 2015). Although many students appreciated the use of the LMS, its use seldom went beyond just posting notes and information for students. In other words, there was little use of LMS to have real-time engagement with students, promote a sense of community, and improve learning (Brady et al., 2010). This has derailed advancements by HEIs in terms of online learning, which, according to King and Boyatt (2014), could have accelerated access to higher education.

Haythornthwaite et al. (2007) attribute the change to online learning to the changing landscape of information and communication technologies (ICTs), innovative teaching approaches, and innovation from the learning body. Nguyen (2015) explains online learning as a form of distance learning introduced in response to the physical absence from campus. This was made possible in the late 1980s and 1990s due to the development of the personal computer and affordability of both the personal computer and internet access (Hubackova, 2015). However, online learning is (or should be) more than using a computer or gadget to access the content. It is about intense interactions (whether synchronous or asynchronous), providing students with a positive learning experience that, in the end, would have prepared students within a particular profession or line of work.

Online learning differs from blended learning in that it primarily refers to learning methods that students may employ. Conversely, blended learning refers to incorporating online learning for teaching and learning to be extended beyond the physical location (mainly campus location) to areas where students may learn under their own control (Watson & Murin, 2014).

THE TRIGGERS

The main objective of this paper is to discuss how embracing online teaching and learning in South African HEIs relies on triggers. In other words, is it obligatory or discretionary? Below, we discuss the two pertinent triggers, and argue that they, in some way or another, have propelled the incorporation of online teaching and learning.

Trigger 1: Student protests (#FeesMustFall)

Although LMS have been used by universities for different purposes, they were not used constructively to engage students online through real-time synchronous sessions (Cilliers et al., 2017; Mashau & Nyawo, 2021). This was consistent until the emergence of student protests during 2015–2017 (Czerniewicz et al., 2019). Cilliers et al. (2017) found that lecturers seldom used the LMS tools to teach. In other words, there was no link between their pedagogy and how they made use of the LMS. The eruption of these student protests propelled institutions to swiftly shift to online and/or blended learning. According to Czerniewicz et al. (2019), this was a positive move towards advanced and transformative teaching and learning that responds to the ever-changing world. The move to online learning during the protests was rather a strategy to 'complete the academic year'. To emphasise the real reason for HEIs to move to online or blended learning, Czerniewicz et al. (2019, p.2) note that 'while simultaneously considering and using measures that would allow teaching to continue or at least for the curriculum to be completed'.

The truth is, South African students have long been known for their activism in resolving issues that are affecting them.

However, it seems as if a few, if not none, of the HEIs had imagined a possible protest of the magnitude of *Fees Must Fall* and its potential to pose a threat to how content is delivered and the likelihood of becoming an impediment to the access to education. Indeed, this was a trigger in the higher education landscape because Jansen (2017) argues that 'no university had ever experienced this level of student protest in terms of scale, scope, intensity, and in the course of time, violence'. Although the *Fees Must Fall* protest was more of a political trigger to bring change, it affected the education landscape and had implications for how teaching and learning is and can be viewed. Soon after the protests had waned, HEIs resumed the traditional teaching practices instead of adopting blended learning and/or online learning where circumstances allowed.

According to Hamidi and Chavoshi (2018), factors such as finances, content coverage, and the development of academics derail the implementation and enhancement of blended/online learning. We argue that the student protests could have been a wake-up call and a learning opportunity for HEIs. The protests took place two years apart, and yet HEIs still relied on the obligatory shift strategies in the second occurrence. This was a missed opportunity for HEIs to be proactive in foreseeing the best possible way to alleviate the impact of disrupted learning when faced with a similar predicament. This would have made the transition to online learning and teaching a smooth shift during the COVID-19 pandemic. The experiences in the second trigger (discussed below) seem to suggest that HEIs did not learn.

Trigger 2: The COVID-19 pandemic

Similar to the pre-*Fees Must Fall* period, in the pre-COVID-19 period, the country's HEIs had embarked on using LMS. However, studies suggest that the LMS were used predominantly for administrative purposes, not as a pedagogical tool to actively engage with students (Celliers et al., 2017; Mashau & Nyawo, 2021). Owing to the health threats of COVID-19, the country was forced into a lockdown (just like in other countries that experienced the pandemic first). This led to the suspension of all lectures in HEIs. What was viable during that time was a transition to online teaching and learning. One would have expected a smooth transition since we had experienced a similar incident in the form of student protests. However, it seemed to be a problematic and daunting process not only for lecturers but also for HEIs' leadership (Mpungose, 2020).

HEIs lost weeks of teaching and learning to train staff on online platforms and teaching models and transition existing curricula to online. The question that arises here is: could the HEIs not learn from the first trigger? The blind eye turned in the first trigger had cost implications on HEIs, the cost that was not confined to finances but also affected the quality of teaching and learning. Owing to this rapid and unprecedented shift, can we authentically declare that HEIs are truly engaged in online teaching and learning? It seems to be a pseudo-, 'half-cooked' online teaching and learning embracement for two reasons: first, academics had to be trained within a short period. Training of lecturers/academics for professional purposes is not a once-off activity, especially if technology is involved (Jamieson, 2004; McQuiggan, 2012). It is a continuous and prolonged process to allow the acquisition and implementation of skills and competencies. Secondly, an emphasis was put on saving the academic year, and this meant doing what works at that particular time. As a result, lecturers resorted to pedagogies such as uploading narrated PowerPoint slides and giving students activities to do independently (Rapanta et al., 2020). This is not different

from how the LMS was used before and during the first trigger.

One may confidently assume that lecturers are likely to revert to traditional teaching once the COVID-19 pandemic is over. Thus, we would need another trigger to explore the option of a somewhat blended/online learning approach. This is because lecturers may need to understand different aspects of designing and delivering online modules to effectively transition from face-to-face learning to interactive online learning. In essence, lecturers should not only attempt to learn the technologies linked with remote learning, but also understand the essential change and modify their pedagogical methods of teaching to meet the educational needs of online students (Mashau & Nyawo, 2021). The actual challenge is to 'develop fluency with teaching and learning with technology, not just with technology itself' (Jacobsen et al., 2002, p. 44).

CONCLUSION

The purpose of this paper is to reflect on the two identified triggers that (or should have) elicited South African education institutions to embrace online teaching and learning. We have argued that these triggers result in what could be termed pseudo-online teaching and learning because the idea was to save the academic year. South African HEIs had ample time to implement policies on migrating to online learning. Waiting for triggers to enact reform may exacerbate inequalities in access to education, which will perpetuate issues of skills development and the overall development of the country. These triggers should (or should have served) as catalysts to rethink the future of the education system in HEIs. Although Sener (2010) argues that online learning will ultimately attain full scale, we argue that the progress is too slow and dependent on triggers. Our argument in this paper is in line with Mashau and Nyawo (2021, p.138)), who argued that 'the shift to online learning might be difficult to manage if the institution is responding to a once-off event or crisis such as a pandemic or a students' protest'. As such, HEIs in South Africa need to rethink how online teaching and learning is embraced and propelled.

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SHIFTING THE GOAL POSTS: FROM TRADITIONAL TO ONLINE LEARNING DURING COVID-19 AT A UNIVERSITY IN SOUTH AFRICA

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ABSTRACT

Despite the incremental availability of online technologies, traditional methods of teaching and learning are still dominant at universities in South Africa. To move away from this traditional practice, there needs to be a paradigm shift from traditional to online learning. The outbreak of COVID-19 caused disruptions to the education systems as governments around the world have temporarily closed educational institutions to contain the virus. The unprecedented migration to online learning posed serious challenges, especially in developing countries like South Africa where institutions, teachers, and students are still reliant on traditional classroom teaching and learning methods. In view of this, the study employed a qualitative research approach underpinned by connectivism learning theory to understand lecturers and students' experiences and attitudes towards the use of technology as an enabler for online learning. Data were collected from 40 participants, 20 lecturers (10 males and 10 females) and 20 students (10 males and 10 females) who were purposefully selected. Data were analysed thematically. Heutagogy was used as the study's teaching and learning approach. The findings of this study provided insight into the importance and usefulness of technology as a delivery system which has the potential to bridge the transactional distance that exists between students and their lecturers, students and their institutions.

Keywords: Connectivism, COVID-19, heutagogy, online learning, pandemic

INTRODUCTION

The spread of COVID-19 is presenting opportunities and challenges to all educational institutions regardless of their nature. Amongst these, the implementation of online (or distance) learning with the sole purpose of trying to control and prevent the spread of the coronavirus is one of the opportunities presented. COVID-19 is a disease that is caused by a new severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), and was first reported in Wuhan, China in 2019. On the 20th of March 2020, the World Health Organisation (WHO) declared COVID-19 a pandemic based on the rate at which it was spreading and devastating human lives around the world (Kamble et al., 2021). This pandemic has, without any doubt, caused a lot of harm and disruption in peoples' lives. For example, due to it, many countries have witnessed economic meltdown, reduced working hours, school closures, redundancies in the manufacturing industry, and an unprecedented unemployment rate (Hwang & Holler, 2020). Currently, there are more than 228 626 807 confirmed cases of people across the world who are infected with

COVID-19 while more than 4 689 629 million have succumbed to it.

The latest COVID-19 statistics shows that 205 937 696 people have recovered from the disease (Pololi et al., 2021). From March 2020, many educational institutions were shutdown to allow the curve to flatten (UNESCO, 2020). A high curve is created when there is a steep increase in the number of cases per day, followed by a quick decrease in the number of cases (UNESCO, 2020). In relation to this, it is believed that over 1.7 billion learners are unable to attend school as social distancing is being enforced locally and internationally to contain the spread of COVID-19 (UNESCO, 2020). During lockdowns and school closures, lecturers and educational professionals were asked to supply students with teaching materials and instruct them via remote digital tools. The expectation was that most of them should learn from home under the supervision of their parents. The scale of information communication technology (ICT) use during COVID-19 has swiftly moved teaching to an online platform on an untested and unprecedented scale (Khalil et al., 2020). Governments all over the world, including that of South Africa introduced country-wide lockdown to contain the spread of COVID-19.

South Africa reported its first COVID-19 case on the 5th of March 2020 in Kwazulu-Natal, and by the 15th of March 2020 there were about 1585 confirmed cases. President Cyril Ramaphosa declared a national state of disaster in terms of the Disaster Management Act and Regulations, Act 57 of 2002. The main objective of declaring the state of disaster was to promote an integrated and co-ordinated system of disaster management, with special emphasis on prevention and mitigation, by national, provincial, and municipal organs of the state, statutory functionaries, and other role players involved in disaster management (Mahaye, 2020). Although the government introduced other preventative measures like closing of schools, visa denial to anyone who has visited high risk countries, closing land ports and seaports, social distancing remained the most effective way of minimising the spread of COVID-19 (Ogbonnaya et al., 2020). The COVID-19 lockdown and social distancing policy also led to the suspension of all religious gatherings, and social-cultural functions (Masondo & Chimbunde, 2021).

The COVID-19 pandemic has several diverse implications and impacts on South African society including the social, economic, health, environmental, and technological realms (Fowler et al., 2020). Economically, the South African economy was technically already on recession prior to the lockdown. Further, compounding the economic situation and outlook, Moody's downgraded South Africa's sovereign credit rating to a non-investment grade. This downgrade led to the removal of South Africa from the Global Bond Index and increased the cost for borrowing in international financial markets. In March 2020, the president, in collaboration with the National Command Council, declared a 21-day national lockdown aimed at helping to curb the spread of the disease and minimise its impact on South African society. In the South African context, the president called on all universities to shut down and find ways to offer lectures as from the 18th of March 2020. To minimise the loss of teaching and learning time, many institutions adopted online teaching and learning (Burgess & Sievertsen, 2020; Goh & Sandars, 2020; Tanabe, 2020). Despite teacher unions' objections about having to work in conditions that posed a risk to teachers' and learners' health, schools only partially reopened in June 2020 (Mahaye, 2020). To prepare for this sudden migration to online learning, the institution in which the study was conducted encouraged its academics to start offering their courses using online platforms such

as Blackboard, Moodle, emails, WhatsApp, YouTube, and Microsoft Teams.

Before the implementation of this online delivery systems, it was envisaged that the strategy might have a negative impact on disadvantaged students, particularly those who have little or no access to the Internet. To cater for these groups, students were issued with rubber wrist digi-bands. Rubber wrist digi-bands are bands containing a memory stick uploaded with all the course materials, assignments, and tests. The central feature of the rubber wrist digi-bands is to allow the student to work offline. The use of the digi-band technology is important because it enables students to deal with the challenge of limited Internet access for those not served by high-speed broadband access. The use of the digi-bands makes the institution distinct from other universities as it is tied to its unique local circumstances.

Although the digi-band technology is not without its limits, it presents an opportunity for students to take a big leap into the digital future by studying using technology as a delivery tool. The offering of courses using online platforms allowed students not only to interact with their lecturers, but also with one another anytime, anywhere, which is not possible under the traditional face-to-face delivery model. This online delivery system was premised on a heutagogical approach that is student-centred and assessment driven. Baijnath and Ryan (2014), Blashke, Kenyon and Hase (2014) define heutagogy as a learning theory in which lecturers develop and deliver instruction to their students using newer technologies. From a heutagogical perspective, students are encouraged to learn on their own as individuals and at the same time collaborate with their peers in the process of knowledge creation. Transitioning from traditional to online learning requires students and their lecturers to have a positive mind shift towards the utilisation of technologies for teaching and learning (Al Zaidiyeen, Mei & Fook, 2010).

PROBLEM STATEMENT

The COVID-19 pandemic impacted education at all levels in various ways. Institutions and educators quickly responded to an unexpected and forced transition from traditional face-to-face to remote teaching. The COVID-19 pandemic has taken the known interactive, collaborative and cooperative lecture-halls from lecturers, and replaced them with uncertainty. Most institutions, lecturers, and students were caught off-guard by the sudden radical move to online education. This rapid, unexpected, and forced transition did not only come with challenges and constraints, but also with opportunities that needed to be examined. Existing literature points to an emergency remote teaching (Bozkurt & Sharma, 2020) or emergency eLearning (Murphy, 2020) and to difficulties associated with poor online teaching infrastructure, inexperience of lecturers, the information gap and complex environment at home (Zhang et al., 2020).

CONCEPTUALIZING THE FRAMEWORK GUIDING THE STUDY

For online teaching and learning to take place, both lecturers and students should be connected to the Internet information highway. Against this backdrop, the current study is conceptualised within Siemens' (2004) connectivism learning theory. Siemens (2004) defines connectivism as a theory for the digital age which is characterised by the influence of technology in the field of education. Connectivism presents a model of learning that acknowledges the tectonic shifts in society where learning is no longer an internal, individualistic

activity. The theory argues that learning is the process of building networks of information, contacts, and resources that are applied to real problems. Contrary to the traditionalist view, the basic principle behind connectivism is that knowledge is constructed through social interaction via networks. Connectivists believe that knowledge is stored in the Internet and can be sourced by anyone with access to the Internet anywhere, anytime. Connectivism therefore, is inclined towards the belief that knowledge exists outside of the individual, who makes connections between information to build new knowledge. Connectivism as a theory points out that traditional learning theories such as behaviourism, cognitivism, and constructivism have limitations because they were developed at a time when technology had not impacted on learning like it has done today. Siemens' (2004) assertion that these theories were developed when knowledge was growing more slowly prompts a question: how does connectivism compare to other learning theories and how does it differ from the established paradigms? Anderson and Dron (2011) state that connectivism is built on an assumption of a constructivist model of learning, with the student at the centre, connecting and constructing knowledge in a context that includes not only external networks and groups but also his or her own histories. Connectivism demands that learners are heutagogically involved in the teaching and learning processes since they are not passive recipients of information as it is alleged in behaviourism and cognitivism, instead they are co-creators of knowledge using emerging technologies as enablers (Vygotsky, 1978).

In a connectivist pedagogy, information is shared freely rather than being locked into books and journals since students can surf freely without the constraints of established academia. This free range brings the importance of virtual academia where there is no top-down control. The nature of this study, with its focus on understanding lecturers' and students' experiences, perceptions, and attitudes on using technology to migrate to online learning is consistent with a connectivist epistemological position. It is within this context that the study uses connectivism as its theoretical framework to advance public awareness on the use of technology as a delivery tool.

REVIEW OF RELATED LITERATURE

Much of the current literature on technology enhanced teaching (usually sourced from writers living in the developed world) assumes that students have easy access to computer hardware and other appropriate forms of connectivity such as 3G, 4G or fast, efficient Wi-Fi. While this literature is, in the main useful and sound, what this study is offering is a localised South African perspective in which many students still struggle to obtain or simply cannot afford fast and freely available wireless Internet connections. This study is, therefore, undertaken from a locale in which the above mentioned are not to be taken for granted. A few years ago, researchers (Blake, 2013; Carey, 2013) claimed that they were witnessing a paradigm shift in higher education, where institutions are in the process of migrating from traditional to online learning. This paradigm shift has been enhanced by recent technological developments. Although the use of technology has grown rapidly in the last few years, most universities especially in Africa are still offering their courses using traditional face-to-face delivery system. While traditional instructions are still used in many institutions, it is appealing to think that technology can assist to both teach and assess learning in ways never been imagined before. When COVID-19 was declared a global pandemic on the 20th

of March 2020, countries in all corners of the world implemented national school closures, thereby affecting students in the process (Adnan & Anwar, 2020; Cucinotta & Vanelli, 2020). COVID-19 forced lecturers to shift to online mode of teaching (Dhawan, 2020). Online learning has been described as an access to learning experiences using technology as a delivery system.

The paradigm shift from traditional face-to-face to online poses challenges to the lecturers as well as the students due to the complex nature of online learning (Di Pietro et al., 2020; Elrafae et al., 2021). Currently, many institutions are still manned by teachers and lecturers who do not have enough knowledge of how to use computers and many do not know how to teach using online platforms (Ogbonnaya et al., 2020). Additionally, some students might neither own a computer nor a smartphone to enable them to access online learning. Educational institutions can be categorized as traditional or face-to-face, distance learning, or blended learning. In distance learning, there is a physical separation between the instructor and the student, student and peers, student and the institution, and these components are further separated by space and time (Keegan, 2005). In blended learning, institutions combine traditional classroom teaching with educational technologies (Kamalluarifin et al., 2018). In the context of South Africa, most institutions are based on traditional face-to-face methods of learning that take place in a classroom or a lecture hall (Elfaki et al., 2019). Regardless of the types of educational institutions, COVID-19 presented opportunities and challenges for all types of institutions. For example, in distance learning institutions, the business is as usual, with more opportunities and limited challenges. For blended learning institutions, COVID-19 presented the opportunity to improve distance learning tools and equipment, marketing strategies and planning. Migrating from traditional to online learning requires lecturers and students to have a positive mind shift that is inclined towards the utilisation of the new technologies. The movement to online teaching has allowed the education sector to learn about infrastructure shortfalls and there is a need now to learn how to address this. The emergence of COVID-19 pandemic might influence people to think that we have now reached the end of face-to-face or a contact university, and the reality is that we are far from it. The high dropout and failure rate that are usually experienced in distance learning institutions indicate that it would be misguided to convert contact universities into distance learning institutions (Elrafae et al., 2021). The challenges of access to digital devices such as laptops and tables, stable and reliable access to internet connectivity, and access to and affordability of mobile data bundles are prevalent in the shift to online course delivery. Alluding to technology as an enabler for teaching and learning Keegan (2005), and Bennet and Maton (2010) posit that technology is currently used to bridge the time, geographical, economic, social, educational, and communication distance between students and their lecturers. Carey (2013) observes that the dawn of new technologies revolutionised teaching and learning because it transformed both students' and lecturers' experiences. A study by Chu and Tsai (2009) found that adult learners prefer to use online technology because it allows them the opportunity to learn without leaving their homes or offices. This view is supported by De Paepe et al., (2018) who examined the cost of online versus traditional delivery model. Their findings revealed that the quality of online learning is as good as that of traditional face-to-face learning. In addition, the study also found that technology allows students to access learning materials that can allow them to work on their own or collaborate with their peers anywhere, anytime. McFarland and

Hamilton (2005) conducted a study in which they examined students' attitudes towards the use of technology as a delivery tool. The findings revealed that, to successfully initiate and implement the use of technology as an enabler depends strongly on the support and attitudes of the participants involved. So, gaining an appreciation of lecturers' and students' attitudes towards ICT may provide useful insights into ICT integration and acceptance in teaching and learning. These findings are consistent with the literature that reveals that the successful integration and implementation of educational technologies depend largely on the attitudes of educators who determine how ICT is used (Al-Zaidiyeen, Mei & Fook, 2010). Al-Zaidiyeen, Mei and Fook (2010) also note that perceptions and attitudes are further affected by other factors such as the users' experiences, lack of resources, lack of professional training, gender, academic qualification, age, lack of institutional support, and lack of time. The development of stakeholders' positive attitudes towards ICT is therefore a key factor in technology adoption and diffusion. Even though technology plays an important role in saving time and bringing efficiency in teaching and learning, it should be noted that technology will not (and should not) replace instructors because it is the instructor who controls the equipment (Zare-ee, 2011). Online teaching and learning create educational opportunities for individuals who may have faced unsurpassable barriers to study through traditional learning (Masondo & Chimbudze, 2020). While there are many benefits of online teaching and learning, the absence of quality interaction can negatively affect some aspects of learning because direct communication between the learner and the lecturer is lost (Traxler, 2018). Contrary to this view, Fogel and Nehmad (2009) argue that the use of social media platforms such as Twitter, WhatsApp, Facebook, YouTube, etc, play an important role in providing students with opportunities for interaction and expressions of ideas since they allow them to collaborate and share information through audio and virtual communications. According to Dhawan (2020), online teaching and learning is currently the only tool that can rescue us from the impact of COVID-19 regarding the teaching and learning processes. Furthermore, Dhawan (2020) defines online as a learning experience in synchronous or asynchronous environments using different devices (mobile phones, laptops, etc) with Internet access. Although COVID-19 brought a range of challenges in the education sector, it made people to look for new modes of learning. Currently, academic institutions have grabbed the opportunity by making their lecturers teach and students learn via online methodologies. Since lockdown may continue to be implemented until effective vaccines become available, it is of utmost importance for governments to reflect on the main difficulties that students, parents, teachers, and school managers have encountered in adapting to this phase of massive online learning and intervene to better harness the potential of online learning. While some people believe that the unplanned and sudden migration to online learning without the training of practitioners, insufficient band-with, and little preparation, will result in a poor user experience that is not conducive to sustained growth, it is also believed that a new hybrid model of education will emerge, with significant benefits. For example, before any institution goes completely online, all external barriers or challenges such as uneven access to the Internet should be considered and dealt with. Failure to address lack of Internet connectivity would affect the whole process of teaching and learning online (Zhao, 2020). In South Africa, lecturers and students are challenged by technical operational obstacles such as poor connectivity and data limitations and/or

accompanied by issues related to inadequate home environments as well as related personal issues such as unplanned pregnancy, substance use, depression and other mental health problems (Adedoyin & Sokyan, 2020). Despite the many challenges experienced, COVID-19 has changed the entire structure of human life, both in everyday life and specifically in education. This pandemic is, no doubt a threat to humanity, (Poon & Peiris, 2020), considering the state of emergency declared by WHO as a result of the rapid spread and severity of the deadly virus across the globe.

RESEARCH METHODOLOGY

The study was conducted at a single mode traditional face-to-face university in South Africa. The research question that provided the focus of the study was: What are lecturers' and students' experiences, perceptions, and attitudes towards using technology as a tool to migrate from traditional face-to-face to an online learning during the COVID-19 pandemic? A qualitative interpretive research approach (Johnson & Christensen, 2019) was adopted to understand those experiences, perceptions, and attitudes.

Population and sample

A total of 40 participants consisting of 20 lecturers (10 males and 10 females) and 20 students (10 males and 10 females) were selected from the university's Faculty of Human, Social Sciences and Education using purposeful sampling. The rationale for using purposive sampling was based on the understanding that the researcher wanted to get in-depth information from those who were directly affected by the implementation of online learning. Participation was on voluntary basis. Most of the lecturers who participated in the study were coming from the Department of Educational Studies were the researcher is located. Students were drawn from the School of Education which is found within the Faculty of Human and Social Sciences. All participants were informed of the study's objectives.

Data collection procedures

Individual and focus group interviews were used as data collection strategies because they were the only relevant methods that could allow the participants to vividly elaborate on their experiences, perceptions, and attitudes. Before the interviews started, an interview guide was designed consisting of overarching questions which required the participants to share their experiences and perceptions of using technology as a delivery tool. Due to the lockdown and COVID-19 restrictions, interviews were conducted online using Microsoft Teams, and this approach was cost-effective. To access the online platform each participant was given a personal log-in name and password. Each interview was scheduled to last for a maximum of 30 minutes. To ensure that the interviews were conducted in accordance with all ethical considerations for a social research an ethical clearance was applied from the university's ethics committee. To promote a sense of privacy, safety and confidentiality, all participants were allocated pseudonyms and were identified as P1, P2, P3, P4, etc. Since data collection was done online, participants were required to sign online consent forms by clicking a button after having read all relevant information. In total two focus group interviews were conducted with students and each focus group had 10 members. Data were collected until saturation point was reached. This was evidenced by participants' repeat of what has been said. It was at this stage that the researcher decided to stop with the interviewing process.

Data analysis

Data analysis is a systematic search for the meanings contained within the data

as related to the research concerns, and it involves organising what has been seen, heard, and read so that sense can be made of what is learned or investigated (Cresswell & Cresswell, 2009). Cresswell and Cresswell (2009) define qualitative data analysis as working with data, organising it, breaking it into manageable units, synthesising it, searching for patterns, discovering what is important and what is to be learned, and deciding what one will tell others. Data were analysed using Collaizi's (1978) thematic data analysis framework. The first analysis emanated from the individual interviews conducted with lecturers and the second from the focus group discussions with selected students. Although all the interviews were digitally voice-recorded, a notebook in which all the emerging major points raised by participants were documented was kept. At the end of the interviewing process, all the interviews were transcribed verbatim. After all the meanings were coded, patterns and categories were identified. To validate the data collected, all participants were provided with electronic copies of the interview transcriptions and voice recordings to check if indeed all their experiences and perceptions were correctly captured. The feedback received from participants demonstrated that all the participants agreed with the interview transcriptions as they confirmed that the report was a true reflection of their personal experiences.

RESULTS AND DISCUSSION

To answer the research question: What are lecturers' and students' experiences, perceptions, and attitudes of using technology as a tool to migrate from traditional to online delivery system during the COVID-19 pandemic? The findings were located within Heidegger's (1982) and Husserl's (1981) descriptive-interpretive approach. The approach allows the identification of human experiences of the phenomenon as described by the participants, and on the understanding that meanings are not directly available to us but are interpreted. Heidegger (1982) shows that our primary relationship with the phenomenon is through lived experiences and is based on the belief that every form of human awareness is interpretive. This study reports on the findings of data-gathering approaches used to collect data to provide a more comprehensive picture of lecturers' and students' experiences and perceptions of the institution's migration from traditional to online learning. The emergence of the COVID-19 pandemic has changed learning patterns in schools and universities. Educational institutions the world-over were forced by the circumstances to adopt online teaching and learning. From the data collected, transcribed, and analysed, the following themes emerged: Internet access and affordability, attitudes towards online learning, lack of pedagogical and technical skills for online learning, technological and institutional readiness for online learning. Next is a discussion of the themes followed by the raw data, together with excerpts or verbal quotations from selected participants.

Theme 1: Internet access and affordability

An important driver of online teaching and learning is Internet access and affordability by the institution and the students. Turning to the cost implications of online learning, participants revealed that Internet access is a pre-requisite for connected learning to take place. While describing access and affordability to Internet as a factor for sustaining online teaching and learning, students believe that

institutions should negotiate with cell-phone companies to provide them with cheap data so that they can have easy access to Internet anywhere, anytime, especially during the time when the world is experiencing the COVID-19 pandemic. Currently, the price of data for Internet access in South Africa is very expensive when compared to other countries around the world, hence the slogan from students: "Data must fall."

The participants showed that the benefits of using technology outweigh the costs. From the findings, it could be argued that the biggest obstacle in the growth of online learning is the lack of commitment from the government and the private sector, particularly mobile phone providers. The issue of Internet access and affordability is currently being debated in the National Assembly because of the mobile cell phone companies' reluctance to reduce their data prices. The participants preferred the use of online learning to traditional classroom learning as it provides them with easy access to the course content and the luxury of learning from home. COVID-19 proved that access to Internet technology has become a game-changer in the teaching and learning terrain because it has completely changed the way teaching, learning, and assessment are managed. For example, P1 compared the use of online teaching during COVID-19 to a tsunami as shown in this excerpt:

> Technology has just become like a tsunami which cannot be stopped. Previously we used to receive learning materials using hardcopies in the classroom, and now we get them online. We are now registering, receiving study materials, and writing our tests and examinations online.

This notion is supported by Daniel (2020) who indicates that online learning has the capacity to go beyond the classroom walls. There is a sense that the phenomenon (technology is compared to a tsunami) is unstoppable. Technology is therefore, seen as a powerful and irresistible force which is happening rapidly, especially now when the world is experiencing the COVID-19 pandemic. Participants raised some challenges regarding the use of technology as a delivery system. For example, lecturers and students cannot engage in online teaching and learning in the absence of a reliable power supply, Internet bandwidth, and people's attitudes towards technology adoption. The study also found that the introduction of online learning has brought a new kind of student-lecturer, student-peer interaction not hitherto imagined in a traditional face-to-face institution. Research has shown that student-to-student interaction is a vital to building community in an online environment, which supports productive and satisfying learning, and helps students to develop critical thinking (Simamora, 2020). In a classroom setting, this interaction happens naturally, as students listen to each other's comments, ask each other questions, and build rapport through frequent contact. Instructors can also foster student-to-student interaction in an online setting, but this will require building formal and informal interaction opportunities in the course design. An important aspect that also emerged in this theme was the issue of using technology to conduct non-venue-based examinations during the COVID-19 pandemic. The use of non-venue-based or online examinations has the potential to ease student overcrowding during examination times and improve the efficiency of summative assessment. As a result of summative assessments which are venue-based, in the 2018 academic year, there were 35 cases of students who were found guilty by the Student Disciplinary Appeals Committee

(SDAC) for either cheating or having brought illegal materials into the examination rooms.

Theme 2: Lecturers' and students' attitudes towards online learning

The success of any initiative to implement technology as a delivery system depends largely on the support and attitudes of the people involved (Al-Zaidiyeen, Mei & Fook, 2010). In his study on attitudes towards the integration of ICTs for teaching and learning, Bingimlas (2009) argues that people's attitude plays an important role. Findings of the study have shown that even though most students are positive about the use of technology as a delivery system, there are some who are still struggling to access internet, especially at home. So, gaining an appreciation of people's attitudes towards the use of online learning may provide useful insights into computer technology integration, acceptance, and usage. Hew and Brush (2007) posit that if lecturers and students perceive technology programmes as neither fulfilling their needs nor their students' needs, it is unlikely that they will integrate it into their teaching and learning. The study has further shown that there were lecturers and students who had negative attitudes towards the use of technology as a delivery tool for teaching and learning. Some of the participants quoted instances where instructors held negative attitudes towards the adoption of online learning as shown by P3 in the following excerpt:

> I don't understand why we have to teach online because most of us are comfortable with our traditional face-to-face delivery system. I still believe in print media that is paper based.

The negative attitudes were found to be exacerbated by factors like lack of technical skills to use online resources, lack of institutional support, age, gender, and lack of time. Participants further indicated that the use of online learning has contributed to the improvement of students' results as compared to that of traditional delivery system. Mischke (2015) conducted a study in which she compared results obtained using traditional teaching methods and those obtained when using technology as a delivery tool. The findings revealed that online students performed significantly better than those of the institution's traditional delivery system.

Theme 3: Lack of technical skills and knowledge for online learning

This theme relates to the technological skills and experiences lecturers and students need to operate effectively and efficiently in an online environment. Results of the study have shown that having ICT skills is a pre-requisite for one to operate in a digital world, though this is often overshadowed by challenges of unavailability and inadequacy of access. In many institutions of learning, some lecturers do not have technical skills on how to use a computer, and many might not know how to teach using online platforms and as such, they cannot participate effectively in an online environment (Carrilo et al., 2020; Ogbonnaya et al., 2020). For example, participant identified as P5 complained about the education system's failure to integrate ICTs in teaching and learning as shown in this excerpt:

> I think challenges like lack of in-service and re-training in ICTs, lack of technical and appropriate administrative support, lack of appropriate physical environment and ICT infrastructure are to be attended to if the institution

> has to make strides in online learning.

The study also found that some students did not want to show their weaknesses in ICT skills, which led to another problem, resistance to change, which is associated with fear of adopting new technologies, fear of exposing one's ignorance, negative attitude towards online learning and a perception that online learning is difficult.

Theme 4: Institutional and pedagogical readiness for online learning

Participants emphasized the importance of institutional and technological readiness for online learning. Online learning readiness has been addressed by various authors in different literature studies. Before implementing an online learning programme, it is important for organisations to expand their needs assessment processes to measure their students' readiness which is usually measured against the following categories: Are they motivated? Are they pedagogically and psychologically ready? Do they have technological skills to operate in an online environment? What is their level of digital literacy? On the issue of readiness, the study found that students were technologically ready for online learning as shown by P6 in this excerpt:

> I like online learning because it improves my performance. Using online learning is a good idea because it allows one to learn anything anywhere, and any time without bothering about submission deadlines.

The study revealed that students are able to access Internet from their homes using their smartphones, tablets, and laptops. Most of the students who took part in the study indicated that the institution is ready for online learning although there is a backlog in terms of ICT infrastructure. The support resources required for e-learning are categorised into four areas, namely: (1) technical support, (2) training, (3) course and curriculum development, and (4) help assistance while continuous planning is essential for keeping infrastructure up-to-date and achieving a high return on investment (Traxler, 2018). A shift to e-learning is a shift towards a new learning culture. In addition, the COVID-19 pandemic has reinforced the importance of online learning in education. Again, the study showed that since online learning is the way to go, there is a need to integrate it in all aspects of the institution's curriculum.

CONCLUSION AND RECOMMENDATIONS

The purpose of this study was to document lecturers' and students' experiences, perceptions, and attitudes on the way in which a traditional face-to-face university used technology to migrate to an online delivery system during the COVID-19 pandemic. Data collected through interviews yielded the following major themes: Internet access and affordability, lecturers' and students' attitudes towards online learning, lack of technical skills and knowledge for online learning, institutional and pedagogical readiness for online learning. The study further confirms that a careful blend of appropriate digital technologies with a pedagogical approach designed to match the context and circumstances of students can overcome many of the traditional challenges, particularly those brought by the outbreak of the COVID-19 pandemic. We are currently witnessing heroic efforts by various education systems to suddenly

move to online learning in response to COVID-19. More and more educational institutions are adopting online learning method for delivering learning material. Online learning programs can serve students of all ages, levels of ability, and learning backgrounds. Online learning can also expand the range of courses available to students, particularly for those who live in rural areas (Simamora, 2020). As online learning platform is becoming popular in both conventional and distance learning across the world, the evaluation of lecturers' and students' pedagogical and technological readiness to online learning is more critical than ever before. Regarding the participants' abilities to use the various online technologies for teaching and learning, the findings were quite encouraging. The findings revealed that online teaching and learning has the potential to bridge the transactional gap that usually exists between students and their lecturers, students and their peers. There is little doubt that the COVID-19 pandemic has achieved much in terms of transforming the institution's teaching and learning model. On the negative side, COVID-19 has brought many unprecedented challenges for lecturers, students, school managers, and parents among other stakeholders. Most of the challenges identified are associated with limited technological infrastructure and capacity, socio-economic factors, attitudes towards ICTs, lack of technological and pedagogical skills to work in an online environment. Like many studies conducted amid the COVID-19 crisis, the study provided a fertile ground for further research on how COVID-19 impacted on teaching and learning in many institutions across the globe.

For example, a study could be conducted to determine student-lecturer, and student-peer relationships when interacting in an online space during the COVID-19 pandemic. In addition, research could be conducted from multiple perspectives to measure and determine the effectiveness of online learning when compared to the institution's traditional face-to-face delivery system. Again, a study could also be carried out on how institutions which are on the verge of moving away from traditional face-to-face classroom system could prepare their migration to an online delivery system. On a cautionary note, it can be argued that before any institution decides to migrate to online teaching and learning, it is important to make sure that all external barriers such as uneven access to the internet are thoroughly dealt with because failure to address these challenges could jeopardise the whole process. Despite some limitations, the outbreak of COVID-19 led to a total digital transformation of education across different levels. To ensure that online and blended learning are widely adopted post COVID-19, governments should invest more on e-learning because no learning can take place in the absence of a reliable and well-established technological infrastructure. In conclusion, COVID-19 created an opportunity for change in pedagogical approaches and the introduction of virtual learning in all levels of education.

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STUDENT DIVERSITY AND ONLINE TEACHING AND LEARNING OF MATHEMATICS IN HIGHER EDUCATION DURING COVID-19 LOCKDOWN: PLANNING TOWARDS POST COVID-19 ERA

Theme: Access, diversity, equality and pedagogy in H.E. in a post-COVID-19 era

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ABSTRACT

The interpretation and integration of diversity in higher education is critical in informing the modes of teaching and learning as well as research contents within institutions of higher learning. The meanings and definitions attached to the concept of diversity influences the various ways in which higher education institutions respond, reflect and integrate diversity issues which currently characterise the higher education spectrum given the Covid-19 pandemic. The way academics relate and interrogate diversity issues influence their perceptions, sensitivity, observations, responses, reactions, and those of their students towards these issues. Although diversity has been conventionally associated with race, culture and gender, recently its scope has widened and embraced a variety of elements which include socio-economic backgrounds, places of origin and residence, as well as education and training, among others. Therefore, diversity represents a combination of various characteristics that make every individual and/or group exclusive and unique and for the purpose of this paper, diversity relates to students' socio-economic character as well as geographic and/or residential origins. The paper provides Covid-19 teaching and learning experiences of mathematics at a historically disadvantaged institution of higher education, namely the University of Limpopo, and proffer better planning post Covid-19 era. Although institutions of higher education have facilitated improved access, support services and more welcoming and inclusive environments needed for online teaching and learning, there are still student diversity related challenges, which must be taken into consideration in future planning.

Keywords: Student Diversity, Online Teaching and Learning, Mathematics, Higher Education, Covid-19 Lockdown

INTRODUCTION

Massification, internationalization as well as globalization of higher education has led to increasing diversity in student and facilitator (lecturer) profiles (Boelens, Voet & De Wever, 2018). There is a global increase in racial, ethnic, cultural, linguistic, educational, gender, religious, social and economic diversity within higher education institutions (Aesaert, Van Nijlen, Vanderlinde, Tondeur, Devlieger & van Braak, 2015; Boelens et al., 2018; Strydom & Fourie, 2018). Therefore, higher education institutions need strategies and approaches to manage the diversity in both students and lecturers which is visible through various elements which include, but not limited to race, culture, ethnicity,

language, education, gender, religion as well as socio-economic status, among others (Boelens et al., 2018; Strydom & Fourie, 2018). Development inequalities and Covid-19 resulted in serious diversity within the society, social and economic arena inclusive of higher education spectrum, which is mostly faced with challenges associated with the integration of diversity into the system (Strydom & Fourie, 2018). Accordingly, socio-economic characteristics that can to influence teaching and learning in higher education are sex, age and economic status (Aesaert et al., 2015; Hung, 2016; Ramoroka, Tsheola & Sebola, 2017).

In higher education and training, the lecturer has a responsibility to employ different teaching and learning approaches in order to create an environment of group creativity, collaborative reasoning, innovation, flexibility and adaptability among diversified students given the Covid-19 related circumstances (Ramoroka et al., 2017). If facilitators cannot factor in issues of diversity in their teaching, it becomes difficult for students to engage creatively in their learning because the teaching will be undermining their diversity amid the Covid-19 pandemic. Therefore, diversity represents a combination of various characteristics that make every individual and/or group exclusive and unique and for the purpose of this paper, diversity relates to students' socio-economic character as well as geographic and/or residential origins in relation to the Covid-19 pandemic. This paper provides Covid-19 teaching and learning experiences of mathematics at a historically disadvantaged institution of higher education, namely the University of Limpopo in South Africa, and proffer better planning post Covid-19 era.

The University of Limpopo enrols students who come mostly from historically disadvantaged backgrounds and from low-income families. Previously, low-income students and students from underserved populations typically enrolled in small colleges with few academic resources and a lack of student-service support and only a few get the opportunity to enrol in established institutions of higher learning such as universities (Williams, Karahalios & Ferrari, 2013). However, the student population at the University of Limpopo comprises mostly of Sepedi, Venda, Tsonga and Shangaan who are mostly from disadvantaged backgrounds with a few international students. The institution also enrols students living with disabilities. Amongst the student body, some are the first to attend higher education from their families. Cotton, Nash and Kneale (2017) defined these students as first-generation students. In addition, the institution enrols students who identified themselves as lesbian, gay, bisexual, transgender, intersexed, queer and asexual (LGBTIQA) (Justice & Hooker, 2017).

To achieve its purpose, the paper consists of nine sections, which include this introduction and references. The second section provides a detailed literature review on student diversity amid Covid-19 pandemic while in the third section the theoretical framework adopted for this research is described. In the fourth section, the methodology and research design adopted for this research is presented. The findings and discussions are presented in fifth and sixth sections, respectively. A brief conclusion is provided in section seven with recommendations stated in section eight.

LITERATURE REVIEW

The interpretation and integration of diversity in higher education is critical in informing the modes of teaching and learning as well as research contents within these institutions (Boelens et al., 2018;

Karimi & Matous, 2018; Strydom & Fourie, 2018). The meanings and definitions attached to the concept of diversity influences the various ways in which higher education institutions respond, reflect and integrate diversity issues which currently characterise the higher education spectrum. The way academics relate and interrogate diversity issues influence their perceptions, sensitivity, observations, responses, and reactions and those of their students towards these issues (Karimi & Matous, 2018). Although diversity has been conventionally associated with race, culture and gender, recently its scope has widened and embraced a variety of elements which include ethnic, cultural, religious and socio-economic backgrounds, age, physical traits, places of origin and residential, sexual orientation and/or gender, socio-economic status, social and political affiliations, professions, work positions and experiences as well as education and training, among others (Boelens et al., 2018; Karimi & Matous, 2018; Strydom & Fourie, 2018). Therefore, diversity represents a combination of various characteristics that make every individual and/or group exclusive and unique.

Diversity is defined as "the inclusion of different types of people such as people of different races or cultures in a group or organization" (Nelson & Brennan, 2019: 672). According to Karimi & Matous (2018, p.185) diversity refers to “difference within a group, inclusion speaks to how those members are treated and how they feel”. Therefore, within higher education, there are a number of aspects that are directly linked to student diversity such as full-time versus part-time students, language, academic disadvantages, first generation, gender, race, culture, socio-economic status, religion, learning disabilities as well LGBTIQA group. That is, diversity implies differences, which exists among people, which includes elements such as gender, age, religion, race, ethnicity, education, socio-economic status and sexual orientation, among others (Strydom & Fourie, 2018; Airton & Koecher, 2019; Nelson & Brennan, 2019).

Recently, the global student population going into higher education is more diverse in cultural, social and economic status, nationality, gender, age, prior education as well as academic achievement (Anderton, Evans, & Chivers, 2016; Airton & Koecher, 2019; Nelson & Brennan, 2019). Additionally, higher education has changed socially in numerous countries in terms of the inclusion of high numbers of students from low socio-economic backgrounds into the system (Rodríguez-Hernández, Cascallar & Kyndt, 2020). Socio-economic diversity, which is conceptualised in various ways, is the most commonly used variable in measuring and explaining diversity in higher education (Rodríguez-Izquierdo, Falcon & Permisan, 2020). For instance, Chapin (1928, as cited in Rodríguez-Hernández, Cascallar & Kyndt, 2020, p.2) defined socio-economic diversity as: “the position that an individual or family occupies with reference to the prevailing average of standards of cultural possessions, effective income, material possessions, and participation in group activity in the community”. For Mueller and Parcel (1981, cited in Rodríguez-Hernández et al., 2020, p. 2) socio-economic diversity is the “position of an individual, family, or group on a hierarchy based on economic, power, and prestige dimensions”. Recently, De Clercq, Galand and Frenay (2017) defined socio-economic diversity as the amount of cultural, social and economic resources available per student and this kind of diversity is difficult to ignore in higher education sector given the current Covid-19 related circumstances.

For a critical analyses of teaching and learning during the Covid-19 pandemic, Cumulative Inequality Theory assets that "social systems generate inequality, which is manifested over the life course via demographic and developmental processes, and that personal trajectories are shaped by the accumulation of risk, available resources, perceived trajectories, and human agency" (Merton, 1968). Based on this theoretical grounding, the indicators of socio-economic diversity are observed at different levels namely, the 'individual, family and area levels' (Australian Bureau of Statistics, 2011; Rodríguez-Hernández et al., 2020). Education, occupation and income are indicators for socio-economic diversity at individual level, which reflect students' socio-economic conditions notwithstanding the time they are being observed (Airton & Koecher, 2019; Nelson & Brennan, 2019; Rodríguez-Hernández et al., 2020). At this level, income signifies the accessibility and availability of social and economic resources that a student is exposed to which puts them at a better position to choose their occupation and further decides on their education levels. At the family level, household resources such as books, computers, internet, cars and money are used as measures for students' socio-economic diversity (De Clercq et al., 2017; Rodríguez-Hernández et al., 2020; Rodríguez-Izquierdo et al., 2020). The resources in question are used to establish if students' homes are capable of providing necessary environments for effective learning. Whereas, at geographic/residential area level, neighbourhood resources are considered as indicators for socio-economic diversity inclusive of social and financial resources that are not exclusively provided by family to students (Rodríguez-Hernández et al., 2020). The resources in question include neighbourhood resources and characteristics which include the degree of urbanization, number of libraries and parks in the area where students reside (Rodríguez-Hernández et al., 2020).

During the Covid-19 pandemic, students who are exposed to area environments that support learning are more likely to perform better academically. From the three levels, the diversity measures broadly incorporate two primary elements, which are mainly about prestige and resources (Rodríguez-Hernández et al., 2020; Rodríguez-Izquierdo et al., 2020). In terms of prestige, hierarchal position determines a student's position within the society while resources reflect on cultural, social and economic resources that one is exposed to in their geographic areas (De Clercq et al., 2017). Therefore, this paper uses the dominant socio-economic and geographic location diversity to determine teaching and learning experiences of mathematics at the University of Limpopo and further proffer better planning post Covid-19 era.

THEORETICAL FRAMEWORK

This research draws on Bourdieu's work, which highlights the ways in which cultural systems such as education (in our case online education) reproduce the structure of society, including the social class difference (Bourdieu, 1986; Bourdieu & Wacquant, 1992). The key concepts of Bourdieu are *field, capital and habitus*. Bourdieu and Wacquant (1992, p.97) describe a *field* as a social space within which there is a struggle for resources or 'capital' between agents who are unequally positioned according to the resources they have. Hilgers and Mangez (2015) described a field as a relatively autonomous domain of activity that responds to rules of functioning and institutions that are specific to it, and which define the relations among the agents. Shawa (2015) viewed a field as a social

space in which people compete for resources or a field of forces. There are various fields within the social world, and each field is a relational space of its own, dedicated to a specific type of activity (Hilgers & Mangez, 2015). In each field, specific power dynamics are at play, which makes certain people more adapted than others to act in this field (Pinxten and Lievens, 2014). The field in our case is the 'online learning' within the higher education.

Capital is a resource that can be monetary or nonmonetary. It consists of three forms namely *economic, cultural and social*, which are interrelated, and interconvertible (Bourdieu, 1986). *Economic capital* refers to material assets that are "immediately and directly convertible into money and may be institutionalized in the form of property rights" (Bourdieu 1986, p.242). *Economic capital* includes all kinds of material resources. Bourdieu (1986) described *cultural capital* as the accumulation or acquisition of knowledge, skills, and information through formal and informal education, which may exist in the embodied, objectified or institutionalised states. In the embodied state, a person accumulates *cultural capital* in the form of long-lasting dispositions of the mind and body, while in the objectified state, a person accumulates *cultural capital* through tangible goods such as books and pictures. In the institutionalised state, a person accumulates *cultural capital* through academic credentials and/or awards (O'Shea, 2016). *Cultural capital*, therefore, mean to have the right kind of knowledge, but it extends to knowledge of how to behave in particular settings, which enables people to fit into social groups (Brosnan, Southgate, Outram, Lempp, Wright, Saxby, Harris, Bennet & Kelly, 2016). *Cultural capital* can be seen to be very unevenly distributed in the student population, and more so in the population at large (Cotton et al., 2017).

The *social capital* is defined as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance and recognition" (Bourdieu, 1986, p.248). *Social capital*, therefore, refers to networks that surround people providing both embodied and practical support (O'Shea, 2016). Simply put, *social capital* is the aggregate of the actual or potential resources, which are linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance and recognition. Brosnan et al. (2016) argued that the ability to forge connections and accumulate *social capital* is due to someone's access to *economic capital*. Capriano (2006) argued that although superior amount of *cultural capital* facilitates improved *social capital* within a field, it could be used to exclude those that have not accumulated a similar level.

Webb, Schirato, Schirato, Danaher and Danaher (2002, p.15) defined *habitus* as a concept that expresses, on the one hand, the way in which individuals become themselves, develop attitudes and dispositions and, on the other hand, the ways in which those individuals engage in practices. In simpler terms, is a set of assumptions, habits, taken-for-granted and ways of being that are vihecles through which agents engage with, understand and move on through the world (Shawa, 2015). Habitus is a "system of lasting, transposable dispositions developed through one's upbringing in a particular socio-cultural environment, which 'functions at every moment as a matrix of perceptions, appreciations and actions and makes possible the achievement of infinitely diversified tasks" (Brosnan et al. 2016).

Habitus is formed through primary socialisation into the world through family, culture and milieu of education and it guides people's choices and attitudes (Pinxten & Lievens, 2014).

Bourdieu's concepts of field, capital (economic, cultural and social) and habitus are appropriate for this research as it highlights the ways in which cultural systems such as education (online education) reproduce the structure of society, including social class differences (Brosnan et al., 2016). The concepts of capital by Bourdieu has underpinned several studies focusing student experiences in health sciences and the impact of social inequalities in academic attainment (Bathmaker, 2015; Brosnan et al., 2016; O'Shea, 2016; Pinxten & Lievens, 2014; Wadhwa, 2017). In this research, online learning is viewed as a field in which students' socio-economic character as well as geographic and/or residential origins impact on their online education. The field, along with the concepts of capital and habitus, is used to make sense of the differentiated nature of social space in online educational settings, and practical action within it.

RESEARCH METHOD AND DESIGN

A qualitative research method with a case study design was adopted in this research. This is a case study, which looked into student diversity and online teaching and learning of mathematics at the University of Limpopo during the covid-19 pandemic. Qualitative data is gathered through observations, conversation (interviews) or written material. This work relied on data collected through written material, which includes reports submitted by mathematics facilitators in the Department of Mathematics and Applied Mathematics at the University of Limpopo. Four sets of bimonthly reports for the period 15 June 2020 to 07 August 2020 were used. The reports include method of delivery used, material covered, number of students reached, number of students not reached and a general comment by the facilitator. The bimonthly reports selected for analysis were three honours level, two third year level, two second year level, three first year level and one summary report provided by the line manager. The principle of selecting the reports for analysis was if it contained detailed comments by the facilitator about what was experienced in the online class (Skinner, 2020). Reports with no comments by the facilitators were excluded. Code numbers F1 – F11 were assigned to the reports to protect the facilitators' confidentiality and preserve anonymity.

Data Analysis

For data analysis, the researchers use thematic approach to analyse the information obtained from the bimonthly reports. Bogdan and Biklen (1982, p.145) describe thematic analysis as working with data, organising it, breaking it into manageable units, synthesising it, searching for patterns, discovering what is important and what is to be learned and deciding what one will tell others.

FINDINGS

This section focusses on the research findings that emerge from the data analysis process. Identified themes demonstrate the experiences gained by mathematics facilitators from the implementation of online teaching and learning at a historically disadvantaged institution of higher education. The main themes are (1) delivery of online classes, (2) student attendance and participation (3) internet connection, and (4) access to internet data and learning gargets. The findings below builds on the thematic

structure and illicit the meaning derived from the data.

Delivery of online classes

The bimonthly reports reveal that mathematics facilitators conduct online classes using different platforms, which include the Blackboard, WhatsApp, google meet and emails, during the online teaching and learning.

Besides the blackboard platform, I also communicated with the students via WhatsApp, that is, whatever I share on the blackboard I repost in on the group WhatsApp for the class. [F1].

Students receive the videos in advance and watch it before the class. During the online classes, students ask questions and mathematical concepts are clarified.

We agreed with students that we send them video a day before our normal lecture, then we connect via blackboard collaborate to discuss the video and students asking questions. … Students send questions on email and I answer them. [F6].

Some online classes take place via the google meet platform. The platform is reported to better than the blackboard.

Live lecture via google meet. The recording uploaded on blackboard for the students who had connection problems. Google meet is a better platform than blackboard collaborate ultra. [F7].

Mathematics facilitators use WhatsApp as a form of commination while lectures take place on the blackboard platform.

A WhatsApp group has been created for the course and online lectures have been continuing on Blackboard Collaborate [F8].

Some mathematics facilitators conduct online classes via WhatsApp platform through the recording and postage of short videos.

As I have indicated, my reception in terms of the 3G provided is very poor, as such I am unable to connect on my laptop. I am using WhatsApp by sending short videos and pictures. [F10].

Most mathematics facilitators use the blackboard platform to conduct online classes with a few using the WhatsApp platform.

Most lecturers are using blackboard collaborate to teach which has its own challenges and also WhatsApp, they even post videos and then after the students have watched the videos, they then discuss that in blackboard collaborate. [F11].

While recorded online lectures are uploaded on blackboard after the lecture, one facilitator posts the recorded videos before the lecture commences.

We agreed with students that we send them video a day before our normal lecture, then we connect via blackboard collaborate to discuss the video and students asking questions. [F6].

Students download the videos at their own time and are able to follow the online classes.

Most students are complaining about the network connections, they want to download the materials and listen to the recordings at their own time mostly during the night. [F3].

The recorded online classes are of benefit to students who miss classes. In addition, YouTube videos are uploaded for students to watch at their own time.

However, I make sure that the recorded sessions are uploaded on time for everyone to access them even those who missed the classes. Apart from the recorded session's videos, I have also shared some YouTube videos that could benefit them. [F4].

Facilitators also post recorded online classes on WhatsApp platform to enable students with internet connectivity challenges to view the recorded lectures.

Students asked me to record my own videos and post them on WhatsApp and blackboard. They asked me to resort to this method because the majority had connectivity problems with live sessions. [F7].

In addition to recorded online classes, facilitator also post detailed lecture notes on the blackboard.

The interesting part is that lecture notes and videos are uploaded on blackboard to cater for students who missed classes. [F9].

Students download learning material posted on blackboard even though some report that they have no internet data.

Though some students complain that they have never received data, but I can see that most of them are able to download the material even if it is not at the exact time of the lecture. [F10].

Students interact with facilitators via the blackboard collaborate. This platform allows students to ask questions and get feedback from facilitators.

Most lecturers are using blackboard collaborate to teach which has its own challenges and also WhatsApp, they even post videos and then after the students have watched the videos, they then discuss that in blackboard collaborate. [F11].

Student attendance and participation

The bimonthly reports reveal poor attendance of students in online classes. One facilitator attributed poor attendance in class to the fact that students can view the recorded lecture at their own time.

We are experiencing poor attendance of students. Maybe they take advantage of the fact that they can view the video at a later stage. [F2].

Several students are not attending the online classes.

Few students attend the lectures. The number of attendees fluctuates total number of students always less than 30 percent. [F3].

The facilitators are concerned on the number of students attending online classes as the number keeps on decreasing.

I'm a bit worried about the rapid drop of the number of student attending the online classes. [F4].

While some students attend online classes, others are not reachable. High numbers of students are unreachable.

The only issue is still on the number of students who can't be reached because the number is too big compared to those who are attending/reachable, and it seems to be increasing. [F5].

Class attend is a major problem as most students in large classes do not show up for classes. On facilitator has reported that at no point has the attendance been more than half the class size.

Attendance is unsatisfactory and quite disturbing with some days registering 149 students out of a class of 608. At no point, half the class was able to attend. [F9].

One facilitator attributed poor class attendance to internet connectivity challenges and lack of data.

Only a few numbers of students are attending the online classes which is a big challenge. Some students have a challenge of network and others claim that they don't have data. [F11].

Students repeating the modules find themselves failing to access the blackboard platform. The delay in being linked to the platform results in missing online classes as students access the link to join the class on the blackboard.

One student repeating the course has received data, however her name does not appear on the list of students linked to the module on blackboard, hence, she cannot participate. [F1].

Although some students were able to access the blackboard platform, they could not access the link to particular courses, as their blackboard did not have course management tools.

I have three students whom their blackboards don't have course management as a result they cannot access blackboard collaborate. [F4].

The class attendance improved when students are back on campus.

Since the postgraduate students have come back to campus the attendance has improved, more than 90% of postgraduate students are able to attend the online teaching. [F11].

Despite poor attendance to online classes, students who attend actively participate in online classes.

During lectures, students can ask questions which means that most of them are following what is being taught. [F3].

One facilitator acknowledges student participation but bemoan decreasing numbers on those that attend online classes.

The sessions are going well, and students are participating, the only issue is the number of students who can't be reached because the number is too big compared to those who are attending/reachable. [F5].

Some students do not respond to WhatsApp messages. One facilitator encourages students to self-study using the lecture notes shared on the blackboard.

Other students are not really responding either on the WhatsApp group or by attending blackboard collaborate. I have been trying my best to encourage them to self-study

from the notes shared on Blackboard. [F8].

Although it is difficult to establish how many students ask questions in an online class, one facilitator has indicated that students do participate.

Those who attend are participating very well and they are asking questions where they need clarity. [F11].

Internet connection

Internet connectivity is still a major problem in historically disadvantaged institutions. Students have internet connectivity challenges and most of them are unable to attend online classes. The bimonthly reports reveal that some students connect and disconnect during the online class sessions

On 21 July 2020, two students had unstable internet connection as they keep on joining and leaving the Blackboard Collaborate interactive class. [F1].

Students do not stay connected for online class sessions.

The number of students who connect for lectures, mostly do not stay connected throughout the sessions but keep on reconnecting for twenty minutes or so. [F3].

Mathematics facilitators also encountered internet connectivity challenges as one reported that poor signal where he/she stays. Internet connectivity is better on campus.

Where I'm staying, I have a problem of connectivity, my signal is very poor. With this problem, I am requesting access for my office, only when I have a class. [F2].

Whereas other students connect and disconnect, others do not connect at all.

Other students are unable to connect. Others connects and disconnects throughout the sessions. Other students don't connect at all. [F5].

The campus has better internet connections compared to off campus.

One student on campus had very clear reception. The others had problems of connectivity as they were off campus. [F7].

One facilitator is unable to use the laptop, as the internet reception is poor. As a result, the facilitator uses WhatsApp platform to conduct lectures.

As I have indicated, my reception in terms of the 3G provided is very poor. as such I am unable to connect on my laptop. I am using WhatsApp by sending short videos and pictures. [F10].

In some villages, there is no internet services, hence one cannot conduct online classes via the blackboard. This has led to facilitators opting to use WhatsApp platforms.

Lecturers also have challenges with connectivity, although they have the 3G, in some villages there is no network. Some resort to WhatsApp videos and other means of communicating so that they can teach the students. [F11].

Access to internet data and learning gadgets

Students rely on data provided by the institution.

Another student said she did not receive data and is not able to access blackboard due to lack of data. She, however, is following the discussions on WhatsApp. [F1].

When the data deplete, students are unable to attend online classes.

On 09-07-2020 many students claim that they have run out of data that's why they could not attend. [F4].

The bimonthly reports also reveal that some students do not have either a smart phone or a laptop.

One student has indicated that she does not have either a smart phone or a laptop, so she cannot access the blackboard platform. She relies on borrowing a phone from a friend. [F1].

Students without proper learning gargets find it difficult to attend online classes.

Students are still having issues with connectivity. Some say they still do not have data and others say they do not have the gadgets. [F7].

DISCUSSIONS

Although the shift due to the covid-19 pandemic from face-to-face teaching and learning to online aimed at serving the 2020 academic year, it is important to understand the experiences that both facilitators and students gained at a historically disadvantaged institution of higher education. Despite the adoption of online, as a mode of delivery following the Covid-19 pandemic, there is still a lot to be learnt when it comes to the use of online as a mode of delivery. The findings reveal that, in a historically disadvantaged institution of higher education, varied technological platforms such as the blackboard, google meet, and WhatsApp are necessary to cater for the needs of diverse student body. It becomes apparent that the WhatsApp platform offers an alternate way as a mode of delivery. This finding is consistent with Kinnari-Korpela (2015) who reveal the effectiveness of using WhatsApp in online learning, and the most preferred by most students and facilitators for its convenience.

Blended online learning was also evident to diversify instructional delivery (Awodeyi, Akpan & Udo, 2014). One facilitator flipped the online classroom where the content was delivered through recorded video lectures with the actual online class used to briefly introduce mathematical concepts, increase understanding and clear misconceptions. This finding agrees with Pannen (2014) who highlights that in a flipped classroom, the content is delivered online through recorded video lectures and You Tubes with the class time mainly used for discussions, simulation, practices, creation of learning products, collaborating with others, increasing understanding and clearing misconceptions. This was, however, in reference to a face-to-face class instead of the online one. Danker (2015) confirms the same finding by arguing that in class, students are summarily introduced to main concepts and most of the time is dedicated to interactive problem-solving sessions in which students solve problems in groups. However, this approach is effective if all students come to class having watched the video or read the uploaded learning material. Serrano et al. (2019) argue that the blended learning leads to better student experiences and outcomes when combined appropriately.

The findings show that, despite poor online class attendance, most students download and watch the recorded online lectures at night when they have extra internet data. Once downloaded, students can watch them as many times as they would like and at their convenient times. The use of recorded lectures enhance learning outside the classroom (Kinnari-Korpela, 2015). However, relying on listening to recorded lectures does not offer the same experience with attending the live online class as one cannot ask questions on unclear mathematical concepts. This, however, assist students who experienced unstable internet connectivity during the lecture and those who would have missed the online class for some other reasons to follow the lecture. In this case, students are to be autonomous, self-directed, and self-disciplined. They, however, can interact with the facilitators via emails and WhatsApp asking questions on areas, which find difficult to comprehend.

According to the findings, WhatsApp platforms enhance online learning using short videos during the Covid-19 lockdown. This agrees with Kinnari-Korpela (2015) who argues that the use of short videos is worth considering when developing methods for mathematics' learning. In addition to the online classes via blackboard, students interact with facilitators via the blackboard collaborate, WhatsApp platform and through emails.

The findings reveal that most students who fail to attend online classes cite lack of internet data, learning gargets and poor internet connectivity in areas where they reside. Bourdieu's concept of field along with the associated concepts of capital and habitus assist in gaining a deeper understanding of experiences gained in the implementation of online teaching and learning at a historically disadvantaged institution of higher education. Most students at the University of Limpopo come from poor socio-economic background and lack economic capital, as they could not afford learning gargets and internet data. This concurs with Airton and Koecher (2019) who highlight that socio-economic diversity play a role in students not affording the learning gadgets. Students rely on internet data provided by the institution. This was evident when students miss online classes citing depletion of internet data or waiting to receive internet data.

Bourdieu (1986) and Merton (1968) argue that people from different social positions differ from one another regarding their possession of three forms of capital: social, cultural and economic capital, mostly attached to their geographic locations. The concepts of capital uncovers the workings of power and inequality in particular social spaces (Bathmaker, 2015). Shawa (2015) noted that the forms of capital, that is, cultural, economic and social, all contribute significantly to academic experiences, which unfortunately in this case is undesirable. Han (2020) highlights several setbacks in online learning adoption, which include students without learning gargets failing to attend classes or access learning material. Therefore, desirable experiences in online learning is facilitated by the possession of cultural capital and higher-class habitus. Lower-class students do not possess these traits, so the experiences of the majority of these is unfavourable. This explains the inequalities that existed amongst the student body. In addition, cultural capital inculcated in higher-class homes enables higher0class students to attend online classes compared to lower-class students, resulting in inequalities as the dominant class maintains its class position in society. The adoption of online learning requires much preparation as there are a number setbacks that are experienced which include internet not working

smoothly, the teaching platform unstable and congested, students not residing on campus not having adequate data while some students may not have gargets to access online material (Han, 2020). Mayes, Natividad and Spector (2015) argued that there is need to support students with the learning gargets and the much-needed connectivity. Without such support, online learning can further isolate students from low socio-economic status rather than promote inclusion and social advancement (Rivers, Rivers & Hazell, 2015).

The findings show that online class attendance was worrisome especially in large classes wherein not more than half of the students attended classes. In some instances, students who were re-taking the course fail to attend online classes, as their names were not appearing on the list of students linked to the blackboard platform.

Brosnan et al. (2016) argues that by identifying the specific forms of capital that operate in each field, it helps students to understand the values and the kinds of habitus that dominate the field. The findings reveal that students at a historically disadvantaged institution of higher education face challenges in internet connectivity from the geographical areas where they come from. This agrees with the Cumulative Inequality Theory by Merton (1968). As attested by the Cumulative Inequality Theory and Bourdieu's concepts of field, capital and habitus, students who resides in areas with poor internet connectivity miss online classes. Failure to attend online classes due to poor internet connectivity result in students feeling isolated and disconnected from the rest.

Students' attendance improved greatly when they were on campus as they could use the institution's internet. This clearly shows that students have internet connectivity challenges at their places of residence. Additionally, students who attend online classes actively participate during the lecture. That is, stable internet connectivity boost students' attendance and participation during online classes.

The historically disadvantaged institutions of higher education in South Africa still suffer from the digital divide, i.e. the gap between those who have access to and control of digital technology and those who do not (Delcore & Neufeld, 2017). The shift from face-to-face to online learning in historically disadvantaged institutions is compounded by socio-economic background as well as the geographical residential origins of the student body. Tshuma (2016) alluded the challenge to the damaging legacy of colonialism and apartheid. Therefore, issues of access, quality and equity remain a challenge at historically disadvantaged institutions of higher education.

CONCLUSION

This paper defines student diversity to mean students' socio-economic character as well as geographic and/or residential origins. Using this definition, the paper discussed Covid-19 teaching and learning experiences of mathematics using University of Limpopo as a case study. The research revealed, through empirical analysis, that students' socio-economic character as well as geographic and/or residential origins influence students' experience in online learning of mathematics during Covid-19 lockdown. On the one hand, students who reside in geographical areas with poor internet connection due to poor and limited infrastructure, find it difficult to attend online classes while on the other hand students without learning gargets or internet data miss classes. All these affect negatively on students' online learning and academic

performance in general. By using Bourdieu's concepts of field, capital and habitus, and the Cumulative Inequality Theory, it become clear that the dominant socio-economic and geographic location diversity determine students' experiences in online learning. Recommendations that can be adopted by historically disadvantaged institutions of higher education post Covid-19 era are made considering these research findings.

RECOMMENDATIONS

Institutions of higher education should consider the theory of affordance in future pandemics, which deals with accessibility and connectivity issues when implementing online learning (Blewett, 2016) which include Bourdieu's concepts of field, capital and habitus (Bourdieu, 1986) and Cumulative Inequality Theory (Merton, 1968). The researchers recommend that the historically disadvantaged institutions consider the following:

- Adoption of hybrid teaching and learning approaches (blended learning) which combines face-to-face teaching with online teaching as it gives both students and facilitators the necessary practice in using online teaching.
- Use of zero-rated internet data learning platforms when implementing online learning, where students can access learning platforms without being charged on internet data, to avoid the challenges of internet connectivity and lack of data.
- Establishment of partnerships regarding data provision and learning gargets to needy students.
- Provision of accommodation to students who come from areas with poor internet connection due to lack of and limited infrastructure inclusive of those who do not possess learning gargets.
- Use of WhatsApp platform as an approved alternative mode of delivery in addition to the institutions' Learning Management Systems such as Blackboard and Moodle, among others.
- Adoption of multimodal learning system where students without learning gadgets receive hardcopies of detailed notes through courier.
- When all the recommended measures are in place, a class attendance monitoring system that compels all students to attend must be implemented. As in face-to-face classes, students who miss a certain percentage of classes do not qualify to write examination.

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The pandemic is our portal: Re-imagining teaching and learning in the time of Covid-19

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ABSTRACT

The Covid-19 pandemic continues to disrupt the global health care systems, trade, transportation, education and other critical sectors. Universities have equally been affected and are still trapped in protracted struggles regarding how to respond to the pandemic, while at the same time ensuring that teaching and learning, research and community engagement continue. In this paper, we offer some theoretical and empirical reflections on our experiences as teacher educators at a South African university. Through reflexivity and dialogic conversations, we foreground our teaching experiences as Curriculum Studies academics, in response to the Covid-19 pandemic. We draw on Arundhati Roy's concept of the 'pandemic as a portal' in (re)looking at the pandemic as an epistemic opportunity to r*eflect, re-imagine* and *reconceptualize* teaching and learning, in a time of crisis. We argue that, although the pandemic has been a disruptive force in our lives, it can also be an opportunity to re-think the future of teaching and learning and ensure that no student is left behind. We end the paper with some empirical and philosophical future of teaching and learning during this disruptive moment.

Keywords: Teaching and learning; Covid-19; higher education; social justice

> Whatever it is, coronavirus has made the mighty kneel, and brought the world to a halt like nothing else could. Our minds are still racing back and forth, longing for a return to "normality", trying to stitch our future to our past and refusing to acknowledge the rupture. But the rupture exists. And in the midst of this terrible despair, it offers us a chance to rethink the doomsday machine we have built for ourselves. Nothing could be worse than a return to normality. Historically, pandemics have forced humans to break with the past and imagine their world anew….It is a portal, a gateway between one world and the next. We can choose to walk through it, dragging the carcasses of our prejudice and hatred, our avarice, our data banks and dead ideas, our dead rivers and smoky skies behind us. Or we can walk through lightly, with little luggage, ready to imagine another world. And ready to fight for it (Roy, 2020).

INTRODUCTION

The emergence of the Covid-19 pandemic continues to be a great source of tension and disruption in the South African higher education sector; with academics, students, management and the community all struggling to make sense of what is increasingly becoming our 'new normal' in the sector (Aboagye, Yawson, & Appiah, 2021; Bao, 2020; Iglesias-Pradas, Hernández-García, Chaparro-Peláez, & Prieto, 2021). It should be acknowledged that this new normal has certainly been disruptive and chaotic, and has resulted in loss of life, depression and anxiety; as both students and academics have attempted to navigate through the difficulties and structural challenges (Hlatshwayo & Bertram, 2020). In this paper, we seek to contribute to the emerging body of research that looks at and theorizes the effects of Covid-19 on our teaching and learning practices in the academy (Marinoni, Van't Land, & Jensen, 2020; Means & Neisler, 2021; Toquero, 2020). We attempt to make this contribution in two ways. We firstly reflect on our experiences as academics in a research-intensive university as we struggle to respond to what we call the 'pandemic teaching' in our curriculum offerings. Secondly, and from the focus on our experiences, we propose some theoretical and empirical measures towards humanizing this disruptive moment in ways that enable teaching and learning to be more socially just, democratic and inclusive. We draw on the Indian novelist and activist, Arundhati Roy's, idea of the pandemic as a portal to re-center and re-position ourselves and our complex lifeworlds as we struggle to navigate this Covid moment.

We first begin this paper by outlining the emergent literature on academics' experiences of teaching and learning during the pandemic, and show where in the field, we seek to make an intervention. We then outline the conceptual tools this paper utilises, that is, Roy's (2019) argument about the pandemic as an epistemic and existential portal. We then move to the heart of the paper, where we become more self-reflexive and dialogical about ourselves, and our experiences in navigating teaching and learning during the time of crisis. We then draw conclusions and recommendations on the need to re-imagine teaching and learning during a pandemic.

Teaching, learning and the pandemic

The emergence of Covid-19 worldwide forced education institutions to introduce emergency remote teaching (Hodges, Moore, Lockee, Trust & Bond, 2020) as a crisis-response intervention. It was apparent that institutions of higher learning could not operate under the 'business as usual' model (Hedding, Greve, Breetzke, Nel & Jansen van Vuuren, 2020) if they were to mitigate the effects of the pandemic on education. However, the introduction of the emergency remote teaching came with many challenges for both academics and students. Firstly, academics largely felt pressured and rushed into just getting the teaching and learning content or resources online (Hodges et al.), without any proper pedagogical training for online teaching (Ali, 2020; Hedding et al., 2020). Secondly, some academics continued to struggle with poor internet connectivity issues, which negatively impacted their efficient and effective running of synchronous online 'classes' (Bania & Banerjee, 2020). This struggle was worsened by some institutions' subscriptions to, and reliance on Zoom, which has a limited capacity of 300 participants (Ngubane, Blose, Mthembu & Hlongwa, 2020), not suitable for large classes. The challenge was also aggravated by lecturers' lack of digital competency (Adedoyin &

Soykan, 2020). Thirdly, the socioeconomic status of students created a further divide among them and influenced how they engaged with remote learning. Students from low socioeconomic backgrounds fell behind with their learning when remote learning was prioritized during the lockdowns, as they could not access free WiFi on campus (Adedoyin & Soykan, 2020). Therefore, it can be argued that students from low socioeconomic backgrounds contributed to the heavy workloads of academics who had to ensure that no student was left behind when universities migrated to online remote teaching (Ngubane et al. 2020). Students' socioeconomic status brings to the fore, not only issues of access, equity, and equality; but also, of institutional readiness.

It should be acknowledged that Covid-19 has caused shifts in the education space in several forms. Like a three-legged pot, our experiences show that the shift forced institutional-directed activities, academic-directed activities as well as student-directed activities to change from face-to-face to online activities. For an institutional-directed change, the shift to online teaching brought by the Covid-19 pandemic demanded institutions to react to the emergency in teaching and learning (Bozkurt, Jung, Xiao, Vladimirschi, Schuwer, Egorov, & Paskevicius, 2020). This emergency reaction demanded change in various forms, such as change from manual to online processes, from on-campus activities to remote activities, virtual teaching, learning plans and communication. The institutions had to react to the challenges brought by Covid-19 concerning access to digital devices and the internet, capacitation, and equity for both staff and students (Ramrathan, 2020). Online resources to support both staff and students became a critical priority for institutions to ensure that no student was left behind.

Academics were key role players in the rushed changes to emergency online teaching and learning, meant to save the academic year. The emergency changes forced academics to move from traditional face-to-face teaching to remote education swiftly. On the one hand, humankind was faced with personal disruptions, personal and family ill-health challenges, and adapting to the Covid-19 pandemic protocol (Okoro, 2020). On the other hand, academics were faced with a swift transition from face-to-face teaching to remote teaching. The “pandemic teaching” in higher education came with demands requiring academics to carry on with their responsibilities at a difficult time of having to deal with self and family health issues. As mentioned, the Covid-19 caused shifts in education space in several forms, such as academics were involved in the migration of practices towards online learning, in technical and administrative aspects of online teaching, and in novel flipped classroom approaches (Iglesias-Pradas, Hernández-García, Chaparro-Peláez, & Prieto, 2021). The transition to remote teaching came with the demand to adapt the planned curriculum to suit the online environment (Bhagat & Kim, 2020). The traditional mode of delivery, communication, type of assessments, and implementation of assessments were part of the curriculum changes occasioned by innovative online teaching and assessment (Lapitan, Tiangco, Sumalinog, Sabarillo, & Diaz, 2021). The sudden changes occasioned by the Covid pandemic fears, and the need to continue with teaching in a new online environment, brought anxiety and uncertainty. In addition, academics had to strike a work-life balance brought by the protocol of working from home. The shift to remote teaching and learning was not only felt by academics, but equally by students

Remote learning increased the existing inequalities amongst students, especially regarding the digital divide (Bozkurt, Jung, Xiao, Vladimirschi, Schuwer, Egorov, & Paskevicius, 2020; Rapanta, Botturi, Goodyear, Guàrdia, & Koole, 2020), access to technological resources, the conducive nature of the home environment, and availability of technical resources and support (Cunha, Silva, Guimarães, Sousa, Vieira, Lopes, & Rosário, 2021). University residences and university campuses provide students with WIFI, library services, and physical consultations with teacher educators. However, the Covid-19 pandemic shutdowns increased and amplified student diversity when all students had no access to physical resources. The closure of institutions made students' socioeconomic statuses more visible. It caused students to study from home, where the majority experienced limited resources, network outages, and lack of academic support (Ferri, Grifoni, & Guzzo, 2020).

Contrary to the popular discourse on the challenges brought about by remote teaching and learning, recent research has demonstrated how online teaching and learning have benefitted stakeholders in education. Emergency remote teaching exposed academics to opportunities such as increased collaboration (Pokhrel & Chhetri, 2021), re-evaluation of curricula (Hedding et al., 2020), alternative pedagogical practices (Ngubane et al., 2020), to mention a few. Pokhrel and Chhetri (2021) argue that remote teaching and learning has formed strong connections between various stakeholders in education, such as the relationship between teachers and parents at the school level, and between faculty members in higher education. Moreover, Hedding et al. (2020) highlight that the benefit of introducing emergency remote learning continues to allow the institutions of learning to transform and re-evaluate the curricula offered in face-to-face classrooms, to suit the new methods of teaching and learning. Hedding et al.'s (2020) suggestion means that there is need for critical engagement and proper planning of the remote curricula to benefit the students. These engagements and planning allow alternative technological pedagogical practices to emerge, as Ngubane et al. (2020) advocate. In this paper, we contribute to the emergent body of research that continues to explore the effects of the Covid pandemic on our teaching and learning practices.

We now turn to outlining the conceptual framing of our paper, which is Roy's notion of the pandemic as a portal, and how it offers us a useful framework for thinking through and reflecting on our teaching and learning practices during the Covid pandemic.

CONCEPTUAL FRAMINGS

In this paper, we rely on Roy's (2020) conceptual notion of the pandemic as a portal, in an attempt to critically reflect on our own teaching and learning practices during this 'pandemic teaching', as well as begin to re-think, re-imagine, and re-look at how we can improve our pedagogies in ways that are inclusive, democratic and facilitate epistemological access for our students.

In her article in the *Financial Times*, titled, 'The pandemic is a portal', Roy (2020) chronicles the devastating effects of the Covid-19 pandemic on the global community, and especially on the poor and dispossessed subalterns. For Roy, the pandemic has become, what could be seen as the 'great equaliser' in the world in that, it continues to affect, not just the poor, but also the elite, who have historically tended to use their wealth as a social, political,

economic, cultural and health buffer. While tracing the inherent and fascist/capitalist contradictions of the Narendra Modi government in India, Roy (2020) shows us the disregard that the Indian government has shown in refusing to recognize, acknowledge and take the pandemic seriously. The refusal resulted in what is increasingly acknowledged as the Hindu-fication (or Hindutva) of the Indian political society by Modi and the ruling Bharatiya Janata Party (BJP). Roy thus, suggests that the pandemic is a portal for us, in that it ought to be seen as an epistemic opportunity to break with the past and to think differently. We think counter-hegemonically. She writes that 'historically, pandemics have forced humans to break with the past and imagine their world anew' (Roy, 2020), and that the Covid-19 pandemic similarly offers us that opportunity to evaluate our teaching and learning practices, and begin to propose alternative practices that could facilitate and enable students to better engage with curricula.

Hlatshwayo (2020b), argues that rather than the pandemic being seen as an epistemic opportunity in the academy to re-imagine and do things differently, we are gradually witnessing the neoliberal and colonial academy in the global South resorting to draconian forms of performance management and demands for elusive notions of 'productivity;' all in an effort at pretending that it is still 'business as usual' in the university. This obsession with reasserting normalcy during an unprecedented health crisis, has resulted in academics facing depression, mental health and other challenges, as they seek to balance academia andpersonal life. Thus, although we note and recognize Hlatshwayo and Bertram's (2020) sceptical sense of the pandemic being a portal in the university, we nonetheless, believe that this historical moment demands that we reflect on our teaching and learning practices during this moment, and also begin to propose what inclusive and democratic teaching practices could look like during the Covid and post Covid moments.

More recently, different scholars have begun to use Roy's notion of the pandemic as a portal to re-think and re-evaluate different fields of practice in their work and research (see Blanco & Cuervo, 2021; Kralovec et al., 2021; Ledgerwood et al., 2021). For example, Ledgerwood et al. (2021) write about the existential crisis facing the field of psychological science and the need to respond to the unequal, exclusive and narrow nature of the discipline to make the field more relevant and responsive to structural inequality in society. Belk (2020) writes about using the notion of the pandemic as a portal to re-think capitalist modes of consumption in the world, and their effect on climate change and environmental degradation. Nelson and Segil (2020) adopt an interesting perspective employing the notion of the pandemic as a portal to offer a critique and call for the re-thinking of crime and punishment in Colombia, especially as it pertains to the growing mass incarceration in the country, and the lack of tangible evidence on how mass incarceration creates public safety.

In this paper, the pandemic is our portal as we re-think and re-imagine teaching and learning during a time of crisis. We argue that the Covid-19 pandemic offers us an opportunity to re-think our current teaching and learning practices, and we begin to propose alternative and transformative pedagogic practices in our work.

We now turn to the 'heart' of the paper, where we reflect on ourselves and our

existential experiences in teaching and learning during this unprecedented moment. Our discussions and personal reflections will mainly focus on three key aspects of our teaching and learning experiences; our pre-teaching, the actual teaching, and the assessment experiences. It should be noted that these categories and classifications only offer us careful analytical markers and classifications for our discussions. They do not represent real and material distinctions in our work. Put simply, as one is designing their own online module (pre-teaching phase), they also have to think seriously about how the online engagements/participation will look like (teaching moment) as well as what accessible assessments need to be introduced (assessing knowledge). Thus, all these aspects are dialectical and intersectional in curricula design.

THE METHODOLOGICAL ORIENTATION

We are three academics working in the Education and Curriculum Studies Discipline. Our work involves teaching and coordinating modules at both undergraduate and postgraduate levels. The number of registered students in undergraduate modules is usually high, ranging from 800-1300, hence our reference to large classes.

Even before the pandemic, we had created a WhatsApp group for module coordinators where we would chat about pertinent issues related to teaching and learning, which required our immediate attention. The WhatsApp group continued to serve as an extra layer of support, over and above the support we received at institutional level when we shifted to online teaching during the pandemic. Through this platform, we engaged in reflective conversations or dialogical reflections (Bolton, 2010), where we shared ideas on pedagogical strategies, and the successes and challenges we experienced with remote teaching and learning. This sharing was underpinned by the idea that learning occurs both at the personal and social context.

During the conversations, we were not only reflective but also reflexive about our practices. Therefore, when a call for papers was circulated by the institution's research office, it prompted us to revisit the conversations we had on WhatsApp and through emails. In order to respond to the call, we then expanded on our reflexive conversations, intentionally focusing our discussions on our experiences as academics engaging in remote teaching. Reflexivity, as a process of complexifying thinking and experience (Hibbert, Coupland & MacIntosh, 2010) was an essential aspect in our practice, as it opened up spaces for, not only self-critique, but also relational critique from colleagues. Our reflexive processes encompassed critical scrutiny of our thought processes, subjectivities, assumptions and actions (Yarwood, Ogilvie & Yianni, 2015), as we grappled with understanding our new complex roles of teaching during the pandemic. We used our overall research question: "What are academics' experiences of remote teaching during the Covid-19 pandemic?" as a prompt to trigger our thinking, memories, reflections and reflexivity about our pedagogical practices at various moments such as pre-teaching, teaching, and assessment.

The pre-teaching phase

When the university closed, in response to attempts at flattening the curve of Covid-19 infections through the national lockdown, university staff were in a panic mode. Most of them left their essential teaching tools in their offices since the initial lockdown that was announced by president Ramaphosa, in March 2020 was meant to be for only 21

days (SA News, 2020). However, with the increasing number of new Covid-19 infections and deaths in South Africa, the lockdown was extended (South African Government, 2020). In a rush to save the academic year, our institution, like many other institutions of higher learning, moved teaching and learning to an online platform for continuity purposes (Bingimlas, 2021). The move to online teaching and learning was riddled with frustrations, anxiety and fear of the unknown for both the students and the faculty members (academic and professional staff alike) as they navigated what was unchartered territory. As argued by Medina, Melchert and Stowe (2020, p. 684), these feelings often leave the staff members 'vulnerable to self-doubt [and] fear of failure'. Therefore, there was need for the institution to pause, regroup, reflect and think of a way forward. As an institution, we engaged in what we, as authors of this paper, call a pre-teaching phase.

Essentially, the pre-teaching phase is a phase for preparation and planning for teaching and learning. This phase occurred at two levels; institutional and individual. At the institutional level, it manifested when the university teaching and learning office and its hubs at different categories, college, and school levels embarked on panic mode preparations for emergency remote teaching and learning. This centralized preparation was flooded with numerous online teaching workshops intended to capacitate academics with technological knowledge and skills to teach in a remote setting (Cutri, Mena & Whiting, 2020). These workshops would enhance academics' confidence in using different teaching platforms and tools (Ali, 2019). This phase saw academics subjected to information overload as many academics wanted to attend numerous online training workshops to grasp as much as they could about remote and online teaching to ensure that they were part of the game and played the game well as per the institution's expectations. Each academic responsible for teaching and coordinating a specific module had to make particular preparations for that module at the individual level. Therefore, as module coordinators, we had to ensure that the module templates were revised accordingly, to suit the tenets of remote teaching in line with the transition from the physical, face-to-face instruction. The institutional mandate to revise module templates to suit remote teaching, directly impacted the module content to be covered. Hence, to ensure alignment and fitness for purpose, the module objectives and outcomes for remote teaching had to be revised in some modules.

The process included the university management asking academics to revise module templates to prepare for the emergency remote teaching as physical/contact classes were immediately stopped. We thus had to look realistically at the module content, pacing, sequencing of the content and the teaching strategies, what would be feasible and what needed to be excluded without compromising the quality of the module/qualification itself. Little time was given for critical engagement as these module related decisions were largely taken by academics themselves exercising oversight and control of their curricula.

During the pre-teaching phase, the brainstorming and discussions of the suitable content coverage for remote teaching afforded academics space and time to re-imagine the class, which was no longer physical, and not confined by time and space as per time-tabling. The class was now an intangible, virtual space consisting of 'faceless' students and no immediate interaction or response from students during teaching. Largely driven by panic, concern and the need to adapt quickly to the ever-changing nature of our teaching, little time

was afforded for divergent or critical views as we dedicated our time to largely making sure that our module templates were approved, in a rush to 'save the academic year'.

In these reflective brainstorming and reflexive discussion sessions, we re-evaluated and reconceptualized the module content to fit it for teaching and learning in a time of crisis. We also had to reflect on, and reassess the types of, assessment activities that were possible for the emergency remote teaching and learning, and their relevance to the revised module objectives and outcomes. Essentially, we argue that the Covid-19 pandemic afforded us, as academics, the space to strategize about the endless pedagogical possibilities that the multi-modal emergency remote teaching presented. This argument is in line with Dhawan's (2020) findings that academics need to spend much time designing effective strategies for online teaching. However, our pre-teaching meetings were never smooth sailing. They consisted of rigorous debates about the pros and cons of each suggested method, considering the background context of our students. Many of them come from quintile[3] one schools, most of which have rural contexts and are characterized by low socio-economic backgrounds.

During the pre-teaching planning sessions, we had to constantly reflect and remind ourselves of the varied backgrounds of the students we have. Students' backgrounds and experiences that emanate from the existing socio-economic inequalities could not be discounted. We had to pause, reflect and ask ourselves the essential questions, such as who are our students? Where do they come from? What knowledges do they bring into the learning space? How can we incorporate those knowledges and the students' lived experiences into the teaching and learning processes? How can we include the students' voices in the teaching and learning processes as we have done in the face-to-face classes?

Although these questions were not new, as they were also the basis for the pedagogical practices in the traditional classes, it was pertinent to remind ourselves that using digital pedagogies should not make us forget about our students (who were suddenly 'virtual'), and how they would experience the learning process. What became apparent from our discussions was that socio-economic inequalities were likely to be heightened by the forced move to the virtual teaching and learning platform (Means & Neisler, 2021). As academics, we were conscious of the socio-economic divide that was likely to be widened by the then compulsory use of digital technologies and spaces for learning.

In attempting to narrow the divide, and as we contemplated different ways of being creative and innovative in our teaching, we questioned ourselves: How do we plan our lectures/lessons in an inclusive and humanistic manner, showing understanding and care for the students as purported by Dhawan (2020)? How do we ensure meaningful and productive learning experiences for all students? These questions indicated that the pre-teaching phase needed critical reflections and debates, which were sometimes 'messy' as we tried to navigate the new terrain into the unknown future. Whether to use synchronous or asynchronous Zoom or Teams lectures/classes or voice-over PowerPoint slides, had to align with the overall vision and objectives of the

[3] In South Africa, in each of the nine provinces, schools are categorised into 5 quintiles; whereby quintile 1 schools cater for the 20% of the poorest learners and quintile 5 schools cater for the least poor 20% of the learners.

university at large. The process of questioning ourselves is evidence that, even before we embarked on the actual remote teaching, we had started to reflect on, and engage in robust debates, and be reflexive about how we, as academics, were to enact the various curricula fairly and in a just manner. Being reflexive allowed us to ensure that (as far as possible), no student would be left behind, but importantly, that no staff teaching in the module would be left behind, in a way; exercising the pedagogy of care (Hlatshwayo, 2020). Hence, the reflective pre-teaching discussions were pertinent to ensure that integrity and quality issues were overtly and explicitly discussed as the institution prioritized them (Means & Neisler, 2021). It was clear that we could not operate in a 'business as usual' mode, but a lot of re-thinking, relearning and unlearning had to happen if we were to acknowledge the volatile, uncertain situation brought about by the Covid-19 pandemic, so as to be open to new possibilities. Using the pandemic as a portal to reflect, re-evaluate and re-imagine allowed us to welcome (willingly or unwillingly) the various forced shifts that had to happen in a digitalized teaching and learning arena. From the discussion, it is apparent that there is potential for change even in times of turbulence (Medina, Melchert & Stowe, 2020; Žižek, 2018).

We now move to reflect on our complex teaching experiences, while navigating the teaching during the pandemic, students' wellbeing, and the growing university pressures.

Learning and teaching

The emergent literature suggests that Covid-19 pandemic teaching has disrupted our thinking, challenged our traditional ways of teaching and learning, and brought new possibilities; making higher learning institutions think outside the box (Bozkurt, Jung, Xiao, Vladimirschi, Schuwer, Egorov, & Paskevicius, 2020). Findings have also shown that the pandemic has caused academics to shift from traditional methods of teaching to remote teaching, with limited experience. It has exposed students' inequalities regarding access to resources, amplified technical challenges, and forced academics and students to learn new pedagogies and blended approaches (Ali, 2020). As mentioned, the shift from traditional teaching methods meant, as academics, we needed to attend virtual training and adapt to new ways of doing things—for example, Zoom lectures, synchronous and asynchronous teaching, and using WhatsApp as a teaching and communicating tool.

The adjustment to the new normal has brought several challenges in the education space. Due to lockdown restrictions and the shutdown of institutions, academics were faced with several educational challenges, such as unpreparedness to move to online teaching. Unpreparedness and lack of digital literacies brought anxiety and uncertainties (Adedoyin & Soykan, 2020). This pandemic teaching was challenged by technical difficulties such as network problems, not having data bundles, communicating with students with poor infrastructures, and no electricity in rural areas (Bania & Banerjee, 2020). In South Africa, the challenges of poor connectivity are compounded by crippling power outages in rural areas (Dube, 2020). While we, as academics, were navigating pandemic teaching, we were also faced with competing interests such as balancing home and work responsibilities, caring for family members affected by the coronavirus, saving the academic year, and not leaving any student behind.

As academics, we observed that the Covid-19 pandemic amplified inequalities and

widened the existing gap in South Africa, primarily, the educational space (Bozkurt, Jung, Xiao, Vladimirschi, Schuwer, Egorov, & Paskevicius, 2020; Rapanta, Botturi, Goodyear, Guàrdia, & Koole, 2020). Our experiences forced us to think about how we made remote teaching and learning more socially just, democratic, and inclusive under Covid-19 pandemic and beyond. Students remained our central point as all these issues undoubtedly had a negative impact on some of the students' ability to focus on their academic work (some in self-isolation). We show how we navigated the remote teaching terrain, with the notion of not leaving any student behind. The institution had to extend the academic year, change sessional dates, and provide many catch-up programmes. We used various methods to communicate and track students who were not participating. We were advised by the institution not to leave any students behind, by being flexible and accommodative during the difficult times occasioned by Covid-19 pandemic. These efforts increased our workload and caused some of us to work overtime, and to work odd hours developing materials to align with remote teaching as our homes became workspaces. Despite the Covid-19 challenges, the other side of the pandemic brought creativity, a sense of care, synergy, and collegiality in the education space (Mishra, Gupta, & Shree, 2020). As academics, we experienced collaboration and support from each other. Some colleagues who are experts in the field of online teaching pedagogies trained their peers. For academics, the Covid-19 pandemic has opened opportunities for us to reflect on our practice, for example; reflecting on how we teach and why we teach the way we do. It has prompted us to reconsider our processes and procedures, relook the available options for blended approaches, have automated systems, meet virtually, etc. Our learnings and experience from the 'pandemic as a portal' have helped us to re-imagine and reconceptualize new possibilities by revising module templates to accommodate remote learning, using blended teaching approaches, and engaging in online pedagogies (Adedoyin & Soykan, 2020).

We now move to the final aspect of our reflections; the complexities, challenges, and opportunities that came with re-thinking assessment practices.

Assessing knowledge

Reflecting on our own teaching and learning experiences when it comes to assessment, it should be noted that all three of us were (and to some extent, still are) currently involved in coordinating and teaching large classes. This meant that, unlike some modules that have relatively smaller enrolment numbers and are perceived as relatively easier to manage and coordinate, we have the burden of coordinating 3-4 different contract lecturers, planning for what socially just and inclusive assessments should look like, implementing those assessments, and seeing what the outcomes were.

Before the national government announced the introduction of the lockdown regulations in an effort at controlling the community spread of the Covid-19 pandemic (SABC, 2020), we relied on what could largely be seen as traditional forms of the assessment such as the physical/classroom tests, assignments, exams, classroom group presentations and others. With the announcement of the lockdown, and the different higher education institutions in the country calling for a ban on all physical contact; we now had to re-imagine, under

pressure, what alternative yet inclusive forms of assessment could look like. In existential and pedagogic reflections, what we mostly did could be referred to as the 'dumping' of curriculum material online and referring to that as pedagogy. In this period of great disruption and growing mass panic, and with the different higher education institutions being obsessed with saving the academic year at all costs - often at the expense of students, academic and professional staff - we found ourselves vulnerable, exposed and increasingly frustrated. We organized emergency meetings with contract staff members that we were teaching with, and started coming up with innovative and creative ways of assessing students without compromising the "quality" and the curricula. Scholars, such as Knowles (2020), Maringe (2020) and Hlatshwayo (2020a; 2020b) have advised the need to pause, reflect and prioritize ourselves as we strive to make sense of the uncertainty that has confronted the higher education sector, and acknowledge that we cannot achieve everything at once. The pressures of responding to our new normal, and ensuring that no student is left behind, proved difficult. We relied on various online learning and social media platforms such as Zoom, Microsoft Teams, WhatsApp, Facebook, and others in an effort to continue the teaching and learning programme.

We introduced new quizzes, multiple choice questions, and short essay questions on these platforms; as alternatives for the in-person class tests and exams we had historically relied on. The internal arguments for and against these online assessment methods were often divergent and deeply contested. For some colleagues, online assessment represented what they saw as 'quick fix' solutions that did not align with their pedagogical beliefs. They were particularly concerned about the quality of the assessment themselves, and how they could guard against unethical practices. For us, we saw the online assessment practices as largely beneficial for, not only meeting the current Covid-restrictions on teaching and learning, but also enabling us to be creative and innovative in how we assess for understanding.

As mentioned earlier, South Africa is a deeply unequal country with racialized poverty, spatiality, access to safe (and conducive) shelter, connectivity, data, technology, and to food for a significant majority of the people (David et al., 2018; Hundenborn, Leibbrandt, & Woolard, 2018; Sarkodie & Adams, 2020). This racialized and structural inequality in the country manifests and is reflected in the higher education sector itself. As a result, we had to deal with what Mossberger, Tolbert, and Stansbury (2003), and Du Preez and Le Grange (2020) refer to as the 'virtual inequality' and 'digital divide' in our assessments, with a significant number of students struggling to have access to, and engage in the online teaching and learning, including performing some online assessments. We often had to call students who were in remote parts of the country, and who could not have access to and connect to a reliable telecommunication signals, to be able to take part either in teaching and learning, or assessments. One of the authors, who identify as a decolonial and social justice scholar, found himself calling students, constructing and keeping a database of those who did not participate in assessments, and trying to create alternative, physical assessments that could enable students to engage in the module with success. Most of these efforts proved futile as most of the students were largely residing in the rural areas that had little to no network connectivity, and did not have the money to come to campus and submit their work physically.

We agree with Sasere and Makhasane (2020) and Du Preez and Le Grange (2020) who pose questions on the uses of online teaching, learning and assessments methods, and the extent to which they enable or facilitate epistemological access to the higher education curriculum. While we reject Morrow's (2009) classical conception of epistemological access as being the *sole* responsibility of the student to read, engage with the curricula and ensure that they are *faithful* to an otherwise 'pure' and 'apolitical' discipline. We nonetheless believe that as academics in this Covid moment, we have struggled to facilitate and create the conditions for mutual dialogue and forums for debates or discussions/conversations that could have resulted in enhanced curriculum understanding in our respective modules. This struggle to facilitate and enable epistemological access results in some students struggling to finish the academic year, them having outstanding assessments, as well as them potentially delaying the completion of their qualifications.

One of the difficulties of online teaching and learning and attempting to assess whether the students understood the taught material, is the idea of rigour, quality assurance and what could be termed as academic integrity (Gamage et al., 2020; García-Peñalvo et al., 2021; Means & Neisler, 2021). We often reflected on and had Department meetings/seminars beginning in 2020, where we would share and collaborate with one another on different assessment practices we were adopting/piloting/experimenting with in our respective modules. We would often ask ourselves about the specific assessments we were constructing and designing, to what extent were they truly being performed/completed by the 'right' kind of students, and to what extent there was evidence of cheating and other unethical practices. Although Lee-Post and Hapke (2017) and Jamieson (2020) write about the challenges of academic integrity during online teaching and learning, and difficulties of monitoring and policing such measures, little to no practical evidence is provided to academics on how to tackle this challenge. The emergent practical solutions offered by scholars such as Lee-Post and Hapke (2017) appear to be software orientated, expensive and demanding further resources from the university/department. They write;

> As biometric technologies become more accurate and less costly, an authentication solution based on a unique aspect of who the user is and/or what the user does surely will replace the simplistic username and password scheme as a stronger proof of user identity, authenticity, and presence. Among the different biometric-based authentication solutions, fingerprinting is the most mature and proven technology for such purpose …Indeed, fingerprint biometrics has already been incorporated in Apple's iPhone 5 for user identification and authentication. It is only a matter of time before a computer's input device will have a

> built-in fingerprint reader. As learners use such devices to interact with the virtual learning environment, their fingerprint biometrics can be examined in a continuous fashion to perform presence authentication in a non-intrusive manner (Lee-Post & Hapke, 2017, p. 139).

The above biometrical solutions suggested by Lee-Post and Hapke (2017) as necessary as they may be, will not be suitable to our own individual context, as our students are largely Black working-class students, who live in rural, township or peri-urban areas in South Africa. Access to such sophisticated technological devices, data, network, and connectivity will be a monumental challenge, if the students are not on campus. Thus, we struggled to deal with the academic integrity issues in our assessments, and often relied on explicit forms of plagiarism that could be potentially captured by similarity software indexes, such as the Turnitin.

Some parting thoughts

The Covid-19 pandemic was, and to some extent continues to be, a disruptive force in the higher education sector, with teaching and learning being at the centre of this crisis. Roy's (2020) clarion call to see the pandemic as a portal, is useful in helping us, not only to reflect on our pandemic teaching and learning practices (and experiences), but also to re-imagine what socially just and democratic teaching would look like.

In this paper, we attempt to explore and theorize our own teaching and learning practices in an effort to 1) reflect on our pedagogic experiences during this challenging and disruptive moment, and 2) begin to re-imagine how teaching practices could look like for us in the future. We purposely chose to draw on three aspects of our teaching and learning; the pre-teaching phase, the actual teaching, and the assessment strategies and decisions. The central rationale for this discursive differentiation and segmentation was the absence of literature on the 'messy' and complex challenges of assembling/re-structuring large classes in a research-intensive university; and the administrative, logistical and curricula challenges that come with that process, in a relatively short period of time. Based on the above, we make the following recommendations.

- Roy's notion of the pandemic as a portal is a relatively new and recent concept. More research is still required to develop it as a conceptual framework that can enable analytical, theoretical, and conceptual application in future research.

- Higher education institutions need to better construct and introduce workshops, spaces, and forums dedicated to critical dialogue and conversations on online teaching and learning experiences. As academics, we often struggled with online learning, and were often forced to resort to 'corridor' and 'informal' conversations. These critical dialogues could potentially foster and help inform future university decisions on teaching and learning, and improve practice.

- Although peripheral, the complex challenges of academic integrity with online teaching and learning is gradually becoming an important theme in the literature on Covid teaching, and potential assessment practices. Future research could offer some practical, and financially feasible, solutions and ensure that there is rigour, quality assurance and integrity in the curricula.

- The pre-teaching, which is largely an administrative phase, is still under-researched in the teaching and learning literature. Future research could focus on it, as it is where academics decide how to design their curricula, the philosophical underpinnings of the curriculum, as well as what to include or exclude in their module(s). Apple (1971) refers to this as the site of the 'hidden curricula', with Bernstein (2000) calling it the site where ideology and politics reside. Thus, future research should explore to what extent our ethics, values, politics, and ideology play a role in curriculum design, in particular, during the pre-teaching phase.

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TEACHING IN THE TIME OF CRISIS: A DECOLONIAL TAKE OF MY EXPERIENCES OF ONLINE TEACHING AT A RURAL UNIVERSITY IN SOUTH AFRICA

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ABSTRACT

The spread of the 2019 novel coronavirus in South Africa, like in many parts of the world, has led to a sustained national lockdown meant to prevent the continued spread, as well as a potential resurgence of the virus. This meant all institutions of learning (higher and basic education institutions) were closed. Higher education institutions in South Africa were forced to adopt Emergency Remote Online Teaching and Learning (EROTL) Modalities to salvage what was left of the 2020 academic year. This was partly to avoid a systematic and institutional collapse of the education sector. Therefore, in this paper I reflect on the pedagogical difficulties and successes that I have encountered as a teacher-educator (lecturer) at a rural university in Limpopo Province, South Africa relating to the sudden, unprecedented, shift from face-to-face teaching and learning to EROTL. This I do by employing a decolonial framework underpinned by decolonial love as decoloniality, and a living theory methodology with action-reflection cycles as a method. I concluded, for instance, that for EROTL to be meaningful and impactful; university departments need to have a reliable institutional memory that would enable new academic staff members to know what was taught previously in a specific module or course allocated to them. Beyond this, as lecturers, we need to build solid relationships with our students that centre their interests, and these relationships need to be informed by decolonial love. This will enable us to meaningfully collaborate with them in our pursuit of a successful academic project that is transformative. We also need, in our pedagogical choices, to consider other online platforms such as WhatsApp, especially in managing larger classes.

Keywords: Covid-19; Decolonisation; Emergency Remote Online Teaching and Learning; Higher Education; Pedagogical Content Knowledge; Rural University.

INTRODUCTION

The current global pandemic caused by the coronavirus disease (COVID-19) was first reported on the 31st of December 2019 by the World Health Organization (WHO) after a cluster of pneumonia cases in the Wuhan City, Hubei Province of China[4] has fundamentally disrupted our way of life. The spread of the virus to other parts of the world, including South Africa, forced governments to lockdown their countries and institutions. These lockdowns were necessitated by some of the following reasons:

i. The absence of vaccination medicine to combat the spread of the virus;

ii. The need for citizens to self-quarantine and practice social and physical distancing to prevent the spread of the virus.

[4] This information was accessed from the National Institute of Communicable Diseases' (NICD) website. The NICD is "national public health institute of South Africa, providing reference microbiology, virology, epidemiology, surveillance and public health research to support the government's response to communicable disease threats." Their website link is: https://www.nicd.ac.za/

In South Africa, the national lockdown was announced by President Cyril Ramaphosa[5] on the 23rd of March 2020 under the Disaster Management Act 57 of 2002.[6] It was initially meant to commence at midnight on Thursday, March 26 until midnight on Thursday, April 16. However, this was later extended due to the rapid increase in the number of people getting infected by the virus and the need to contain its spread.[7] This move prompted universities to move towards Emergency Remote Online Teaching and Learning (EROTL) to complete the 2020 academic programme thus avoid a systematic and institutional collapse of the entire education sector. However, EROTL has placed lecturers and their students under great strain and pressure leading to deepened mental health issues amongst them (Godsell, 2020). This is partly to do with the fact that university managements adopted a business-as-usual approach in their operational logics and implementation of EROTL. They have seemingly ignored the fact that other basic imperatives needed to be in place first before they can implement EROTL.

Therefore, in this paper I reflect on the pedagogical difficulties and successes that I have encountered as a teacher-educator (lecturer) at a rural university in Limpopo Province, South Africa relating to the sudden, unprecedented, shift from face-to-face teaching and learning towards EROTL. I do this by firstly historicising the difference between a rural and urban university in contemporary South Africa. Secondly, I review the literature on the challenges and successes necessitated by the transition from face-to-face to online teaching and learning. Thirdly, I outline the theoretical and methodological tools I employed. Lastly, I reflect on my positionality as a teacher-educator at a rural university, and the pedagogical difficulties and successes I encountered having joined the rural university during the national lockdown from a historically white, well-resourced cosmopolitan university.

HISTORICISING A RURAL UNIVERSITY IN CONTEMPORARY SOUTH AFRICA

Contemporary South African higher education is profoundly shaped and structurally influenced by the history and legacy of colonial-apartheid[8] and a pervasive modernity/coloniality project (Badat and Sayed 2014; Badat, 2016; Ndlovu-Gatsheni, 2015, 2018ab). The adoption of the Extension of University Education Act 45, introduced in 1959 by the colonial-apartheid regime led by the National Party saw the establishment of various types of institutions of higher learning (IHL). These were based on racial, geographical location, and ethnic differences, i.e., historically white universities (HWUs) and historically black[9] universities (HBUs). The main reason for a differentiated higher education sector, especially the establishment of HBUs, "was overtly political and instrumental; they were not established because of an academic need for institutions of the kind they became" (Bunting, 2006, p. 46). In other words, they were established for the domestication and subjugation of Africans. This differentiation was also used to ensure and maintain the cultural hegemony

[5] Watch President Matamela Cyril Ramaphosa announcing the lockdown here: https://www.youtube.com/watch?v=LegaUR1A0Jg

[6] South Africa's initial national lockdown regulations can be accessed in various national department website. However, it should be noted that these regulations were amended by various departments based on their departmental mandates.

[7] President Cyril Ramaphosa's speech on measures to contain Coronavirus and the extension of the National lockdown can be accessed here: https://www.gov.za/speeches/president-cyril-ramaphosa-extension-coronavirus-covid-19-lockdown-end-april-9-apr-2020-0000.

[8] I frame colonialism and apartheid as an inseparable enterprise because they are fundamentally and ideologically the same. That is, they are two sides of the same coin.

[9] Black in the context of this paper is used within its Black Consciousness conceptualisation. That is, with reference to Africans, Coloureds and Indians who were oppressed under colonial-apartheid.

of the dominant group, i.e., white people (Bourdieu, 2011). Additionally, they were also used as a manipulation of the economic system and its structures to ensure and maintain the economic reproduction of the status quo (Bunting, 2006; Muthama and Mckenna, 2017). According to Muthama and Mckenna:

> Ten HBUs were established which were classified into three broad groups based on geographical location and the ethnic population they were designed to serve (Education Policy Unit, University of Western Cape, 1997). The first group comprised six rural universities: University of Zululand; a campus of the University of the North, established in QwaQwa; the University of Fort Hare (that existed before apartheid but was then designated for the Xhosa population), which became the homeland institution for Ciskei (Subotzky, 1997; Department of Higher Education and Training, 2013); and three universities found within "independent homelands" – University of Transkei; University of Bophuthatswana, and University of Venda (Subotzky, 1997; DHET, 2013). The second group comprised two urban universities, University of the Western Cape for 'Coloured' people, situated in Cape Town, and the University of Durban-Westville for 'Indians' in KwaZulu Natal. The last group comprised two specialist institutions, the Medical University of South Africa (MEDUNSA) which was established in response to demand for medical care for the black population, and Vista University, which was established to offer teacher education through seven satellite campuses across the country (Subotzky, 1997; DHET, 2013). (Muthama and Mckenna, 2017, p. 130)

All these institutions were controlled by eight different government departments (Bunting, 2006). This differentiated approach meant that the colonial-apartheid regime was able to further justify, legalise, maintain, and perpetuate inequalities and injustices that existed between Africans and whites. Therefore, in terms of IHL, this differentiated approach meant that the colonial-apartheid regime was able to discriminate against HBUs in terms of funding, networking opportunities, autonomy, infrastructure development, research, and postgraduate studies development (Muthama and Mckenna, 2017).

The legacy of this differentiated approach is still very much alive in contemporary South Africa's higher education sector. This is despite the 1996 liberal Constitution[10] and the Green and White Papers of 1997[11] on higher education which resulted in the Higher Education Act 101 of 1997, promising a somewhat uniform higher education sector. This was vividly exposed, first, by student protests post-1994 especially the 2015-6 #MustFall student protests (see: Badat, 2016, 2017; Nyamnjoh, 2016ab; Heleta, 2016, 2018; Hlatshwayo & Shawa, 2020; Mazibuko, 2020). What was interesting about the 2015-6 student protests was the unbalanced media coverage and unbalanced government response to student demands. In other words, mainstream media appeared to only cover student protests when they were taking place in HWUs.[12] Thus, further reinforcing the unearned privilege that those institutions continue to enjoy to this day. The government response is also worrisome. Students from HBUs have been protesting the lack of transformation, infrastructure and so on in their respective

[10] Section 29(1) of the 1996 Liberal Constitution provides: "Everyone has the right (a) to a basic education, including adult basic education, and (b) to further education, which the state through reasonable measures, must make progressively available and accessible."

[11] These papers frame higher education as a social institution that functions to redress historical injustices.

[12] See: *History of South African student protests reflects inequality's grip''*, by Nuraan Davids (Senior Lecturer in Philosophy of Education, Stellenbosch University)., and Yusef Waghid (Distinguished Professor of Philosophy of Education, Stellenbosch University) at: https://theconversation.com/history-of-south-african-student-protests-reflects-inequalitys-grip-66279

institutions since the dawn of democracy. Yet, their demands are either met with perpetual silence or systemic state-sponsored violence. However, when similar demands are made by students from HWUs, the government appears to be *proactive* instead of *reactive* in their response to the crisis in higher education.[13]

Secondly, the coronavirus pandemic also vividly exposed these inequalities and injustices. The fact that HBUs battled in completing the academic year in 2020 due to limited resources, lack of adequate infrastructure, less to no private dominations, less to no expertise, etc., was partly informed by the historical inequalities and injustices discussed and the pervasive modernity/coloniality project. Many, if not all, completed their 2020 academic year in between the second and fourth months of 2021, while HWUs managed to complete their 2020 academic year in late December 2020.

Thirdly, the inequalities and injustices that exist between HBUs and HWUs are also because of the *digital divide*, *inequality*, and *marginality* that can be historicised. Charp describes the digital divide merely as:

> …the gap in technology ownership and access between those who are affluent and those who are poor or live in rural areas with limited or no access to the internet. (Charp, 2001, np)

The State, the private sector, and HBU managements attempted to remedy the situation by loaning various technological devices and allocating about thirty gigabytes in mobile data to each student per month. This with the view of aiding students online learning by making sure that they had access to various online teaching and learning platforms. This was simply not enough because, beyond access to technological devices, mobile data and online teaching and learning platforms; real access is access that makes it easier and possible for anyone to use the said resources in ways that are effective and meaningful to their learning and teaching.

Lastly, many of the students that HBUs educate are from rural and township communities situated in countries that make up the Southern African Development Community (SADC). Most of these communities are yet to be electrified or have reliable internet connectivity. Hence, universities such as the University of Limpopo (UL) were forced to repatriate[14] some of its students to make sure that they complete their 2020 academic year. This came at a huge cost for these institutions because these are funds that they did not have or budgeted for. Moreover, unlike HWUs, these institutions do not receive significant additional funds in the form of private donations.

EMERGENCY REMOTE ONLINE TEACHING AND LEARNING DURING UNPRECEDENTED TIMES

Beyond the many crises that universities in contemporary South Africa are experiencing such as institutional racism, knowledge production politics, and modernity/coloniality (Fataar, 2017, 2018; Khunou *et al*, 2019). For Hlatshwayo, with whom I fully agree, "teaching and learning are arguably central" (Hlatshwayo (2020, p. 143). This is because "universities have begun to conceptualise teaching and learning as the 'dumping' of curriculum material online in an attempt to salvage what [was] increasingly becoming a lost academic year [reference to 2020 academic year]" (Hlatshwayo, 2020, p. 143), and the avoidance of systematic and institutional collapse moving forward. This

[13] See Langa, M. (Ed.) (2018) #Hashtag: *An analysis of the #FeesMustFall Movement at South African universities*. Centre for the Study of Violence and Reconciliation, Johannesburg.

[14] A Repatriation Task Team was set up by the University https://www.ul.ac.za/index.php?Entity=c_news&TheS=541

is informed by the business-as-usual approach adopted by universities to re-establish and project 'normalcy' in unnormal times. This has brought about numerous challenges and successes.

Firstly, despite the oversold *blended learning* approach[15] by universities, teaching and learning in the new normal has been reduced to mere *uploading* of learning materials and recorded lectures online (ibid). What Godsell (2020, p. 117) calls "a space of delivering a disembodied script-like curriculum". Thus, in many respects, both students and lecturers were and are denied the opportunity to engage in effective and meaningful teaching and learning sessions. These sessions are usually underpinned by effective and meaningful dialogue between *student-to-student, student-to-lecturer,* and *lecturer-to-student* in real-time. These dialogues usually enact and inspire deeper intellectual thought, as well as enable all parties to determine each other's emotions, which is somewhat limited in online teaching and learning situations. This denial is informed by many disruptions (see Hlatshwayo (2020) *on other disruptions*). But the most central disruption is the business-as-usual approach adopted by universities, because "it forfeits the social justice and critical engagement agenda that is often required when teaching and learning is concerned" (Hlatshwayo, 2020, p. 143). Hence, Maringe asserts that:

> First is the fact that both staff and students do not quite know how to conduct university business in the distance mode. There is a vast and complex scholarship of distance learning, which traditional universities are not quite up to speed with (Guardia, 2016). Mere posting of teaching and learning materials on platforms such as SAKAI without the underpinning pedagogies is likely to negatively affect both the quality and effectiveness of students learning. Secondly, the transition to online learning is often thought of as a cheaper option. There is a significant amount of human resource and technological support needed to sustain meaningful online learning (Bates, 2016). The initial costs of setting up effective online education are quite substantial, and many universities will not have budgeted for this in the current academic year. The tendency will be to turn to cheaper online options which may negatively influence both quality and effectiveness. (Maringe, 2020, np)

However, what is not said here is that this is not the reality of all students and lecturers in South Africa. In some cases, *blended learning* has been used and it is working. Thus, in these cases effective teaching and learning take place. But, my sense, having reflected on this issue with some of my colleagues from other institutions of higher learning especially in HBUs; what I am describing above is their reality too. As Hlatshwayo argues:

> if we are not careful, our pace and speed to get everything online could potentially lead to the unintended consequences of reinforcing technological and virtual inequality, marginality, and exclusion in society. This can result in millions of Black working-class students being socially construed as the *natives of nowhere*, locked out of the online curricula and forced to stay longer in the academy as a result of failing to meet the demands of assessment and risking academic exclusion. We need to rethink teaching and learning during the time of a pandemic. (Hlatshwayo, 2020, p. 144-5)

Secondly, the lack of online Pedagogical Content Knowledge (PCK)

[15] University Managements proposed blended learning (refers to the use of both online and face-to-face teaching simultaneously) as one of the pedagogical approaches that academics and students can be engaged with during this deadly pandemic. However, given the many restrictions of people gathering in one space by the State. This approach was never really implemented in many respects. Thus, majority of the university programmes were done online.

from many lecturers has proven to be a constrain to online teaching and learning. This is because understood in its traditional sense, PCK refers to "the blending of content knowledge, knowledge of learners [and students] and their context and general pedagogical knowledge into representations that are "pedagogically powerful and yet adaptive to the variations in ability and background presented by [learners and students]" (Shulman1987b, p. 102)" (Rusznynak and Walton, 2011, p. 272). Moreover, to aid this PCK, Vygotskian principles of the *Zone of Proximal Development* (ZPD) and *scaffolding*, which speak to the difference between what a learner or student can do without help and what they can do with help in a teaching-learning situation ought to be considered (Maluleka, 2018). Thus, PCK for online learning and teaching has been reduced to the mere *uploading* of learning materials online. When it should include "…technical and administrative aspects of teaching online (e.g., respectively, using platforms and tools and organizing workflows). More significantly, it [should] include the pedagogical foundations and knowledge of principles needed to design for, and facilitate, meaningful online learning experiences" (Rapanta, Botturi, Goodyear, Guàrdia, and Koole, 2020, p. 924). Additionally, this requires lecturers, in their pedagogical choices, to be aware of the fact that online teaching and learning means that teaching in a divided world characterised by multiple realities (access to smart devices and data, rurality versus urbanity etc.) that in turn have a bearing on their teaching.

Similar experiences of online teaching and learning are found in the United States of America and elsewhere around the world (Conaway, Eston, & Schmit, 2005; Bassoppo-Moyo, 2006; Limperos, *et al*., 2015; Kebritchi, Lipschuetz, and Santiague, 2017). Therefore, what this says is that the challenges that we are experiencing in contemporary South Africa are not unique to us. Thus, there needs to be a coordinated effort at a global, national, as well as individual university level to overcome this crisis.

A DECOLONIAL FRAMEWORK AND LIVING THEORY METHODOLOGY

The paper builds on a decolonial framework that considers the higher education sector in the so-called "postcolonial situations" as one site of many to which its project can be advanced and realised. This is because of the persistent and pervasive coloniality project that continues to reproduce the varied inequalities and injustices that exist in South Africa's higher education sector. Hence, the lingering legacy of the Extension of University Education Act, Act 45 of 1959 as discussed above.

Coloniality is the *underside* or *darker side* of Euro-north Americentric modernity that is often hidden and should be unveiled or unmasked (Quijano, 2000; Maldonado-Torres, 2008; Mignolo, 2009). Maldonado-Torres emphasises that coloniality:

> … survives colonialism. It is maintained alive in books, in the criteria for academic performance, in cultural patterns, in common sense, in the self-image of peoples, in aspirations of self, and so many other aspects of our modern experience. In a way, as modern subjects, we breathe coloniality all the time and every day. (Maldonado-Torres, 2007, p. 243)

All institutions of learning (schools, colleges, and universities), as well as the interplay of several institutional dimensions, namely, capitalism, industrialism, surveillance and information control of the nation-state, and development of military power continually reproduce coloniality. i.e., coloniality of

power, knowledge and being (Ndlovu-Gatsheni, 2018ab). Therefore, there is a need to disrupt it to address inequalities and injustices that exist in higher education.

One of the ways of disrupting coloniality and addressing inequalities and injustices that exist in higher education is through the spreading and embracement of *decolonial love as decoloniality*, which is a critique of the formative relationship between the coloniality of power, knowledge and being (see Maldonado-Torres, 2007). Sandoval (2000) and Maldonado-Torres (2008) have since theorised about the need for decolonial love. For Sandoval, decolonial love is the kind of love that demands one to recognise and affirm others' humanity in its wholeness despite our differences. This kind of love is informed and shaped by a *decolonial attitude*.[16] Similarly, Maldonado-Torres (2008, p. 187) asserts that this love recognises "alliance[s] and affection across lines of difference.". It is thus "the humanizing task of building a world in which genuine ethical relations become the norm and not the exception." This means, lecturers in their pedagogical choices, need to recognise past inequities and injustices that inform and shape the students they work with. Beyond this, decolonial love demands lecturers and students too, to work towards a transformative future that transcends coloniality and its power matrix. This transformative work needs to be underpinned by kindness, dignity, sharing, co-responsibility, humaneness, social justice, affinity, and generosity, i.e., *ubuntu*.

Methodologically, I have adopted the Living Theory Methodological Framework (Whitehead, 2008). The living theory is a disciplined process of critical self-reflection. That is, a process of "turning back onto a self'' where I am "at once an observed and an active observer" (Steier, 1995, p. 163; Mortar, 2015, p. 1). The process is a personal and self-oriented activity that entails "inquiring into the self by the self; thinking about one's own life and work as a practitioner so that one can continue developing oneself, one's work; that of others and by so doing make significant contributions in one's work and society" (Ndille, 2018, p. 93). In other words, this disciplined process or activity is informed by decolonial love because it requires a complete change in our way of seeing and interacting with *the self*, each other, and the world around us. This complete change can only take place if we first start by decolonising *the self*. This can only happen if we embrace critical self-reflection. This means incessant critical self-reflection on our attitudes and reactions towards the many perpetual inequalities and injustices that continue to negatively affect African students[17] in institutions of higher learning, especially in South Africa. This is a critical scholarly exercise underpinned by compassion, love, care, solidarity, and never-ending self-reflection and self-critique that can in turn make one recognise and appreciate not only the many injustices and inequalities that exist. But also, how one, in their little corner, can work towards easing the pain, suffering, hopelessness and the alienation that African students continue to experience even though one's actions can and might be a direct contrast to the powers that might be. Thus, in turn, lands one into trouble. However, this is the risk that one ought to take if one is truly on the side of the oppressed.

The research method that informs this paper is what Whitehead (2008, p. 107) calls "action-reflection cycles". This

[16] A decolonial attitude is human quality which informs and shapes a "new ethics beyond coloniality," and is an "expression of an ethical subjectivity that defines and positions itself in a way that promotes decolonization and re-imagines human relationships" (Maldonado-Torres, 2006, p. 242).

[17] By African students I am referring to mainly Black working-class students who continue to be negatively affected by the legacy of colonial-apartheid.

method is informed by a research question that asks: "How do I, *as an individual*, improve what I am doing?" (ibid; italics own emphasis). This research method enables one to critically self-introspect about their practice and the choices they make. This is done with the view of meaningfully improving one's practice, as well as improving students understanding of the knowledge rendered.

TEACHING IN THE TIME OF CRISIS: REFLECTIONS OF MY PEDAGOGICAL DIFFICULTIES AND SUCCESSES AT A RURAL UNIVERSITY IN SOUTH AFRICA

Before reflecting on the pedagogical difficulties and successes I have encountered since the beginning of this global pandemic. It is worth mentioning that I am a teacher-educator (lecturer) at the UL – School of Education (formerly, University College of the North). It is located about thirty kilometres outside the City of Polokwane, Limpopo Province, South Africa. During colonial-apartheid, UL was one of many sites of revolutionary resistance, intellectually and otherwise. The institution educated the likes of Abram Onkgopotse Tiro[18] and other young militant revolutionaries of the day (Tiro, 2019).

On the 1st of January 2005, the University College of the North was merged with the MEDUNSA to form UL. This merger, like many other mergers in the higher education in contemporary South Africa, was meant to reconfigure higher education institutions "according to *type* and *mission culture* (programmatic differentiation) and involved name changing in some instances to dissipate the erstwhile eminence of geopolitical engineering (Bunting 2006, p.59)" (Baloyi and Naidoo, 2016, p.22). UL's vision as it stands reads:

> To be a leading African University focused on the developmental needs of its communities and epitomising academic excellence and innovativeness.[19]

I joined UL in September of 2020 from the University of the Witwatersrand (WITS). UL and WITS are true reflections of HBUs and HWUs respectively. My transitioning from one to the other was not easy at all given the different realities of both institutions, coupled with the fact that while trying to settle in a new city; I am still in the process of writing and finalising my doctoral thesis. Therefore, the first obstacle I experienced after joining UL was the lack of *institutional memory*, at least at the departmental level. This is important to build for any institution of higher learning that takes the academic project seriously. The lack of this institutional memory negatively impacted my pedagogical choices. This is because one of the courses I was asked to teach had no paperwork whatsoever. Under 'normal circumstances' this paperwork was supposed to be handed over to me to see what was taught in the course before. This would have enabled me to familiarise myself with the content, aims, objectives, and intended learning outcomes of the course. It would have also enabled me to assess if the entire course needs improvement or I can continue with what was previously taught. To make matter worse, this was a course that I have never taught before; and had no training in it during my undergraduate years. All of this made me question *what*, *how*, and by *whom* was the course taught years before me. Was this course even taught or were previous students just given marks to proceed? I wondered. The questions I asked myself are consistent with the action-reflection cycles research method

[18] Tiro was a young militant student activist of his time. He was a was a Black Consciousness Movement and South African Students' Organisation member with Bantu S. Biko.

[19] UL's vision retrieved from: https://www.ul.ac.za/index.php?Entity=ul_mis_vis#start.

adopted. It is also consistent with decolonial love because in loving what you do and the students you teach; you continuously need to ask yourself *what* knowledge and *whose* knowledge is legitimated or not within the disciplines you teach and *why*?

However, with the help of a former colleague, Dr Rene Ferguson[20] a specialist in the course, I managed to build a new course altogether. The new course was thus rendered to students two weeks after the course was scheduled to start. It was underpinned by an inclusive decolonial approach to knowledge that sought to recentre African knowledge forms in the curriculum (Fataar, 2017). In the midst of all of this, some students enrolled in this course made available previous examination papers and asked if I can build a course out of that. These were students who were not going to graduate in 2021 had they not completed the course. However, knowing the kind of work that one needs to do to produce a thought-provoking course. That is, the complex nature of curriculum knowledge building and structuring (see Bernstein, 1996, 1999; Maton, 2014). I politely rejected these suggestions from students and engaged my former colleague. This was not meant to undermine contributions by students in any way, as decolonial love requires the need to recentre students as equal contributors to any academic project. Rather, the rejection was based on the need to first establish a sound course founded on disciplinarity traditions that would in turn allow for contributions by students to be more meaningful. This was a decision I took also considering that not all contributions can coherently be included in the curriculum. In the end, the course was taught successfully, and the students passed satisfactorily with some stating that they enjoyed the course.[21] However, my sense of this process, having critically evaluated myself, is that both myself and the students were in many instances assessment-driven "…rather than doing work to learn for the sake of learning and becoming good teachers" (Godsell, 2020, p. 119). This assessment-driven approach led to the Minister of Higher Education, Science and Innovation, Dr Blade Nzimande stating that "*University students getting better marks during Covid-19 than in past years*" (media emphasis).[22]

The other pedagogical difficulties I encountered included the teaching and learning platform that UL is using called, *Blackboard*. This platform was new to me because previously I used a platform called *Sakai* that my previous university, Wits, used in 2020. At first, I found it difficult to navigate and effectively use the platform even after attending few online training sessions on it. This was the sense that I got from students, because before Covid-19 the platform was merely used for uploading materials not so much for teaching and learning. However, with the help of certain colleagues, I managed to know my way around the platform quickly and thus used it effectively – to teach my courses. Therefore, apart from the data and network issues that students experienced, as well as access to smart devices, those students who managed to log in were exposed to a somewhat engaging pedagogical experience. This is because Blackboard has functions such as the *chatroom* and *messaging* that myself and the students somewhat effectively used to engage on numerous issues related to our courses. For those students, who were unable to log in during scheduled time for whatever reason; all the sessions I had were recorded and immediately *uploaded*

[20] Dr Rene Ferguson is my former colleague and head of the Social and Economic Sciences Division at Wits School of Education.

[21] This is based on feedback from several students conveyed to me.

[22] Retrieved from https://www.news24.com/news24/southafrica/news/university-students-getting-better-marks-better-during-covid-19-than-in-past-years-nzimande-20201126.

for them to access at their convenience. This also included the exchanges that took place in the *chatroom* and *messaging* functions. Another useful function was the *announcement* function. I used it to either remind students of their next lecture, test, assignment, or the need to work on the tutorial activities.

Over and above this, *WhatsApp* proved to be a useful pedagogical tool. Unlike the WITS School of Education; UL's School of Education, at least in my department, does not make use of tutors because they do not have a well-established cohort of graduate students to assist with tutoring; and the fact that we are short-staffed is not helping either. Another reason might also be the financial constraints that the institution finds itself in. So, one had to think of innovative ways to engage students beyond the timetabled lecture times to make up for what could 'normally' be tutoring periods. That is where WhatsApp comes in. I employed WhatsApp because I wanted to create conditions conducive to engaging students who have felt alienated from the university due to pervasive modernity/coloniality. This I believe was a show of decolonial love, in that, I employed a platform that was not consistent with university rules on teaching and learning platforms to make sure that all students were meaningfully part of the academic project (Bernstein, 1996).

So, to make up for this very important academic experience (tutorials), through elected Class Representatives, we created WhatsApp groups that worked as tutorial groups. Each group was administered by an elected class representative. Students were allocated a group based on the sequence they appeared in the class list. For instance, number one to thirty on the class list would make a single tutorial group. I was only a member of one group that included all class representatives. This is because there were just too many groups. For instance, in one course that I was teaching, I had over 750 students enrolled. So, if thirty was the standard number to make up a tutorial group; it meant in that course alone we had twenty-five tutorial groups. These groups worked as sites where students could meaningfully contribute to the academic project.

In the specific group that I was a member of, the class representatives shared with me the experiences and concerns that the students had especially relating to the administrative aspects of the course, as well as the academic features. I would in turn share with them information on all these aspects for them to immediately share in their groups. I would also share with them tutorial activities that they shared in their groups. All this information I communicated in my online lectures as well. Thus, the effectiveness of this method came through the online lectures I had and how the students engaged. Their engagement through the *chatroom* and *messaging* functions would also reflect if they either got the information I shared through their elected class representatives or whether they did what they were supposed to do as individual students or not.

The creation of these tutorial groups was not only crucial in getting some work done. It was also informed and shaped by Freirian concepts of *dialogic exploration*, *self-reflection*, *action*, and *more reflection* (praxis) and ideas of *humanisation* and *conscientisation* (Freire, 1996), as well as *collectivity* and *vulnerability* (hooks, 1994). All of which are consistent with decolonial love and Living Theory Methodological Framework. However, as argued by Godsell[23] who I completely approve of:

[23] Dr Sarah Godsell is a lecturer at WITS School of Education, and a former colleague of mine. We worked in the same department while I was still at WITS.

These are all practices that require an extensive and extended relationship with students. It is very hard to build this relationship online, so where these functioned, when they did, it was because of a strong foundation that we had built in the class. (Godsell, 2020, p. 118)

The difference with me is that I did not have the opportunity to build an extensive and extended relationship with my students at UL in person. I have never met any student I teach at UL to date in person due to Covid-19. So, the relationship we built online was successful because of the decolonial love that I showed them through my teaching and the way I engage with them even after working hours and weekends. This I did, not because I needed some form of recognition or accolades. I did because decolonial love as underpinned by the philosophy of *ubuntu* requires one, in their pedagogical choices, as well as epistemological and assessments choices, to think of the kind of impact (is the impact positive, encouraging, engaging, or building? Or it is just negative and regressive?) their choices would have on the end receiver, in this case, the students.

Secondly, this was done with a bigger goal in mind. That is, working towards educating initial teacher-training students that would later become exceptional teachers/educators that would, in turn, work towards the betterment and benefit of the entire South African community. This is what Kenyan writer and novelist, Ngũgĩ wa Thiong'o., and Nigerian writer and novelist, Chinua Achebe, in their literary work stress. The need for, and importance of *collective effort* in dismantling the coloniality/modernity project that is embedded and flourishes in all aspects of our lives for the betterment and benefit of everyone. In their respective texts, Achebe in *Things Fall Apart* (1958), as well as wa Thiong'o in *Weep not, child* (1964); *The River Between* (1965) and *A Grain of Wheat* (1967) reiterate the need for a stable centre that holds a family together. This would then translate into a community and then an entire nation coming together under a common purpose and vision.

CONCLUSION AND RECOMMENDATIONS

As the coronavirus disease continues to disrupt our lives and ways of living. It also forces us not only to coexist with it; but to also *re*imagine higher education and the different ways we get to teach, learn, assess. In this paper, I have critically reflected on my positionality as a teacher-educator at a rural university in South Africa, and the pedagogical difficulties and successes I encountered having joined the university during the national lockdown in South Africa from a historically white, well-resourced cosmopolitan university. Over and above this, I argue that there is a need for all involved in higher education to *re*imagine how we do things to avoid leaving behind millions of students, especially the African students in our country that are already disadvantaged due to the legacy of colonial-apartheid (Hlatshwayo, 2020).

Therefore, for lecturers, this means acquiring the necessary PCK for online teaching, as well as having a curricular that stimulates critical engagements amongst students whilst at the same time negotiating and navigating the 'new normal' for survival.[24] At the heart of this, is the need for decolonial interventions that many students and progressive staff (academic, support, administrative etc.) in many universities especially in the global South have been calling for before this global pandemic (Ngcobozi, 2015;

[24] Numerous studies have been conducted about the lack of and need for online pedagogical content knowledge (As a start, see: Godsell (2020)., Hlatshwayo (2021)., and Dube, M. C (2020) *Online learning challenges postgraduate certificate in education History students faced during COVID-19 at the University of Zululand).*

Maxwele, 2016; Klein and Jenkins 2018; Ndlovu-Gatsheni 2017; Ruddock 2018; Hlatshwayo and Shawa, 2020). These decolonial interventions go beyond challenging the continuing epistemic inequalities and injustices that exist in all universities of the world, and not just universities in the global South. They are also concerned with making sure that we *re*imagine and work towards a higher education sector that does not see students and staff as disposables that can be replaced at any time. Hence, the adopted business-as-usual approach alluded to earlier. But sees these important stakeholders as human beings before anything else. In this way, any change in the operational logic of a university would be underpinned by ethics and values of *ubuntu*, *Afrikan humanness*, *decolonial humanism*, and decolonial love (Maldonado-Torres, 2008; Badat 2017; Heleta 2016). This is because ubuntu just like Afrikan humanness, decolonial humanism, and decolonial love is well captured by the Nguni maxim *Umuntu ngumuntu ngabantu* (I am because of who we all are), meaning "to be a human being is to affirm one's humanity by recognising the humanity of others and, on that basis, establish humane relations with them" (Nxumalo and Mncube, 2018).

For students, this means meaningfully engaging and learning in the new normal.[25] That is, being taught in meaningful ways that would enable them to meaningfully negotiate, navigate and engage with the three dialectical purposes of education in any society as proposed by Biesta (2009). This means, firstly, students being able to obtain qualifications they enrolled for (Hlatshwayo, 2020). However, this does not mean obtaining a qualification for the sake of it. In my view, it means obtaining the qualification having acquired all the necessary skills, knowledge, and competencies embedded within, and espoused by the said qualification. The second purpose of education speaks to the need to socialise students into common national norms, values, and beliefs. In South Africa's case, this means the socialisation of students into those common national norms, values, and beliefs as articulated in, and envisaged by the democratic liberal constitution adopted in 1996 to better equip them with the necessary cultural and social capital for the real world (Biesta, 2009; Bourdieu, 2011). The third purpose of education speaks to the 'subjectification' of students into the so-called 21st-century skills (Biesta, 2009: Hlatshwayo, 2020). These include critical thinking, reading, and writing; creativity; collaboration; communication; information literacy; media literacy; technology literacy; flexibility; leadership; initiative; productivity; and social skills.[26]

For university management, this means devising operational logics that would create an enabling environment for both lecturers, administrative staff, and students to take the academic project forward in meaningful and impactful ways.[27] This includes re-budgeting their finances to meaningfully respond to the needs of both lecturers, administrative staff, and students. Moreover, this also means doing more (beyond paying lip service) to socially and emotionally support both students and lecturers given the increasing suicidal cases due to mental

[25] Again, there are numerous studies (as a start, see: Chisadza *et al* (2021) *Online and face-to-face learning: Evidence from students' performance during the Covid-19 pandemic.*, and Mpungose, C (2020) *Emergent transition from face-to-face to online learning in a South African University in the context of the Coronavirus pandemic*), about the education void students have gained as a result of the pandemic and ways in which we, as lecturers, can practically work with students to fill that void.

[26] Beyond just uploading materials that students are expected to engage with. We need to create materials that incorporate those skills (see: Hlatshwayo, 2020).

[27] More than 300 academics across South African universities have rejected claims by university managements and the state that the 2020 academic year has been a success for universities, lecturers, and students. See interview with Professor Noor Nieftagodien (WITS) on this issue: https://www.youtube.com/watch?v=BVSfupENd1g.

health-related issues, especially amongst the students.[28]

For the State, especially in South Africa, this means instead of cutting the higher education budget.[29] There needs to be an increase because the cutting of the higher education budget perpetuates not only the historical inequalities and injustices mentioned above.[30] It also limits universities from effectively, impactfully, and meaningfully doing what they are expected to do as mandated by the constitution of the country. Moreover, the State should do more in supporting universities in their work towards dealing with and managing mental health-related issues that are prevalent amongst students and lecturers.

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[28] There has been reported cases of suicidal cases due to mental health-related issues, especially amongst the students in our universities with Student Representative Councils blaming universities for not doing enough to address mental health issues (see: *IOL* https://www.iol.co.za/sundayindependent/news/tragedy-grips-wits-university-after-three-suicides-in-three-weeks-92baad28-6cdd-4c12-a8fb-c41851e037c0.,

[29] The Department of Higher Education in South Africa had their budget being cut by almost 10 billion South African Rands for the year 2020/21. This is because the government claims to have moved to address the fiscal damage caused by ongoing corruption and Covid-19 pandemic by adopting a Austerity budget. Access Minister Tito Mboweni's 2021 Budget Speech, here: https://www.gov.za/speeches/minister-tito-mboweni-2021-budget-speech-24-feb-2021-0000.

[30] Statistics South Africa has over years reported on the decline of state funding for higher education (see http://www.statssa.gov.za/?p=13719 and http://www.sun.ac.za/english/news-media/latest-news/student-fees/education-sector-funding). Universities South Africa (A body of all vice-chancellors of public universities) has also reported on this issue for many years (see: https://www.newssite.co.za/dhen/crisis-student-funding-2021.pdf).

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TOWARDS AN EVIDENCE-BASED MULTIMODAL MENTAL HEALTH INTERVENTION FRAMEWORK FOR RURAL SOUTH AFRICAN UNIVERSITY STUDENTS

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ABSTRACT

Higher education institutions of learning are entrusted with the important role of educating their nation, especially the youth. Amid the advent of the COVID-19 pandemic, the traditional role of universities has been disrupted, and how long this disruption will last is uncertain. Considering this reality, we hypothesised that the psychological well-being of university community members has been negatively impacted. This study sought to establish the psychological impact of the COVID-19 pandemic and develop a contextually evidence-based psychological programme to mitigate the effects of COVID-19 on students. We adopted a convergent parallel mixed methods research (MMR) design and administered an online survey to all students in the university. In total, 313 students participated in the quantitative portion of the study, whereas 229 completed the qualitative part. The study revealed that students predominately experienced anxiety and depression. We also found that students exhibited feelings of isolation, boredom, loneliness and confined as a result of the change of routines. This caused the students to learn to adapt and cope with new ways of engaging with their studies. We therefore propose a customised COVID-19 mental health framework to be instituted and offered to students.

Keywords: Mental health, COVID-19, Intervention model, Rural university students, Psychological impact, Psychological services

INTRODUCTION

This article was written almost two years after the novel coronavirus infection, commonly known as COVID-19, was declared a public health hazard of global proportions. Since the declaration of the virus as a pandemic agent of disease by the World Health Organization in February 2020, research has revealed its negative physical and mental health outcomes. Initially, most studies focused on healthcare workers (Wang et al., 2020), in-patients (Cagnin et al., 2020) and the general public (Rahman, Muralidharan, Quazi, Saleem, & Khan, 2020; Sood, 2020). However, there has been a paucity of research paying attention to the student population in higher education (HE) communities, and specifically those located in rural communities. Estimates have suggested that about 200 million learners have since been out of school in Africa (UNESCO, 2020). In South Africa, more than 1.1 million students in HE institutions continue to be affected by the

disease (Mahaye, 2020). Although South Africa's Department of Higher Education and Training (DHET) continues to advise HE institutions on strategies for the management and running of academic programmes during the pandemic, little of the advice is contextually relevant particularly to institutions located in rural areas. Most of the suggested intervention strategies are not informed by the realities faced by students located in rural institutions (Dube, 2020). Thus, the current study aimed to assess and establish the mental health impact of COVID-19 in a rural university in South Africa, and to propose an intervention model for such students.

BACKROUND LITERATURE

Mental health of university students following COVID-19 lockdown

During the incidence of COVID-19, most students became uncertain about their future. As a result, their worry triggered the onset on mental illnesses such as anxiety and depression (Cao et al., 2020). In the study by Cao et al. (2020), 24.9% of college students presented with anxiety symptoms which were related to their studies, remote learning and their future. In addition to anxiety, it was also found that students presented with the symptoms of psychological stress and depression that emanated from lack of support, especially from their institutions (Islam, Sujan, Tasnim, Sikder, Potenza, & Van Os, 2020). At that time most of the institutions were not yet organised to cope with the interruptions on campus; moreover, and according to Zhao, Li, Liu, Zhu, Ma, and Wang (2020), 37% of the students in their study presented with symptoms of depression. Although there were counselling services at some of these tertiary education institutions, during COVID-19 lockdown, some of these centres were completely closed. With this pandemic, most of the students were lonely and confused. As a result, they needed regular and compassionate communication from their institutions (Islam, et al., 2020; Makgahlela, Mothiba, Mokwena, & Mphekgwana, 2021). For them, the need for such interaction was perceived as a reassurance, especially for those students who were confused, frustrated and not coping with multiple psychological stressors.

Lack of resources

Amongst other things that triggered and exacerbated psychological distress were problems that some students experienced with accessing the internet and connecting their electronic devices. Their levels of anxiety were heightened because they believed that they were being left behind and would be penalised for not attending classes. In addition, Adarkwah (2021) indicated that lack of resources, such as laptops or computers, exacerbated their condition. In normal circumstances, most of these students rely on university equipment (such as computers) to carry out their academic assignments. Therefore, lack of these essentials took a toll on them because some felt helpless and hopeless. It was in this regard that they saw a bleak future for themselves since they believed that they were unable to keep up with their classmates (Rallis & Allen-Tejerina, 2020). Hence, Ghazawy et al. (2020) emphasised that, "these symptoms arose because of various factors including the uncertainty about the future". Generally, most rural students are reported to be struggling to cope with remote learning (Dube, 2020) and are vulnerable to mental health problems (McFayden, Breaux, Bertollo, Cummings, & Ollendick 2021).

Academic challenges

Globally, it is a challenge to keep students on track during learning conducted remotely such as that brought about by the need for social distancing to

mitigate the effects of the pandemic (Czerniewicz et al., 2020; Bozkurt et al., 2020; Favale, Soro, Trevisan, Drago, & Mellia, 2020**).** Recent studies established that remote learning leads to university students feeling isolated and vulnerable during a hard COVID-19 lockdown (Ghazawy et al., 2020, Grubic et al., 2020; Islam et al., 2020). Furthermore, some students preferred to work in groups and those were struggling academically and needed constant support because they were vulnerable since they had to be on their own (Qadir & Al-Fuqaha, 2020). Hence, Qadir and Al-Fuqaha, (2020) are of the view that inclusive education should cater for all students, yet it seems that remote learning benefits only a small fraction of students. Those who are not catered for may feel neglected and psychologically stressed. Ghazawy et al. (2020) have provided explanations for these student frustrations and the portrayal of depressive symptoms that emanate from the lack of support, especially from family members.

In reaction to these observations, Zhou et al. (2020) propose that online mental health interventions and programmes be put in place to assist students who are at risk of mental illness as a consequence of COVID-19 lockdown. Several universities around the world (Wango, Wairire, & Kimamo, 2020; Cataldi et al., 2021) and in South Africa (Zhao et al., 2020; Songca, Ndebele, & Mbodila, 2021) have proposed intervention programmes to mitigate the effects of COVID-19 on HE students. However, due to the specific contexts of rural students their applicability can pose serious challenges. It is against this background that this study sought to assess and establish the mental health impact of COVID-19 on a rural university in South Africa, and to propose an intervention model for its students.

CONCEPTUAL FRAMEWORK: THE MENTAL HEALTH MODEL

The Mental Health Model (MHM) is a conceptual framework used to guide psychological interventions. It has been employed extensively in the development of intervention programmes for dealing with people's mental health problems (Ahmed & Suffla, 2007). In line with the model, Butchart and Kruger (2001), as well as Ahmed and Suffla (2007), indicate that programme development should follow a four-stage process, namely: (a) identification of the problem, (b) detection of the causes, (c) development and implementation of the programme, and (d) evaluation of the programme. According to Ahmed and Suffla (2007), interventions should address several risk factors at multiple levels, namely, primary, secondary and tertiary phases, which all build on protective resilience, accommodate diversity, and should also foster participation. At the primary level, psychological interventions are aimed at preventing the onset of mental illness. In contrast, at the secondary level, such interventions focus on reducing the prevalence of mental illness, whereas at the tertiary level interventions aim at improving the quality of life by ameliorating the symptoms of mental illnesses (Gilbert & Bilsker, 2012). Benchmarking on the basic tenets of the MHM, this study proposes a COVID-19 psychological programme that is informed by rural students' experiences and needs (see Figure 1). The programme is yet to be implemented and evaluated by evaluated at our university.

METHODOLOGY

Study location and context

The institution where this study was conducted is one of the comprehensive South African universities, also denoted as a historically disadvantaged institution (HDI). It is situated in a rural area located 30 kilometres northeast of Polokwane, the

administrative capital of Limpopo province. According to South African standards, the province from which this university draws a large proportion of its student is classified as predominantly rural, characterised by low economic status as well as a burden of infrastructure shortages. A large part of these students are classified as needy, with little or no access to basic resources such as water, transport and decent housing. The communities whence they come also do not have infrastructure that can reinforce education such as libraries, internet access, and well-resourced schools. Although most of the students own a mobile telephone, it has been reported elsewhere (Mojapelo, 2020; Pete & Soko, 2020) that they continue to face challenges such as unstable internet connectivity (Kgari-Masondo & Chimbunde, 2021).

Research design

Our study adopted a Mixed-Methods Research (MMR) approach, known as convergent parallel design, advocated by Fretters and Freshwater (2020). This involved the collection and analysis of both qualitative and quantitative data. It also involved the use of rigorous procedures and the integration of both sets of data in what, according to Creswell (2013), has come to be known as convergent parallel design. This is the type of practice where both sets of data are integrated with equal emphasis. Most importantly and specifically, the elected design was based on a philosophical foundation drawn from the eclectic nature of MMR. The choice of the approach and design was also influenced by the fact that, similar to the philosophical nature of MMR, the conceptual framework chosen for the study is also known to be both transformational (Power, 2009) and contemporary (Ellis & Alexander, 2016) in nature.

Since the objective for using this MMR approach was to understand better or acquire more understanding of the psychological impact of COVID-19 on students (Greene, Caracelli, & Graham, 1989; Fretters & Freshwater, 2020), in order to reach most participants in the target population. Participants were chosen using a total population sampling technique. Given the constraints imposed by COVID-19, this sampling technique also allowed us quickly to reach the targeted population via email, so that students who were accessible, capable and willing to participate in the study would complete the online survey (Dornyei, 2007; Etikan, 2016). Ethical clearance for the current study was sought and obtained from Turfloop Research and Ethics Committee (TREC: 102/2020: PG).

Data collection and analysis

The study used an online self-administered data collecting tool in which quantitative data were collected through closed-ended questions and qualitative data were obtained through open-ended questions. The data collection tool was distributed to all 21,619 students who were registered at the university during the academic year 2020. Their responses were collected using the Montreal Behavioural Medicine Centre (MBMC) International Survey. This quantitative data collection tool has recently been adapted from other studies for investigation of psychological problems associated with the COVID-19 pandemic (Durand et al., 2020). Concurrently, the sample of students in our study also responded to a battery of qualitative open-ended questions (QUAL part) designed to elicit data on their experiences with COVID-19 and its psychological impact on their life.

The data were collected using an online facility (Google forms) distributed via e-mails allocated by the university to

the students. Participants were informed of the study's aim and ethical imperatives upon receiving the survey link, and those willing to participate were requested to provide consent and complete the questionnaire online. Data were collected over a three-week period (from 21 June until 9 July 2020), after which the survey questionnaire was closed, allowing for data isolation and analysis. The Cronbach's alpha was 0.869 for measuring the reliability of the survey. This indicated that the study tool was reliable and consistent.

In total, of the 21,619 students targeted, only 313 completed the data collection tool. These respondents provided the QUAN data set that sought to assess their mental well-being. Of this total, only 229 went on also to respond to the QUAL open-ended section of the data collection tool that sought to investigate the students' experiences, challenges and needs as a consequence of the pandemic and nationwide COVID-19 lockdown. According to Krejcie and Morgan (1970), a population of about 20,000 requires a sample size of 377. This means that, for the population size reflected in our study, a total of 313 respondents was acceptable. This level of response, according to Evans and Mathur (2018), is indeed considered satisfactory. In addition, Ye (2007), Manwani and Bossert (2016), and Deshpande (2021) have acknowledged typical challenges with responses to online surveys. This has been said to be more complex during the era of COVID-19 in particular (Kilian et al., 2021). Hence, it has been recommended (Evans, & Mathur, 2018) that, when an online survey is distributed, it should be considered realistic to receive a low response rate. In line with the prescripts of convergent MMR design, for analysis, the data were integrated and presented in the form of a joint display as advocated by Fretters and Freshwater (2015). The results of this analysis are indicated in Table 1.

RESULTS

Table 1 that follows below summarizes the QUAN data on the mental health impacts on the students in our survey.

Table 1: Descriptive summary of the quantitative data on mental health impacts

Mental health	Not at all	Very little	Somewhat	Great extent
Overall mental health has suffered or got worse	59(19%)	113(36%)	89(28%)	52(17%)
Felt more nervous, anxious, or worried	26(8%)	57(18%)	83(27%)	147(47%)
Felt more sad or depressed	37(12%)	96(31%)	77(25%)	103(32%)
Felt lonely	43(14%)	85(27%)	75 (24%)	110(35%)
Felt irritable, frustrated, or angry	49(16%)	82(26%)	84(27%)	98(31%)
Felt afraid of going out	35(11%)	75(24%)	85(27%)	118(38%)
Felt bored	22 (7%)	65(21%)	69(22%)	157(50%)
Felt stressed	27(9%)	60(19%)	80(26%)	146(46%)

Felt confined or 'imprisoned' in my home	37(12%)	68(22%)	84(27%)	124(39%)
Quality of life has got worse	53(17 %)	95(30%)	81(26%)	84(27%)
Quality of life has improved	78(25%)	105(34%)	81(25%)	49(16%)

QUAN results

Descriptive statistics were used to summarise these data. In the responses to closed-ended questions, most students declared they were mentally mildly impacted by COVID-19 (36%), followed by those who were moderately impacted (28%) and those who were severely impacted (17%). Most participants felt extremely anxious/nervous (47%), extremely depressed (33%), extremely lonely (35%), extremely irritable/frustrated (31%), extremely afraid of going out (38%), or extremely bored (50%). Equally, most participants felt extremely stressed (47%) and extremely confined/imprisoned (40%) in their homes; (34%) felt that their quality of life had been moderately affected by COVID-19.

QUAL findings

Thematic analysis was applied to derive themes for discussion in this study. The following themes emerged: 1) relational problems interfere with studies, 2) emotional reactions followed COVID-19 lockdown, 3) there was need for telepsychological services. For example, some of the mental health issues reported were experiences of psychological stress, anxiety and depression. Other symptoms expressed were irritation, frustration, and anger. The findings also showed that students felt isolated, lonely, bored and felt afraid to go out. Verbatim responses classified under each of the themes identified are listed below.

Relational problems interfere with studies.

Students felt confined or imprisoned in their home while at the same time home environments were not conducive for studying. Indeed, their home setting mostly affected relationships adversely and this raised barrier for their studies. This is how some students expressed their concerns:

Respondent 12: *"I would very much like to return to campus because my mental health is primary to my studies. I can't study while I'm under some stress that my family puts us through." Seeing parents fight now and again and having to study while there are kids that need to be taken care of is really a strain because I cannot focus as all."*

Respondent 18: "*All students should go back to campus. Our relationships with our parents are no longer exciting. It is also very frustrating to study at home."*

Respondent 24: "*They must stop virtual classes because we're encountering many problems which are beyond our control such as network issues, bad environment for studying, sometimes when it's raining our rooms are leaking, and people are playing loud music outside, which interrupt our studies, and this can cause many students to fail. The painful part here is that some of the lecturers are*

inconsiderate in a way that they are teaching us even though not all of us got data (10GBs) [meaning 10 gigabytes of internet data] *and we haven't received any gadgets or devices from UL* [University of Limpopo] *for this online learning and yet they want us to participate in it."*

Respondent 43: "*The University should provide online therapy for students because some of us are struggling to study at home, learning and not being at campus makes us sorry about our academics."*

What is discernible from the above quotations is that student learning appears to be affected by the pandemic. COVID-19 has created or exposed conditions (such as poor family relations, forced online learning, lack of preparation for virtual learning), which, when taken together, contribute negatively to the quality of student learning and mental health.

Emotional reactions following COVID-19 lockdown.

Some students reported varied emotional responses such as irritation, frustration and anger. These feelings may have been evoked because of COVID-9 and being expelled from campus and their perceived or real lack of support. This is how two students expressed how they felt:

Respondent 36: "*The University must open because I'm frustrated and I am not coping at home and there are many disturbances here at home."*

Respondent 47: "*The University must reopen. The longer we stay here at our home, situation becomes worse because it is not conducive to study and focus here at home. We feel frustrated, we are confused and discouraged. There is no progress here at home."*

Need for telepsychological services.

The abrupt interference of traditional face-to-face teaching and learning due to the pandemic has several implications for the student population. Amongst others, it led to student adjustment difficulties and compromised mental health (Adarkwah, 2021). From the data, students need psychological services to help mitigate the impact. They expressed the need for psychological serves as follows:

Respondent 23: "*[There's a need for] counselling for students who are experiencing anxiety or are anxious with their studies, not sure if they will make it through this year. Emotional support services for all students would assist and go a long way."*

Respondent 36: "*[There's] a need for support and counselling to get back on track with our studies."*

Another student expressed her need for mental health services as follows:

Respondent 39: "*The university needs to provide therapeutic services to students; we need more social workers and psychologists to help us to deal stress because of COVID-19, because we cannot cope with our studies while staying here at home."*

Table 2 depicts a joint display from the convergent parallel design showing mental health impacts on university students.

Table 2: Joint display from a convergent parallel design showing mental health impact on university students.

Mental health	**Not at all**	**Very little**	**Somewhat**	**Great extent**	**Students' experiences on open-ended questions**
Overall mental health has suffered or got worse	59(19%)	113(36%)	89(28%)	52(17%)	[10] Mental health suffered – this was evident by the need for emotional / psychological support.
Felt more nervous, anxious, or worried	26(8%)	57(18%)	83(27%)	147(47%)	[36] Anxious/worried about their academic year.
Felt more sad or depressed	37(12%)	96(31%)	77(25%)	103(32%)	[20] Sad/depressed – lack of communication – needed mental health support.
Felt lonely	43(14%)	85(27%)	75 (24%)	110(35%)	[3] feeling lonely disconnected to supervisors, feeling they are on their own
Felt irritable, frustrated, or angry	49(16%)	82(26%)	84(27%)	98(31%)	[47] angry because evicted from their residence. No e-learning support.
Felt afraid of going out	35(11%)	75(24%)	85(27%)	118(38%)	[8] were afraid of going out, staying away is a precaution.
Felt bored	22 (7%)	65(21%)	69(22%)	157(50%)	None reported being bored.
Felt stressed	27(9%)	60(19%)	80(26%)	146(46%)	[68] stressed about not getting laptops, data, network coverage for e-learning.

Mental health	Not at all	Very little	Somewhat	Great extent	Students' experiences on open-ended questions
Felt confined or 'imprisoned' in my home	37(12%)	68(22%)	84(27%)	124(39%)	[60] imprisoned at home, cannot study at home because of relationship with parents, fighting parents, noisy house.
Quality of life has got worse	53(17 %)	95(30%)	81(26%)	84(27%)	[4] quality of life got worse, no financial support. Used up parents' saving.
Quality of life has improved	78(25%)	105(34%)	81(25%)	49(16%)	[2] quality of life improved; university is doing its best.

Integration of qualitative and quantitative results and qualitative findings

Integration of the QUAN and QUAL results means interrelating both sets of results and generate the relationship between the two. Both QUAN and QUAL results reveal that COVID-19 pandemic had a severe psychological impact on the participants of this study in that the QUAN results pointed out that 36% students were mildly impacted, 28% moderately impacted and 17% severely impacted. These QUAN results concur with the QUAL results because the themes that emerged were that the students had experienced emotional reactions following COVID-19 lockdown period by showing signs of frustration, anger and irritation. Additionally, the QUAN results pointed out that there were a total of 47% students who were extremely depressed, 33% extremely afraid, and 50% who were feeling extremely bored whilst the QUAL results revealed that students needed telepsychological services to deal with their difficulties in dealing with the situation as they were anxious and they needed emotional support in order to deal with their studies rationally. These aspects of the need of emotional support on QUAL results concurs with the QUAN results in such that the students felt extremely stressed (47%), imprisoned (40%) and that their quality of life had been moderately affected, thus in need of intervention.

The results indicate that the effect of COVID 19 on students did not only affect their adjustment capabilities with their studies but they also had to deal with their own life. Thus, students displayed fear of failing, and fear of going out from their homes and uncertainty about their academic and life future. All these resulted in seeking for psychological support in order to cope with the situation they are facing.

DISCUSSION

The current study sought to investigate the psychological impact of COVID-19 and to propose a contextually

relevant psychological support strategy informed by the rural based students' COVID-19 experiences, challenges and needs during the pandemic. In the main, like many previous reports (de Miranda, da Silva Athanasio, de Sena Oliveira, & Silva, 2020; Ghazawy et al., 2020 & Cagnin et al., 2020), the mental health and learning consequences of the pandemic were evident in this population of students, who reported diverse mental health problems ranging from anxiety, depression and loneliness. Similar studies by Cao et al. (2020) elsewhere also reported more than quarter of students who were anxious and others exhibited signs of depression.

In addition, students experienced increased levels of psychological stress while others felt confined and imprisoned in their dwelling places following lockdown and this increased vulnerability among the students (Clark, 2020). It would seem that the COVID-19 pandemic situation created ambivalent feelings amongst students. On the one hand students wished universities could be opened which could work in their favour, whilst on the other hand they were fears of contracting COVID-19 if they were out of their dwelling places. Most of their home situations were not conducive for effective study. A number of factors contribute to this such as, socio-economic factors, levels of education of some of the students, environmental and at times incidences of violence. For example, some students were concerned about relational difficulties with their family members and some resulted in fights. This has been it has been reported heightened levels of domestic violence, intimate partner violence and other forms of abuse in household as a result of lockdown (Mittal & Singh, 2020; Nakyazze, 2020).

All these factors could be explaining the frustration, anger, loneliness and boredom which add to the interference to their studies depicted in the findings. A possible explanation their emotional pain is that some students were frustrated by the limitations of virtual learning and poor learning environments at their homes. More importantly, students were deprived of the peer support and access to supervisors they would have received if they were on campus. The pandemic has entered its second year and could possibly continue creating undesirable conditions for students and even predisposition to suicidal behaviours. Suicide is regarded as the second common cause of death amongst students at institutions of higher education (Bantjes, 2020). Therefore, prolonged psychological distress could increase the risk of suicidal behaviour among these vulnerable students (Adarkwah, 2021, Bantjes, 2020; Owusu-Ansah, Addae, Peasah, Asante, & Osafo, 2020).

The health crisis because COVID-19 pandemic as well as subsequent lockdown measures triggered psychological stress, anxiety and depressive symptoms among students (Adarkwah, 2021). Previous studies reported that the outbreak of COVID-19 has left many students with these symptoms (Grubic et al., 2020; Islam et al., 2020). COVID-19's impact on students may continue to jeopardize the quality of student teaching and learning, as well as their mental health. As a result, efforts must be made to address students' psychological well-being as well as their academic activities. Institutions of higher learning should develop and support programmes to lessen the mental health burden of the COVID-19 pandemic on rural based students, taking into account the mental health repercussions of lockdown and isolation.

THE PROPOSED MENTAL HEALTH INTERVENTION FRAMEWORK

To this end, we propose a programme to help respond to rural

students' mental health problems (Figure 2). This programme is also informed by the evidence gathered and presented in the preceding section as well as in Figure 1. Zhai and Dub (2020a) have also recommended that student counselling centres should develop online intervention policies to maintain the mental health of students. The services may need to be tailored to the specific requirements of students in a rural setting. It is in this regard that we propose a multimodal intervention framework which, in our view, could guide the implementation of online psychological services. The framework is also underpinned by the MHM, which is a framework renowned to guide psychological interventions.

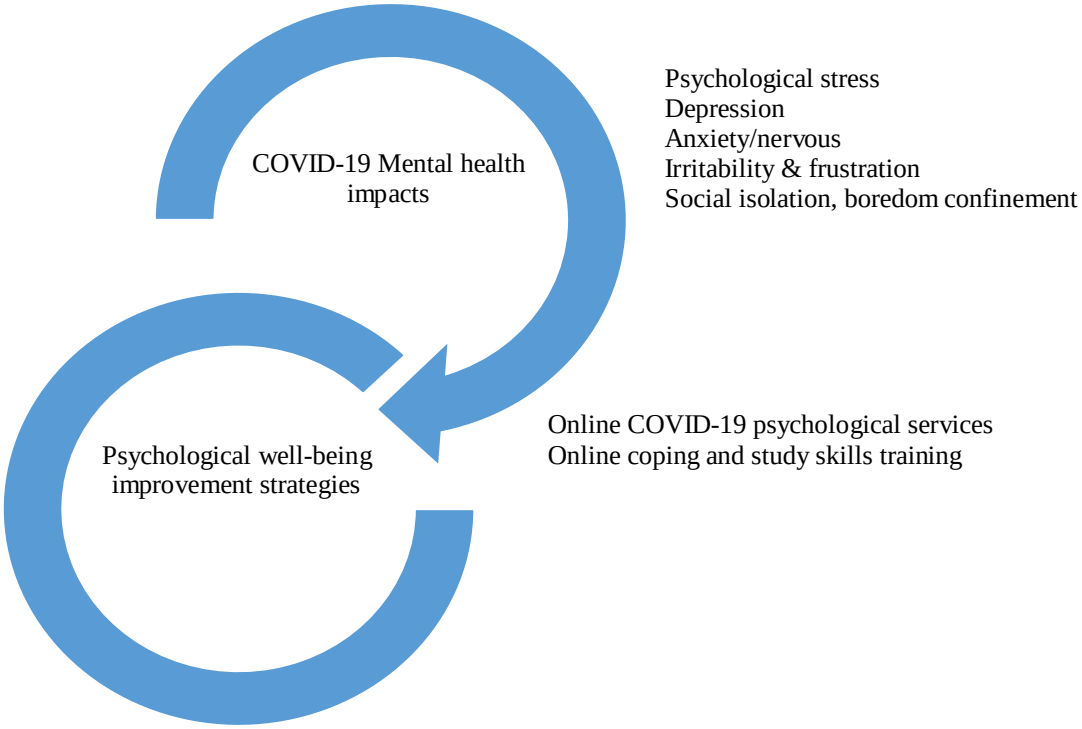

Figure 1: Key findings for students.

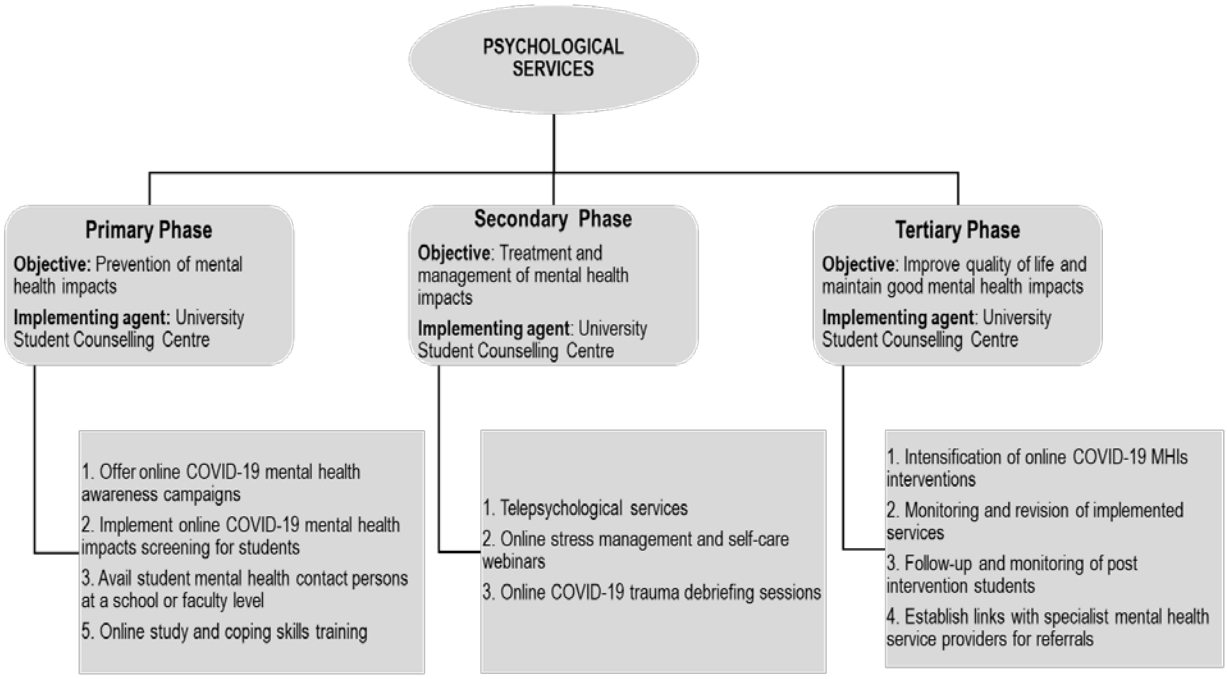

Figure 2: Schematic representation of three-phase targeted psychological services for students.

Primary phase of interventions

This phase is intended to prevent the adverse consequences for mental health due to the pandemic. We propose that these policies should adopt a multimodal approach to widen accessibility, especially among student populations largely found in rural contexts with their various limitations. At a primary phase, the student counselling centres servicing rural student populations should consider providing the following services for students during and after the nationwide COVID-19 lockdown:

- Offer mental health promotion and awareness campaigns using traditional platforms such as local radio stations and television. These should be coupled with content served through modern media platforms such as WhatsApp and Facebook.
- Mental health support materials could also be sent to students using hard-copy platforms such as pamphlets, accompanied with videos and presentations loaded on USB disks. Since the advent of the pandemic, this has proved to be effective for the circulation of course materials at our university.
- Implement multimodal online MHM for students. This can be done in the form of screening tools that have been developed since the outbreak of the pandemic.
- Provide mental health promotion agents such as student counsellors or mental health contact persons at school or faculty level for quick response. These could be made accessible via e-mail, telephone or even through the modern social media platforms.

Some of the proposed intervention methods have been suggested before for counselling centres for the dissemination of mental health information to students (Zhai & Du, 2020b). For home-related challenges affecting student learning, we recommend that the counselling centres consider introducing online workshops on study skills, coping policies and exam preparations (Zhai & Du, 2020a). These initiatives could help alleviate the anxieties of the students and help them to adjust to and cope with the "new normal".

Secondary phase of interventions

Psychological intervention at this level aims at reducing the prevalence of mental illness during the pandemic. Secondary-level interventions are directed at students who already are affected psychologically by the infection. The following online psychological services are recommended for implementation by the university student counselling centre:

- University-funded one-on-one online telepsychological services.
- Online psychological stress management and self-care webinars.
- Online COVID-19 trauma debriefing sessions.

Following COVID-19 lockdown in the United States of America, Zhai and Du (2020a) averred that since the traditional counselling mechanisms may not be feasible, it was advisable for counselling centres at institutions of higher learning to migrate to online systems. In this country, the Health Professions Council of South Africa (HPCSA, 2020) has been forced by circumstances to permit the use of telehealth psychological services to mitigate the spread of the Coronavirus. Telepsychology in this regard includes social media platforms such as WhatsApp video calls, emails, and Zoom meetings (Orrù, Ciacchini, Gemignani, & Conversano, 2020). For the present setting, the university may need to use traditional telephones or cell phones, with the institution incurring the cost of these services. These modes of intervention are recommended from evidence that they have proved effective in the management of mental health problems elsewhere (Brenes, Danhauer, Lyles, Hogan, & Miller 2015). We further recommend that a 24-hour, toll-free number be available for access by all students. Such a facility could be linked to other online national mental health care service providers for ease of use by students.

Tertiary phase of interventions

It is said that, psychological intervention is successful when implemented up to this level (Waxman, 2004). At this stage, services are targeted at improving the quality of life and reducing symptoms of mental illnesses in the student population. Programmes at this respect intend to maintain good mental health. In this context, the following maintenance services are recommended:

- Intensification of online COVID-19 MHI interventions.
- Monitoring, revision and evaluation of implemented COVID-19 services.
- Follow-up and monitoring of student's post-intervention.
- Establish links with specialist mental health service providers for referrals.

Maintaining mental health requires that the programmes be intensified, some of which may be in place already. However, with empirical evidence, the centre could prioritize and modify the delivery of these psychological services for students during and after the COVID-19 pandemic

nationwide (Zhai & Du, 2020b). To ensure that the programmes continuously cater for the needs of the students, constant monitoring and evaluation are recommended to identify the gaps and improve these programmes. According to Waxman (2004), for successful intervention, multidisciplinary collaboration and consultation are encouraged. This strategy can be effective if the institutions consult and collaborate with those bodies in the countries which were hit first by the pandemic and are successfully providing psychological services for students. This form of action is likely to assist in offering guidance on which methods were effective or not, during the actual implementation of these programmes.

CONCLUSION

A mental health model is proposed in this study following our investigation into the COVID-19 experiences of university students. Both quantitatively and qualitatively, we found that students manifested anger, anxiety and depression symptoms, amongst others, and that some students sought an increased use of psychological services. Consequently, it is important to introduce an appropriate mental health management model for a rural university based on the results of our study. In the proposed model, we aim to illustrate how coping and study skills could be improved as part of on-campus teaching and learning. Taking into account the proposed framework, we believe it provides a good basis for dealing with future disasters and pandemics.

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CONFLICT OF INTEREST

No potential conflict of interest was reported by authors.

AUTHORS CONTRIBUTION

All the authors had made considerable contribution to the outset, design, data collection and interpretation of data. Authors were also involved in article drafting, critical revision for important content, and final approval of the article.

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TITLE: INTEGRATING RESILIENCE IN TEACHING AND LEARNING IN SOUTH AFRICAN UNIVERSITIES IN THE COVID-19 ERA: A SCOPING REVIEW

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ABSTRACT

Higher education is a key driver for development in all countries worldwide, including post-colonial countries like South Africa. This paper explores existing literature on building resilient higher education institutions during and after the COVID-19 era. The paper argues that without efforts to understand existing evidence about the pandemic and its impact on teaching and learning, universities will not realise meaningful development in teaching in times of crises and in the post-COVID-19 era. It deploys a four-capacity resilience framework including adoptive, adaptive, anticipative and transformative dimensions to map existing research on resilient higher organisations with the hope that we can learn from universities worldwide and use the evidence to build resilient higher education in South Africa. Methodologically, the paper utilises a scoping review process of 2020-2021 published work in reputable sources. Three themes are identified: COVID-19 and teaching and learning in higher education - opportunities and challenges; adoptive and adaptive capacities in higher education; building a future-focused higher education - anticipative and transformative capacities. The paper argues that the universities in South Africa have not moved beyond mere adoption and adaption capacities to also deploy anticipative and transformative capacities. These capacities call them to be proactive in building a meaningful future for their graduates.

Key terms: adaptive, adoptive, anticipative, crisis, resilience and Transformative capacities

INTRODUCTION

The COVID-19 pandemic has resulted in a substantial shift to online teaching and learning. It came when the higher education systems were still grappling with trying to achieve their relevance in the Fourth Industrial Revolution (4IR). As a result, for systems that were exclusively hands-on in their approach, this was not an easy task at all. The pandemic and its social distancing protocols have awakened creativity for both staff and students to rethink innovative approaches to education. For higher education in South Africa, it was primarily a shift to online teaching and learning (Tamrat & Teferra, 2020). For basic education, it was mainly learning from home with support material being delivered to homes as well as teachers trying to reach the learners using basic technology (Maringe, Chiramba, Pournara, Ndovu & Magabane, 2020). However, like every change, the shift to online teaching and learning has both opportunities and barriers. The shift has tested leadership, and individual and collective agency intensely, resulting in many positive changes (Mahlaba, 2020). However, the shift has also revealed and exacerbated inequalities between the rich and the working class worldwide. Despite online teaching and learning's prominence in re-imagining the curriculum during and post-COVID-19, it is a minority experience in higher education (Tamrat & Teferra,

2020). In fact, it has further exposed the inequalities that were already in existence. Sayed and Singh (2020) discussed the already existing deepened systemic inequalities as following the lines of gender, race, geography and the digital divide in higher education institutions. In this paper, I argue that without our efforts to understand the already existing evidence about the pandemic and its impact on teaching and learning, we will not realise meaningful development in teaching in times of crisis and in the post-COVID-19 era.

The purpose of this paper was thus to understand how best organisations may promote and integrate resilience in teaching and learning during and after the COVID-19 era. The basis of the paper is a scoping review of what research on organisational resilience and resilience in teaching and learning has been conducted in higher education during the COVID-19 era. It also sought to highlight the gaps in the literature and summarise the knowledge gained and suggest a way forward.

The paper begins with a conceptual overview of the two terms: crisis and disruption. This is followed by discussing the methodology deployed, which is the scoping review. The paper then discusses a four-capacity resilient theory as a lens in understanding resilience in higher education. The following section discusses inductive analysis as a data analysis method for the paper. This is followed by a presentation of the findings. The paper ends with recommendations that emphasise the move beyond adaptive and adoptive capacities of institutions to also implement anticipative and transformative capacities.

A CONCEPTUAL OVERVIEW

Two central ideas characterise the discourse of the current pandemic. These are COVID-19 as a disruptive force and as a crisis. There is a tendency to conflate the two or to use them interchangeably in research on natural disasters and pandemics.

It should be borne in mind that the concept of crisis can be traced back to the writings of Hippocrates in ancient Greece. The term was used in relation to medicine, specifically indicating the turning point in the course of a disease or medical condition (Gamble, 2010). Gamble (2010) argues that recently we have understood crisis to mean any event that is in any way out of the ordinary or where there appears to be conflict and the outcome is uncertain. Likewise, Coombs (2007, pp. 2-3) defined crisis as ‘the perception of an unpredictable event that threatens important expectancies of stakeholders and can seriously impact an organisation’s performance and generate negative outcomes. Education institutions are no exception to the crises. Education crises, just like those in any other sector, originate from natural disasters, man-made disasters and pandemics. Besides the current COVID-19 pandemic, which affected the whole world, we have other examples like #FeesMustFall and #RhodesMustFall protests by university students that specifically had a huge impact on South African universities. In such events, we encounter both opportunities and barriers to transformation (García-Morales, Garrido-Moreno & Martín-Rojas, 2021). In other words, the disruption is most likely effective in making us rethink ways of practice. Alternatively, it might exacerbate already existing inequalities.

METHODOLOGY

This paper utilised a scoping review methodology. My argument for using a scoping review is that traditional methods of literature review ‘may be susceptible to bias and result in incorrect decisions’ (Haddaway et al., 2020, p. 1). This is particularly a cause for concern when

dealing with questions that help us to address policy and practice issues. Scoping reviews are also used in circumstances where the literature and research have not received much systematisation, such as the emergent literature from the experience of the ongoing pandemic.

The scoping review process

As a type of systematic review, the scoping review follows five steps as suggested by Khan, Kunz, Kleijnen and Antes (2003, p. 118). The steps are:

- Framing the review questions
- Identifying relevant work
- Assessing the quality of studies
- Summarising the evidence
- Interpreting the findings

The fundamental questions that this review was concerned with were:

1. What resilient capacities will and have promoted teaching and learning in higher education in the COVID-19 era and beyond?
2. In what ways could universities build a more robust framework for enhancing students' epistemological access during the COVID-19 pandemic and beyond?

To identify the relevant literature, I began by reading a variety of studies published between 2020 and 2021. I searched on databases such as Google, Google Scholar, ResearchGate, ERIC, JSTOR and Sabinet. The literature was selected based on key phrases such as resilient teaching and learning in higher education in the COVID-19 era, organisational resilience, adaption and adoption of teaching during COVID-19, anticipation and transformation capacities during the pandemic in higher education, and response, recovery and contingency in organisations in times of pandemics. The search yielded peer-reviewed articles in refereed academic journals published in Africa and internationally. However, there is also vast research that appears in reports, blogs and other web-based publications, reported by international aid agencies such as UNESCO, USAID and the World Bank, as well as several other non-profit organisations like UKFIET and RTI. Although there is much information available, I knew that peer-reviewed journals would constitute the strongest and most reliable information. Moreover, the scoping review helps to identify gaps and trends in the existing literature and informs future research in the area. As a result, I based this paper on peer-reviewed journal articles. The paper has therefore excluded all the evidence from grey literature as well as all the evidence in predatory journals where the motive is profit, not quality.

Search strategy and sources of information

I began by reading the abstracts of the articles. Initially, I had 38 articles. I rejected about 20 of them following the exclusion criteria: not from refereed journals, those with no focus on resilience and the ones I only managed to access the abstracts. Eighteen refereed publications contributed to the scoping review. I read the selected papers several times to understand the overarching ideas about resilience in the existing literature and started writing up. The papers were read the same number of times.

THEORETICAL FRAMEWORK

In this paper, I adopted a resilience theory to understand its usefulness in universities during and in the post-COVID-19 era. Horne and Orr (1997, p. 31) defined resilience as the ability of organisations and individuals to 'respond productively to significant change that disrupts the expected pattern of events

without engaging in an extended period of regressive behaviour'.

They further argued that:

> Every system naturally contains some degree of internal resilience that allows it to flex, bend, and mould around the changing environmental conditions to counteract other resistant forces that would drive it in the direction of destructive brittleness. These internal elastic properties that allow systems to dynamically reshape themselves are a central premise of organizational resilience (Horne & Orr, 1997, p. 31).

Some prominent authors in the field of organisational resilience have shown that four possible capacities within an organisation contribute to the development of resilience (Bahadur et al., 2015; Jeans, Castillo & Thomas, 2017). Jeans et al. (2017) and Bahadur et al. (2015) have used the concepts of adoptive, adaptive, anticipative and transformative capacity to show how students and universities may thrive in challenging circumstances. To them, resilience involves the ability to bounce back when faced with adversities (Bahadur et al., 2015; Jeans et al., 2017). However, the opportunities to develop robust online teaching and learning within a framework recognising institutions and individuals need to move from mere responsiveness to having an adoptive, an adaptive, an anticipative and finally a transformative capacity. These capacities overlap and interweave to form the whole-organisation response in times of crises and disruptions. For example, adoptive and adaptive capacities are reactive by nature, but at the same time, they act as building blocks for the organisation's anticipative and transformative capacities. Adoption, along with adaption, are antecedents of anticipative and transformative capacities. Hence, they function as pre-requisites. The four-capacity framework has been described in Table 1.

Table 1: Bahadur et al.'s (2015) four-dimensional resilience theory (adapted from Chiramba, 2020)

Capacity	Meaning
Adoptive	This involves the ability to cope against the odds. Individuals and institutions bounce back despite experiencing stresses and strains (Jeans et al., 2017). Individuals and institutions harness the skills and resources available to fight adverse situations (Bahadur et al., 2015). With this capacity, individuals and institutions may endure the impact of adverse circumstances (OECD, 2014). This basic capacity and the magnitude to which it is utilised has a direct effect on the three capacities that follow (Chiramba, 2020).
Adaptive	This capacity provides incremental change (Chiramba, 2020). It gives institutions and individuals opportunities to take deliberate roles in adjusting to adverse circumstances (OECD, 2014). Individuals and institutions adjust, modify and alter old strategies in fighting the adversities. This calls for flexibility, and mobilising and modifying existing resources to their advantage (Jeans et al., 2017).
Anticipative	This involves the ability of individuals and institutions to be prepared by planning for an unforeseen challenge (Bahadur et al., 2015). The capacity challenges individuals and institutions to be equipped with tools for planning and preparing for the unknown and uncertain future.

Transformative	This is the last and most crucial capacity every institution should aim to deploy. It involves a deliberate effort to transform the existing systems (Chiramba, 2020). There are numerous structural and systemic barriers to teaching and learning within higher education systems, but there is hope that if an effort is made by universities to transform, we will witness significant changes.

In this paper, I have used these capacities to frame models for developing resilient online teaching and learning programmes, especially in times of crisis and beyond. Chiramba (2020) and Chiramba and Maringe (forthcoming) have explored and analysed these capacities in detail. For them, the adoptive capacity involves efforts by higher education institutions to stabilise during the pandemic. Tafere Gedifew and Shimelis Muluneh (2021) argued that it involves the ability of higher education to act quickly by ensuring continuity of teaching and learning within institutions, but at the same time adhering to all the COVID-19 protocols.

I argue that higher education resilience may be understood through four critical dimensions, as discussed in Table 1. I, therefore, deployed a resilience theory to understand how its four pillars of adoptive, adaptive, anticipative and transformative capacities have and may continue to build resilient higher education in the face of COVID-19 and beyond. Disruptions may be both a source of challenge and opportunity. Hence, the paper proposes a framework for building resilient education systems and institutions in the post-COVID-19 era, based on the four pillars of resilience identified.

DATA PRESENTATION AND ANALYSIS

I deployed inductive data analysis. I began by organising new data that is in refereed journal articles and book chapters on resilient higher education systems during COVID-19 and beyond. This includes literature on resilient higher education in South Africa, published in 2020 and 2021. I reviewed the material making notes in the text as I read and reflected. I read repeatedly and put notes and headings on my coding sheet. I grouped the data integrating the initial categories into broader categories. This has helped me to generate themes and make sense of the existing literature on higher education resilience during and beyond COVID-19.

Table 2: Presentation of the 18 sources of data

Author	**Journal/book**	**Short title (article/book chapter)**	**Method**	**Findings**	**Recommendations**
Adedoyin and Soykan (2020)	Interactive Learning	COVID-19 and challenges of learning	Conceptual	Socio-economic, technology challenges and heavy workload	Rethink opportunities in the COVID-19 era
Badat (2020)	Critical Perspectives on Southern Africa	Reproduction, transformation and public higher education	Conceptual	New wine in old skins	Adoptive and adaptive capacities

		in SA			
Chiramba and Maringe (forthcoming)	Re-imagining Educational Futures in Developing Countries	Organisational resilience post-COVID-19	Conceptual	Reproduction and deepening of educational inequalities during the pandemic	Building resilient universities post-COVID-19
Ehren et al. (2021)	Perspectives in Education	Barriers and opportunities of teaching in the COVID-19 era	International case study reports	Weaknesses in teacher and community agency	Capacity building
Fataar and Badroodien (2020)	Southern African Review of Education (SARE)	Education imaginaries during the COVID-19 pandemic	Conceptual	New imaginaries around purposes, content, methods and assessment	Need for new imaginaries
Fincher (2021)	Handbook of Research on the Changing Role of College and University Leadership	Navigating the new normal	Conceptual	Understanding the changing role	Need to rethink the new normal
García-Morales et al. (2021)	Frontiers in Psychology	The transformation of higher education	Conceptual	Emerging barriers and challenges in the current scenario	Leadership should be aware of the barriers and mobilise resources
Ia Velle et al. (2020)	Journal of Education for Teaching	Initial teacher education and COVID-19	Qualitative data-interviews	Challenges and opportunities in initial teacher education	Opportunities and affordances available post-COVID-19
Ifijeh and Yusuf (2020)	Journal of Academic Librarianship	COVID-19 pandemic and the future of Nigeria's university system	Conceptual	COVID-19 and challenges faced by universities	Rethinking future-focused universities
Islam et al. (2020)	PloSOne	Depression and anxiety among university students	Survey	Challenges faced by students	Rethink provisions for students from low-socio-economic background
Mahlaba (2020)	South African Journal for Higher	Reasons why self-directed	Conceptual	Challenges faced in	Strategies in deploying self-

	Education	learning is important during COVID-19		remote teaching and learning	directed learning
Motala and Menon (2020)	SARE	In search of the new normal	Conceptual	Social exclusion has taken a new form	Transformation strategies - more just future for students
Ndevu (2020)	Responses in the Time of Pandemic	Understanding the effects of COVID-19 in universities in South Africa	Qualitative study involving interviews	Impact of COVID-19 on higher education and strategies to save the academic year	Manage existing challenges, rethink, debate and plan for the future
Pacheco et al. (2020)	Anatomical Sciences Education	Challenges of teaching human anatomy during COVID-19	Conceptual	Challenges of doing practicals online	Rethink practical electronic tutorials using existing tools
Phan and Wood (2020)	Academy of Management Perspectives	Doomsday scenarios	Conceptual	Lack of preparedness for online teaching and learning	Rethink tools to navigate the unknown future
Sayed and Singh (2020)	SARE	Education policy-making during the COVID-19	Conceptual	Policy contestations	Rethinking education dogmas and orthodoxies
Sobaih et al. (2020)	Sustainability	Responses to COVID-19 in higher education: Social media usage	Mixed methods-survey and interviews	Different usage of social media between lecturers and students	Re-imagining social media platforms beyond teaching and learning
Tafere Gedifew and Shimelis Muluneh (2021)	Higher Education Quarterly	Building a change adaptive university	Mixed methods-survey and interviews	The capacity for universities to change was found to be low	Need to systematically assess universities' adaptive capacity before implementing change

SUMMARY OF THE FINDINGS

Table 2 provides a high-level summary of the data emerging out of the 18 sources. Three broad themes relating to challenges of teaching and learning in the COVID-19 era emerge, and these are discussed below. The data shows the development of adaptive and adoptive resilience capacities and also points to the future of higher education.

COVID-19 and teaching and learning in higher education: opportunities and challenges

The abrupt change from face-to-face to remote online teaching and learning adopted by all universities in South Africa in response to the COVID-19 pandemic has presented challenges and threats to the idea of epistemological justice and equity of learning in the sector (Beck, 2010). In line with requirements for social distancing, aimed at reducing the spread of the virus, students had to cease going to campuses, remaining at home to learn. The home learning environments are in stark contrast to the homogenising university environments (Young & Duncan, 2014). The assumption is that because of the widely diverse nature of home and local community environments, the usual divides in the South African society, in terms of race, gender, socio-economic background, rurality and urbanity, have accentuated epistemological inequities among students (McKeever, 2017). This paper is significant in determining how the switch to remote online teaching and learning might have resulted in further widening inequalities in learning among students. Secondly, the paper uncovers ways in which online teaching and learning could be strengthened as a viable model for teaching and learning, given the trends towards greater technologisation and digitalisation of learning in the context of the encroaching 4IR (Choung & Manamela, 2018).

The COVID-19 pandemic has offered higher education systems the opportunity to correct the inequalities that existed before the crisis. It has exposed the gap in unequal access and opportunities to higher education and general education facilities (Ndevu, 2020). In other words, it has laid bare the already existing weaknesses of the education system in general and higher education, particularly in South Africa. These weaknesses have been in existence since the colonial and apartheid era. Upon democracy, there was anticipation that the education system was going to transform, but it seems a lot of new policies have not been adequately implemented. In tandem, Maringe (2017) argues that we have heard of extensive usage of transformational language in the newly made policies post-apartheid, but 26 years after democracy, not much has changed, especially in terms of promoting educational access and success for the formerly marginalised communities. These inequalities have been exposed by the abrupt turn to online teaching and learning. While this move was useful for middle-class students, it was not a viable way for students from low-income backgrounds. Chiramba and Maringe (forthcoming, p. 2) argued that the abrupt turn to online teaching and learning 'revealed serious structural, pedagogical, technological and ethical defects previously taken for granted in the more sanguine and traditional face-to-face modalities that universities generally operate under'. A very clear and significant example is that the home learning environments are different. Maringe et al. (2020, p. 4) have illustrated how these homes might be different:

> There may be less home-based support for students in low-income households than those from middle-class homes because of lower levels of education amongst parents, as well as a lack of physical space and time for learning in the home. There may be little, if any, access to

> replacement pedagogies such as radio/television broadcasts and other forms of online learning for students from low-income households while schools are closed.

On the bright side, through further exposure to the inequalities, COVID-19 has forced higher education leadership to rethink ways of reaching vulnerable learners. Thus, they adopted multiple learning delivery methods that did not only emphasise sophisticated devices, but for some institutions, they considered the commonly used technology like simple phones, television and radio as other possible means to narrow the inequality gaps (Fincher, 2021). The COVID-19 pandemic has also made education leaders think beyond mere management to collaborate with different stakeholders. For example, there is a need for coordination between the government and the public sector, something that has been given little attention until recently (Maringe et al., 2020). The positive thinking we still bear within the ravaging COVID-19 reminds me of Fataar and Badroodien (2020, p. 1), who argued that:

> The COVID-19 pandemic simultaneously engages, intensifies and subverts existing educational inequity and iniquity. This begs the question of whether educational imaginaries can emerge in pandemic times that gesture towards significant educational equity, virtue and dignity. Gesture is important. It is a sign that insists on yet resists the deadness of our time. It signifies life left in the educational body, the body hoping to be educated, always available for educational resurrection.

On the same note, findings from Muftahu's (2020, p. 417) study show that:

> …the Covid-19 pandemic has pushed universities in different nations beyond their limits toward developing appropriate and creative alternatives such as transitioning to remote learning, training of academic staff in the use of online instruction materials and tools and encouraging students to complete their education requirements through online learning in response to the Covid-19 pandemic.
>
> Thus,
>
> universities have the responsibility to enhance learning and success by students from diverse backgrounds. Assembled 'on campuses a supportive environment is possible, but when students study on sporadically working laptops in unstable Wi-Fi hotspots, with power outages and in congested, noisy home environments', online distant higher education compromises opportunity and success (Schreiber et al., 2020 in Badat, 2020, p. 28).

Adoptive and adaptive capacities: How far are these apparent in higher education in general and in South Africa in particular?

Online methods of teaching and learning were used minimally before the COVID-19 pandemic, only to support the physical and face-to-face modes of learning. As a result, staff and students have been impacted by the rapid and complete transition to remote teaching and learning. However, some students and staff have, to a certain extent, adapted to the situation. Fataar and Badroodien (2020, p. 2) referred to this as 'a maladapted vision of doing the new educational normal'. In research carried out by Sayed and Singh (2020, p. 15): 'During lockdown, teachers were expected to shift to online learning without consideration of whether teachers had either the facilities (laptops, data and bandwidth) or pedagogical knowledge to facilitate learning online.' Empirical

research involving four universities in England showed that the closure of universities due to COVID-19 had an impact and serious implications for initial teacher education as they had to introduce virtualisation of the programmes (la Velle, Newman, Montgomery & Hyatt, 2020).

Although the news of lockdown had caused fear amongst leadership, staff and students, the leadership quickly saw the need to cope despite the adversities and were therefore quick in reassuring the staff and students and organised a complete turn to online teaching and learning (la Velle et al., 2020). As in several countries, some of the South African universities started utilising the technologies that people were already familiar with in their blended learning. These included emails, student portals, WhatsApp messages and phone calls to organise and begin remote teaching and learning (la Velle et al., 2020, Meyers & Thomasson, 2020). Although a quick effort was made to prevent lost teaching time, challenges of how to assess for quality as students learn from home remains a challenge in Africa and globally. For example, in a study by Motala and Menon (2020). the higher education institutions in South Africa began to implement the COVID-19 protocols while continuing with the core business of teaching and learning. There was an urgent review of activities followed by online teaching and learning with 'academic staff having to rapidly prepare and capacitate themselves for this' (Motala & Menon, 2020, p. 80).

Although an abrupt turn to online teaching and learning seemed a viable solution to reduce the spread of the pandemic, it was not an effective move for other courses such as human anatomy, where practicals are emphasised (Pacheco, Noll, & Mendonça, 2020). This is in tandem with Ifijeh and Yusuf (2020), who argued that online provision of services in support of teaching and learning have rendered Nigerian university libraries useless as they were so absorbed in giving physical and face-to-face support to the students. It was discovered that the libraries' staff lacked expertise in running the libraries. Thus, I argue that mere adoption of virtual teaching without putting other supporting strategies in place might hinder effective teaching and learning. Adedoyin and Soykan (2020) argued that reactive solutions always pause other challenges, and they claimed that prepared online teaching and learning is different from emergency remote teaching and learning. In emergency remote teaching and learning, the universities were even more absorbed in rescuing the school academic year at the expense of staff and students' well-being. In a survey completed with university students in Bangladesh, results indicated that many students suffered depression and anxiety during COVID-19 (Islam, Barna, Raihan, Khan & Hossain, 2020). The emergency turn to online teaching and learning has raised question about whether universities will remain relevant, whether lecturers and learners have technical knowledge to teach and learn online and whether practical laboratory work can also be conducted online. Research by Sayed and Singh (2020) has clearly shown that the abrupt move to online teaching and learning has widened the inequality gap not only among students but also among South African universities. For the historically Black universities in South Africa, it was almost untenable to resume teaching and learning in these circumstances because they were ill-prepared to do so. It was a different case for historically White universities, which seemed to be successful because they had the resources (Chiramba, 2020; Chiramba & Maringe, forthcoming; Sayed & Singh, 2020; Sobaih, Hasanein & Abu Elnasr, 2020). Moreover, prior to the pandemic, historically White universities practised online teaching and learning as contingency measures as they partially

integrated it into their learning management systems (Sayed & Singh, 2020). As a result, with the coming of the pandemic, they were more or less prepared to completely turn to online teaching and learning. The digital divide alerts us that despite the widespread utilisation of information and communication technologies in South Africa, there remains a huge digital divide characterised by differentials in access to the technologies and devices largely due to affordability, poor internet access and weak signals. Many rural students come to universities with little or no experience of using smartphones and laptops.

Mere adoption of online teaching without strategising how that would be useful posed challenges to teaching and learning during the COVID-19 era. Chiramba and Maringe (forthcoming) argued that we need not only to think about the platforms, but we should also consider content, pedagogy and assessment in the process. As a result, the question remains: How have universities in South Africa built resilience in pedagogies, content and assessment methods, and how do they plan to continue to improve in the future? Although some historically White universities managed to provide laptops and data for students and staff, the historically Black universities could not afford to do that. Scholl and Patin (2012) proposed that four pillars are crucial when universities and individuals wish to achieve adoptive and adaptive capacities. These are summarised below:

a. Robustness, which happens when structures and individuals can function efficiently and effectively despite the odds.
b. Redundancy refers to how replaceable an infrastructure or resource is.
c. Resourcefulness has to do with whether an individual or institution has the capacity to identify problems, establish priorities and mobilise resources.
d. Rapidity shows how quickly an impacted institution or individual can return to normal functioning in the aftermath of a crisis.

Building a future-focused higher education: Anticipative and transformative capacities

Chiramba and Maringe (forthcoming) have argued that while adaptive and adoptive capacities are reactive and seem to play a fire-fighting role within the organisation, universities also need to be proactive. They seem to be subsumed in the *now* of education without even thinking about the future work for their graduates. Thus, Neden, Cleak and Thomson. (2020, p. 1258) argued:

> To remain relevant for the 21st century and to Industry 4.0, educational providers, disciplines and professions must anticipate the future world of work and educate today's students as tomorrow's graduates with capabilities for work in emerging contexts that may not sit within existing roles, disciplines, trades, professions or forms of communication.

They further argued that universities should move beyond accommodating 'uncertainty and build curriculum flexibility, retain relevance and foster academic resilience to navigate and find a fit in new and emerging contexts' (Neden et al., 2020, p. 1258). This can be achieved by 'a shift from transmissive to transformative learning which fits with experiences of increasing complexity, interdependence and systemic breakthrough in the world' (Neden et al., 2020, p. 1261). The research by Neden et al. (2020) suggests that four factors are necessary for building anticipative and transformative education. These are

'visualisation of an emerging future; creation of an anticipative learning design; transforming the learning environment; review and refine the curriculum' (Neden et al., 2020, p. 1264). Much of the literature I came across in this scoping review seems to suggest that universities are still grappling with the adoptive and adaptive capacities, and not much is done to utilise the anticipative and transformative capacities. Therefore, much of the information on these capacities is found in recommendation sections where researchers are paving ways for this to be deployed in higher education.

Learning from the evidence

Both local and international literature seems to suggest that universities are preoccupied with adaptive and adoptive measures of the pandemic (Chiramba & Maringe, forthcoming). Very little is reported in the literature about the measures to develop transformative and anticipative capacities. There is, however, an awareness that these capacities are crucial, and recommendations are made in several studies to engage with those capacities (Chiramba, 2020; Chiramba & Maringe, forthcoming; Kemp & Scoffham, 2021; Neden et al., 2020). Kemp and Scoffman (2021, p. 23) argue: 'Future thinking incites a future-oriented mindset, that challenges operational thinking through a systematic method of exploring alternative futures.'

There is also substantial evidence in the literature showing that while there are mechanisms in place to enable the continuity of learning, there does not seem to be enough to ameliorate the plight of the marginalised students. The other crucial lesson we have learnt from literature is that although some universities have hiccups when it comes to teaching online, in the future, they will become familiar with this form of teaching and learning, and it will be a great opportunity for learners. Incorporating future focus in planning for teaching and learning is deemed an essential direction towards anticipative and transformative capacities of resilience (Bahadur et al., 2015; Jeans et al., 2017). Chiramba (2020) and Chiramba and Maringe (forthcoming) have argued that since anticipative and transformative capacities are viewed as significant but minimally deployed in higher education, there is a need to develop theories and methods for developing and utilising these capacities in higher education systems.

Furthermore, the COVID-19 pandemic, just like any other crisis, provides an abrupt and real sense of urgency that might not be apparent in non-crisis conditions. Phan and Wood (2020) argue that during crises, universities become proactive in widening and hastening decision-making processes. However, I argue that even without a crisis, university leadership should prepare themselves for both conditions in times of stability and in times of turmoil to create conditions that promote concentrating on only one aim collaboratively. Phan and Wood (2020) advocated for leadership to organise doomsday scenarios as ways of equipping universities with tools to navigate the unknown future. Waiting for crises to happen is riskier, and as a result, there is a greater need to engage anticipative and transformative capacities along with the adoptive and adaptive capacities.

CONCLUSION AND RECOMMENDATIONS

The literature highlights the issue of COVID-19 as exacerbating inequality in higher education. I conclude that the pandemic seems to have heightened the assumption that education on its own does not rectify ills in society. In other words, the issues that can contribute to greater social justice are embedded in society, and higher education institutions may not

resolve these issues on their own. For instance, there is a need for stronger government and non-governmental organisation intervention in terms of providing, for example, internet and funding for online teaching and learning resources. The universities, in collaboration with the government and non-governmental organisations, should initiate all-inclusive online-based educational programmes to reach out to all students, especially those living 'in remote areas with or without devices in association with internet-service providers by providing scholarship or student loan' (Islam et al., 2020, p. 20). Secondly, since most of teaching and learning happens remotely from homes, parents and guardians should be encouraged through the university or the governments to provide home environments that are suitable for students to study in (Islam et al., 2020). Thus, I argue that we now need parent and community engagement more than ever.

Universities also need to move from mere adaption and adoption to engage with anticipative and transformative capacities in the quest to promote and enhance students' epistemological access during the COVID-19 pandemic and beyond. The wake of COVID-19 should spark various foresight-based planning activities. Universities may strategically embrace change with an ability to adapt to the changing landscape of the future. The future in the COVID-19 era points towards moving to flexible education, lifelong learning and life-wide learning.

The COVID-19 era also calls us to quickly adapt to a new age of normalcy, which requires a change in behaviour, science and technology (Smith, Skinner & Read, 2020). At the same time, we should be critical about new normalcy as it assumes that the pre-COVID-19 state of the world was normal, yet issues of inequality prevailed. Universities should also be critical of the present and anticipate the future. Academics must be proactive and aligned to clear foresight of the preferred future. Academics need a mindset change, which means thinking needs to be strategised ahead of time or crisis. Visioning and creating alternative futures become unifying factors for subsequent actions (Smith et al., 2020).

If higher education institutions view and utilise anticipative and profound transformative capacities with the tenacity to move the institutions in new directions, we might experience a significant change in education. Entrenched ways of running higher education systems are idle barriers to change. Elsewhere, Gurr and Drysdale (2020) argued that there should be imperatives set in place for universities to envisage the future through the mapping of time where we have come from and where we are heading to, and in so doing, the unknown future is incorporated into decision-making. As a result, universities in South Africa should aim to learn from the examples provided and be proactive in their thinking to push the boundaries of teaching and learning.

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REIMAGINING SUPPORT FOR LEARNING AND TEACHING IN POST-COVID-19 SOUTH AFRICAN HIGHER EDUCATION

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ABSTRACT

In South African higher education, learning and teaching during the COVID-19 pandemic was not a simple shift from a face-to-face to a remote context, but required engagement with varied and constrained contexts. Mediating shifts in learning and teaching during the pandemic blurred the boundaries between personal and professional roles and laid bare the visible and invisible traumas experienced by staff and students. The five authors of this paper, who are learning and teaching support staff at three South African universities, all experienced contextual, structural and operational realities that had implications for when and how their respective universities engaged with Emergency Remote Teaching (ERT). During the crisis, the authors co-created a safe and authentic online community to share experiences, emotions and strategies for supporting learning and teaching in its evolving forms. The historical, structural and socio-cultural conditions at each of the three research-intensive institutions yielded a collective set of diverse stories of "self". At the same time, overarching stories of a collective "us" and "now" emerged. Using discourse analysis, themes were abstracted from the researchers' collective writings about the roles of support staff. Assumptions about how, when and where to support learning and teaching were challenged. Drawing from their shared experience the authors describe a process for reflecting on learning and teaching during and beyond times of crisis and offer several ways of reimagining support for learning and teaching post-COVID-19. The intention is to empower fellow academic developers and educators who have been supporting others during ERT.

Keywords
Academic Development; Collaborative Auto-ethnography; Emotional Labour; Emergency Remote Teaching

INTRODUCTION

Due to the COVID-19 pandemic, higher education institutions globally had to determine how to continue their academic programmes. Terms such as "emergency remote teaching" (ERT) (Hodges, Moore, Lockee, Trust & Bond, 2020) or "emergency remote education" (Bozkurt et al., 2020) were used to describe the transition to the new type of teaching and learning occurring at the time, as distinct from high-quality online teaching and learning. Hodges et al. (2020) define ERT as a temporary shift of instructional delivery to an alternate delivery

mode due to crisis circumstances. It involves the use of fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses… (para.7).

The transition to new forms of learning and teaching had major implications for those staff supporting these functions. Such staff members include the authors of this paper who are employed in the following areas: academic/educational developer, instructional designer and educational technology specialist.

In the process of "pivoting online", academic developers, educational technologists, and others who served as "frontline workers" at the start of the COVID-19 pandemic, experienced significant changes in their roles. Particularly in South Africa, learning and teaching during COVID-19 required that the pre-existing issues concerning access to higher education, diversity, equality and pedagogy be confronted in new ways.

It is in this context that the five authors of this paper, who are from three different research-intensive universities in South Africa, came together for research purposes. This collaboration enabled an organic emergence of a safe, authentic (honest and non-judgemental) online space to share experiences, emotions and strategies for supporting learning and teaching in evolving forms. Initially, the online space helped the researchers to manage their own uncertainties during the extended crisis and also to consider emerging forms of support. Over time the collaborative forum enabled the researchers to establish a strong foundation for reflection within and beyond the current crisis.

The article outlines the research context then considers relevant literature related to supporting learning and teaching during the pandemic. The theoretical framework section draws on Ganz's organising pedagogy (2010) and Hochschild's (1983) theory of emotional labour. Our collaborative auto-ethnography methodology is described as it emerged from our theoretical exploration. The findings are presented as the story of "self", providing a foundation from which the story of "us" and the collective story of "now" could develop.

CONTEXT

In March 2020, the South African government instituted a national lockdown to curb the spread of the COVID-19 virus. The restrictions necessitated a mandatory shift to emergency remote learning and teaching. All students had to vacate university campuses and residences when the "hard" lockdown was instituted. The phased return of students in the second semester of 2020 and first semester of 2021 varied across institutions, with decisions often made in response to infection rates in different provinces. The shift to remote education required different ways of thinking about learning and teaching, with academic staff and students needing to be appropriately supported.

The three public South African universities where the five authors, researchers and research participants are based are all traditionally contact universities with variations in their geographical, structural and operational realities. Each institution's context had unique implications for when and how it proceeded with ERT. Although our individual job descriptions and roles differ (Academic/Educational Developer, Instructional Designer and Educational Technology Specialist), we found similarities between the kinds of work we

were required to do to support academics and students during a challenging time. Each of us has been within our current position for a different length of time, which could have a bearing on how we have experienced our work context during the shifts and changes that were required during the period of the study.

While the three universities have contextual differences in relation to location, staff and student demographics and diversity, the institutions are similar in the sense of being traditional contact research-intensive universities. The three universities differed in relation to when they went online, and how they managed the crisis, which including how ERT was supported, and how online assessment happened. Our research revealed that across the three institutions the level of preparedness, the capacity to deal with the changes and the infrastructure and technological resources available to enable remote learning and teaching differed considerably for both historical and current reasons. It was clear that South African universities are not homogenous when it comes to their use of educational technologies and the degree to which technology is embedded as part of the pedagogical aspects of learning and teaching.

Depending on institutional funding and budget allocations, there are various Learning Management Systems (LMS) and versions being used. The approaches to curriculum design, pedagogy and assessment, together with interpretations of blended learning, vary from university to university. Some institutions were already constrained before the pandemic, with student protests over fees and accommodation, thereby delaying the start of the academic year. The recognition of the various contextual differences and the need for differentiated responses informed the design of our study.

LITERATURE REVIEW

Much of the emerging ERT literature focused on the readiness of students and staff to transition to a different way of learning and teaching (Johnson, Veletsianos, Seaman, 2020; Cutri, Mena & Whiting, 2020). During this transition, it was expected that "everyone will be doing the best they can, trying to take just the essentials with them as they make a mad dash during the emergency" (Hodges et al., 2020, para. 12). Many authors raised concerns that the pandemic would exacerbate inequalities and the digital divides in higher education (Belluigi et al., 2020; Bozkurt et al., 2020; Corbera, Anguelovski, Honey-Rosés & Ruiz-Mallén, 2020; Czerniewicz et al., 2020).

Academic developers or academic support staff are usually available to assist lecturers to design and facilitate learning in different modalities. Pre-pandemic, this has been limited to small numbers of academics at residential universities interested in blended or online learning (Hodges et al., 2020). The support available to academic staff varies considerably across institutions, depending on the resources available and the local context, however most institutions have a small, centralised learning and teaching support team (Redstone & Luo, 2021; Czerniewicz et al., 2020; Mihai, 2020). Sometimes additional support is available at faculty and departmental levels (Mihai, 2020). Often this support includes academic development and educational technology; typically including self-paced courses, workshops, seminars, collections of online resources and one-on-one support (Redstone & Luo, 2021).

The transition to ERT necessitated immediate online professional learning interventions for staff and students. In particular, those supporting the design of courses and development of learning materials saw an increased demand for online learning expertise (Bellaby & Sankey, 2020; Mihai, 2020). People working in academic support found themselves on the educational "frontlines" as institutions pivoted to ERT (Czerniewicz et al., 2020). This meant that the support staff who were providing technical help served as a lifeline for academics, which gave these support staff members greater agency and professional standing beyond simply technical support (Bellaby & Sankey, 2020). Support staff had to "find ways to meet the institutional need to provide instructional continuity while helping faculty develop skills to work and teach in an online environment" (Hodges et al., 2020, para. 9). The role of these support staff changed significantly, as they were required to upskill the academic staff and also to offer pastoral support to help staff manage the anxiety and frustration of dealing with uncertainties, technical difficulties and changing priorities (Bellaby & Sankey, 2020).

In considering how to support professional learning and development in relation to the transition to ERT, our literature review showed that there was a need to focus on organisational, community and teaching support (Redstone & Luo, 2021). Mihai (2020) describes the professional learning approaches during ERT as consisting of a "mix of reactive and proactive, general and discipline-specific, pedagogy and technology-focused" (para. 6).

Academic staff themselves identified specific needs during this time. A study in the United States and Canada found that staff requested online resource hubs with information and resources, as well as assistance with technologies, in order to be able teach online (Johnson et al., 2020). Support during this time needed to include technological support for using the university systems (such as Blackboard and Zoom), and also pedagogical support (Redstone & Luo, 2021). Those providing support to academics had to meet the challenge of greater demand for technological support, over and above, pedagogical support. They also had to be aware of not overloading academic staff with too much information (Mihai, 2020). Importantly, institutions needed to provide a variety of support offerings to meet different needs, including online resources, synchronous and asynchronous workshops, and one-on-one assistance (Redstone & Luo, 2021). Mihai (2020) catalogues the forms of professional learning during ERT as self-paced online courses, bespoke synchronous sessions at faculty or departmental level, open drop-in sessions and repositories of resources.

Academics also needed to look beyond formalised institutional support during ERT. Our literature review indicated that additional collaborative support could be provided through collegial learning groups, communities of practice and peer support (Baran & Correia, 2014, as cited in Redstone & Luo, 2021). The research showed that community support can help overcome feelings of isolation and offer emotional and psychological support as well as promote reflection and an exchange of experiences (Redstone & Luo, 2021). Professional learning approaches can be augmented through communities of practice that showcase good practices in ERT, encourage peer reviews and a team-based approach (Mihai, 2020).

THEORETICAL FRAMEWORK

Based on the critical, exploratory and emerging nature of this study, we drew on Ganz's organising civic pedagogy (2010) and Hochschild's theory of emotional labour (2003) as the theoretical framework. Ganz's theory, based on narratives, specifically on the "story of self, us and now", informed the methodological approach for the study, while Hochschild's theory enabled the analysis of the findings. The nature of each theory provided us with the opportunity to look across the data generated and to strategically abstract and analyse the findings.

The professional and academic practices within higher education are social acts and the COVID-19 experiences further highlighted that higher education has to deal with conflicting tensions within specific contexts. Gantz's (2010) storytelling as pedagogy approach has been used to mobilise social groups for change. As a collective, we felt that our shared higher education learning and teaching values were challenged by the COVID-19 demands and the resulting shifts. This required us to act as authentically responsive practitioners engaging in purposeful action, rather than simply reacting to circumstances.

We hoped that the exploration of the "story of self, the story of us and the story of now" (Ganz, 2010) could help us mobilise hope over fear, empathy over alienation and self-worth over self-doubt. We became increasingly aware that the social, historical and cultural contexts of our practices would yield a diverse set of individual stories ("stories of self") from a personal and professional perspective. Reflecting on ourselves as a collective enabled the articulation of both our shared experiences ("stories of us") and our plans of action in going forward with possibilities for change within our respective professional contexts ("stories of now").

The concept of emotional labour was first conceptualised by sociologist Hochschild (1983) and refers to an employee's display of emotions according to accepted social and cultural norms, rather than to what they actually feel. Through our collective sharing we have realised that since the shift to ERT and the associated demands required of us, we have been labouring emotionally. Emotional labour is seen as the effort of workers to manage feelings in order to create publicly-acceptable professional practices (Hochschild, 1983). Emotional labour could involve deep acting (i.e. modify felt emotions to match displayed emotions) and surface acting (i.e. fake, unfelt emotions or suppression of felt emotions) (Diefendorff et al., 2005). In this study emotional labour refers to the display of theoretically ideal emotions by the university's service or "frontline workers" instead of expressing their true feelings. As a collective, we felt the pressure of this as we were aware of our own vulnerabilities and the very real COVID-19 fears amongst ourselves and our families. The display of institutionally expected emotions was often intended to help enhance the calmness and confidence of students, academics and management during the chaotic transitions to new modes of learning and teaching. The display of these "put on" feelings requires huge emotional effort and human fallibility (Archer, 2007), especially when trying to calm and care for those left in confusion, doubt and fear because of professional, personal, economic and health concerns.

As such, while being regarded as ERT "emergency frontline" university workers, and being ever ready to help, we realised that we were constantly shifting in and out of real and fake emotions, creating tension

between our personal and practitioner selves. Our collective stories spoke to the concepts related to emotional labour, including "being there", being "compassionate", using "emotional intelligence" (McQueen 2004), "caring" (Brilowski & Wendler, 2005) and feeling "empathy" (Larson & Yao 2005).

According to Hunter and Smith (2007), emotional labour can be linked to emotional exhaustion and professional burnout (Mann & Cowburn, 2005; Näring, Briët & Brouwers, 2006) and should be given more consideration. More awareness and acknowledgement of emotional labour and the resulting consequences can lead to individual and organisational renewal (Reeves, 2008). As an informal community collective we met online on a regular basis, which enabled the expression of our built-up everyday stresses, so the meetings became our moments to "exhale". We were able to "exhale" the pain, fear, laughter, tears and anger and we began to feel like a "community of coping" as suggested by Hochschild (Korczynski, 2002). Similar to the Fineman and Sturdy (1999) study, our online meetings became a space where we could drop our university masks. This enabled "emotional exhaling" in a safe space, free from scrutiny, but amongst those willing to hear and care for each other.

METHODOLOGY

Collaborative auto-ethnography is an emerging approach to practitioner research where academic developers and those in related fields engage in processes of shared reflection online (Pallitt, Gachago & Bali, in press; Bali, Crawford, Jessen, Signorelli & Zamora, 2015). Researchers may document their discussions and reflections using various forms of digital artefacts, such as online documents and recordings of online meetings. While digital team ethnography (Beneito-Montagut, et al., 2017) is an emerging methodology, the focus of this article is not on how we made use of online spaces to engage in a collaborative process (such as discussed in Pallitt, Gachago & Bali, in press), but rather on our reflections over time, and how we made sense of these using a particular theoretical lens.

We engaged in a series of free writing activities during 2020 (July, September and November) and 2021 (March), where we responded to the following question prompts:

- Q1: What has kept us awake at night over the last 2 months?
- Q2: What have been the practice pains in the last 2 months?
- Q3: What have been the practice gains in the last 2 months?
- Q4: What are the post-COVID-19 possibilities?

During May and June 2021 we revisited our individual reflections and engaged in a collaborative process to share and discuss meta-reflections. We met online to each read and then discuss our free writes, followed by further discussions, writing meta-reflections and then coming back into the meeting and sharing these to review the emerging themes. These meta-reflections were written on meeting days (or afterwards if authors were unable to join) and uploaded to a shared Google folder. Depending on the different "stories" (Ganz, 2010), we used different questions as prompts to engage in shared meta-reflection (see Table 1).

Table 1: Meta-reflection focus areas and questions

Fo	Questions

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Story of self and story of us	Q1: How has your positionality influenced your professional space and feelings over the last year / Has your professional space influenced your positionality in any way? Q2: What have been the main thoughts about your position over the last year / What surprised you about your position over the last year? Q3: What were the 3 main pains over the last year / What were the 3 gains professionally and personally over the last year?
Story of now	Q1: What are our biggest lessons learned from the past year? Q2: How do we see supporting teaching and learning occurring in the future (post COVID-19)?

The data analysed for this article consists of the individual free-writes, five individual meta-reflections and the recordings and transcripts of online meetings where the authors engaged in shared reflection. Engaging in online meetings was difficult because we had to accommodate the schedules of five individuals. We used a Doodle Poll to coordinate available times and sometimes rescheduled and made alternative plans via WhatsApp owing to load shedding (power disruptions), connectivity issues, and work responsibilities. Our approach to sharing our reflections was therefore more flexible than originally anticipated, especially given constraints beyond our control, such as load shedding.

The authors were assigned participant numbers to ensure privacy and confidentiality. The free writes and reflections included critical opinions of the government, the participants' institutions, university management, and lecturers. As the authors were themselves the participants, no ethical clearance was sought from the institutions. The participant numbers used in the following discussion section do not correspond to the order of authorship in this paper. We see protecting ourselves in this way as a form of care; while sharing reflections with others in a public way is a scholarly activity, it can also be risky for individuals.

We used discourse analysis, as espoused by Fairclough's (2005) social realist explanation, to consider the relations and tensions between social processes, structures and practices within each of our contexts and higher education more broadly. We drew on what emerged, and considered the conditions that enabled or constrained our agency during and post the initial COVID-19 shifts and transitions. Keeping social, organisational and practitioner change as possibilities for re-imagination, our meeting transcriptions, free writes, reflective and reflexive texts, as well as our observations became the discourse or discursive elements that led to our theme categorization and further abstractions.

Our research approach resonates with the decolonial approaches to research and "ubuntu" principles that have become accepted as a research paradigm informing research agendas and methodologies (Muwanga-Zake, 2009; Seehawer, 2018). Ubuntu philosophy positions the individual in terms of their relationships with others and shared humanity (Muwanga-Zake, 2009). When drawn on and acknowledged in research, this philosophy gives the research process a human face and emphasises humane collaboration where individual values, needs and norms are respected

(Muwanga-Zake, 2009; Pallitt, Grossman, et al., in press). As researcher-practitioners in an African context, the recognition and valuing of our individual and collective stories enabled us to re-imagine new possibilities together.

FINDINGS AND DISCUSSIONS

The Story of Self

Due to this study spanning a year, we were able to stand back as individuals and reflect across our free write pieces. In terms of the "story of self", a key finding was the intersection between our positionality and our university positioning. Positionality in our study has its foundation in critical realism (Bhaskar, 1993) and speaks to our life structures when we came into a pre-conditioned world. Our positionality then includes, but is not limited to, our race, gendered or non-gendered identity, culture, religion, geography of birth and socio-economic standing. Our coming together during the moments of structural, cultural and environmental crises associated with COVID-19 enabled the identification and acknowledgement of the enablements and constraints as the university's frontline service workers during a time of fear and panic. Participant 3 (still very new to the institution when the pandemic started) noted: "Our roles changed overnight and with that comes pressure that moved me into different emotional states, ranging from excitement fuelled by adrenalin, to anger and fear of failure, to imposter feelings."

For some individuals, these professional vulnerabilities immediately raised historical and embodied feelings of resistance to authoritarian and forced calls for change. We were, however, only able to arrive at this realisation about our resistance to change through the discursive and emotionally sharing nature of our collective during our meetings; our "exhale" moments. As a community of coping (Korczynski, 2002), we were then able to better identify, understand and calm our own and others' acts of resistance and at times defiance as we began our journey of reimagining our learning and teaching spaces by enhancing the application of technology. Participant 5 (a black female academic who had to abide by the regulations and laws of the apartheid system) reflected as follows:

> A complete awareness of not being good enough came flooding in. I always felt a sense of resistance and questioned every call and this last year made me realise I still do this as the first reaction before going into further thought.

The shift to ERT highlighted the shifting identity threats of many of our positions as Academic Developers, Instructional Designers and Learning Designers, as acknowledged by Participant 2 who said, "I struggle with what to call myself…" The psychological battle of identity resurfaced with the increasing adoption of technologies for learning and teaching and began to increase the vulnerabilities in relation to job descriptions. Participant 2, who, like Participant 3, was new to the institution when the pandemic started, highlighted the identity struggles that the multiple demands of teaching during the pandemic brought up: "[T]ension is around my identity, 'career' and the role we play in supporting academics since I play a support role and yet I am an academic too." This required finding ways of managing these multiple identities during a challenging time.

In some universities, tensions emerged between the identities and roles of Academic Developers (ADs) and Instructional Designers (IDs). IDs were now being

deemed the rescue team responsible for helping all academics and students to transition to ERT. Participant 4 (an ID) noted: "I have noticed how more visible we are than traditional AD folks who seem at a loss to adapt and support in online spaces. Why are they invisible now and us who were ... invisible are overnight VIPs."

Through the thematic analysis of our free writes, we were able to give voice to feelings related to emotional labour (Hochschild, 1983). In the best interest of assisting our universities and colleagues and students in need of learning and teaching support, we realised that in our AD practices we were displaying certain positive emotions for others, while suppressing our authentic, negative feelings. As the stories of self were read, shared and discussed, a sense of coming together through pain, fears, anger and loss was acknowledged and was followed by a renewed sense of safety, care, support and hope for new and re-imagined possibilities. Participant 5 commented: "It was becoming part of a group like this that made me realise that we are all at the mercy of our vulnerabilities. It has enabled more reflection on the areas that continuously creep in and create discomfort."

Given the often dominating culture, especially at research-intensive universities, which gives central place to knowledge (epistemology) rather than to being (ontology), the influence of personal positionality on our professional positioning emerged as a strong concern in our findings. This served to strengthen our belief that who we are, and having a strong sense of the emotional self, matters and is inextricably linked to what we do and how we practice. It was clear that our sense of our own personal relevance and lived history played a role in the way we approached the crisis and how we took on the roles we were expected to manage.

Every one of us mentioned being initially discomforted and disrupted by the COVID-19 crisis and the emergency shifts it necessitated, while trying to "save the academic year" – a chant that actually became burdensome to most. Individual stories raised the importance of "showing up" and being confident for those we needed to support. It was expressed that institutional management, at times, likened us to well-oiled cogs in the university engine, calling for us to engage as "superhero personas". We were expected, in homogenous humanoid fashion, to discard our true feelings and get on with the job demands, irrespective of personal health, well-being and circumstances. Some of the stories of "self" brought to the fore the power imbalances that some have been forced to face and which have contributed to shaping the manner in which representation is made of the personal and professional self. For example, Participant 4 reflected:

> You learn about yourself as a professional, but also it's kind of your role's difference and you learn how important that role is. And then I thought, you know, we support people, not just technologies. And this entails a lot of human work... more than before.

The increased visibility of the technical support aspect, especially within the smaller institutions, highlighted the added responsibility, the diminished human capacity, the poor technical infrastructure and the underlying constraints of meeting the learning and teaching demands during these crisis moments. The visibility also brought to the fore some of our inherent personal "can do it all" traits, which have often harmed our wellbeing and the quality of our professional outputs. Despite the constraints, the moments of coming together to share and exhale have strengthened the

reflexive self within the collective. It has also afforded us time to reconsider and reflect on the need to become more assertive about what we can take on; trust our ability to delegate; practice distributive leadership; and consider wholesome personal and professional preservation and sustainability. Participant 1 (a working mother, recently promoted to a leadership position) highlighted the following:

> One of the big things I learned is that we need to take a step back. I think one of the major lessons would be to actually say... you know what, I can't do this... I cannot manage this, I need to draw on [other resources]... So for me it's been a growth point because I'm not good at asking for help.

The story of the self within the collective clearly revealed the importance of our being and becoming through continuous reflexivity, curious knowing and resilient doing. It also highlighted the value of acknowledging our positionality and its influencing privileges and limiting opportunities, while considering the enhancement of our agency as evolving practitioners, professionals and life-long learners. We see ourselves as people who are ready to engage with those requiring our support, as part of a collective of coping (Hochschild, 1983), and as confident to lean on one another as we navigate, re-imagine and innovate the learning and teaching spaces for future uncertainties.

The Story of Us

There were many areas of overlap between our individual stories of self, which signalled the broader shifts and implications of the rapid shift to ERT. As our relationships within the research group grew and we developed more of a collective identity it became harder to separate out each of the stories of self and us.

Our collective experiences highlighted that following the pandemic our roles not only changed, but also become far more visible at our institutions, as articulated by Participant 2: “COVID has certainly made a big impact on our roles… if I look at what I did this year, it's quite different from my job description and highlighted the need for our roles.”

The sudden shift positioned us as “frontline workers” who went from “under the rock to rock stars” and at times it felt as if university management “hid behind us” (Participant 5) and “outsourced responsibility” (Participant 4). At other times management applied pressures which we perceived to be counterproductive to our role of supporting academics: “We don’t want to be seen as steamrolling ahead, but the pressure from management demands us to” (Participant 4). We had to balance university leadership’s technicist and “solutionist” perspectives of technology and online learning (partly framed by government discourses) with our own awareness and experience of supporting staff and students, which we felt needed sensitivity. Throughout this we also had to manage our own professional emotions to enable others to cope.

Emotional labour emerged as a key theme that shaped our stories. For the authors, emotional labour was practiced implicitly; and it was only through our interactions in a safe space that we could start to make sense of the emotional management we embodied in our professional practices (Hochschild, 1983). As support staff, we had to contain our own emotional state to ensure feelings of safety and confidence in the colleagues we supported. As Participant 4 indicated:

"[B]eing able to negotiate your role as a support person. You need to be able to read what's happening on the ground, what's needed, what's the best format for support?"

The sharing of frustrations, irritations and stress points experienced during the shift to ERT created the conditions for reflection on our own positionality, while our professional practices became central to the story of "us". Professional sharing, outside of our institutions, became a space to share our experiences and break down the self-made isolation that is often inherent in our profession. For example, Participant 3 noted a change in her approach to adapt to the challenges of incorporating new technologies, initially viewed as a necessity to ensure role security. "[B]ut as I began to work through the benefits, despite all the tech glitches, I have now taken to the affordances of technology in teaching and have strongly included this as part of my own positional make up".

Having to support others during this time forced us to work in an open and flexible manner in order to respond to changing circumstances. This required a focus on our own continuous learning. Participant 3 highlighted the tensions inherent in learning during this time:

> I have learned more during this period than any other time in my work in Ed Tech/AD especially on the functional and system level. I have learned more about my institutional context that I could hope for and this has challenged me at every level possible. [This has made it] a time of contradictions, as it is a very sad time... but for my career and my field this was a massive moment that brings our work to the front, but also shows where we can do better on many levels.

As an "us" we were able to hold each one's emotions around the shifting sense of our professional identities within our universities. The sense of being a group enabled us to voice, hear and grapple with our internal deliberations about who we were being identified as within our institutions (Archer, 2007). It also gave us the courage to accept or challenge management on the basis of our job descriptions and the fields we were in. Participant 4 reflected:

> I am feeling that the pandemic has helped me test my limits as an educational technology specialist. Before, I had a bit of imposter syndrome, now I know I am able to do this work and do it well even under stress. I have a renewed appreciation for the skills and dispositions I have, which I have seen does not come easy to many academics – a sense of self as a professional. It's become clear we need to put our stake in the ground as specialists and be taken seriously.

Besides the reshaping of our professional selves, what became very apparent was the urgent need for reimagining learning and teaching spaces within our universities and higher education nationally. As a collective we professionally engaged in re-imagined ideas and alternative practices to successfully enable further epistemic and ontological access. This involved experimenting with and encouraging new ways of knowledge application that could be contextually responsive, and dealing with the constraining factors in our learning and teaching spaces. Participant 4 noted:

> There is a divide between the "traditionals" who want to go back to a fully face-to-face campus and want

> everything to be like it was... and then there are the other staff who have seen the light and are saying "no, we've learnt we can do things differently".

Participant 4 also noted the improved sense of community in some spaces: "I feel like we have a community around online teaching that we did not have before. I am hoping we have more of a voice in matters going forward." Despite all of the chaos, there was recognition that new ways had been found so that we could continue to support academics: "I am proud… of the work we have done over the past year to support academics as it has been so chaotic in some senses." (Participant 2).

The Story of Now

The focus on the story of "now" was for us to recognise the stories of "self" and "us" that had emerged and use these to look ahead. This enabled us to focus on the key lessons that had emerged over the past year and how we could re-imagine support for learning and teaching in higher education in a post-COVID-19 world. The key lessons can be categorised into personal, professional and organisational changes.

Personal change lessons

The first personal lesson that emerged concerned managing the expectations that others projected onto us as "frontline workers". In the transition to ERT, we were expected to provide support to academics and students, "there was this magnification of our work and all of a sudden we needed to provide all of these solutions to the institution" (Participant 1). While managing our own particular challenges, we had to also have the ability "to step out of our own comfort zones" (Participant 5) to be able to support others. As mentioned earlier this support went beyond providing technological support to providing social-emotional support to academics. This occurred through hand holding, listening and holding our own emotions in check. As support staff, we are happy to help where we can, as we value our roles of assisting others, but this sometimes comes at a personal cost. We had to be very careful to manage our own expectations and the expectations of others. Under pressure to assist others, we had to be careful not to do too much. We had to realise that "you cannot fix everything yourself" (Participant 1). As support staff, we find it difficult to ask for help ourselves. However, at times we needed the support of others and to be able to delegate work.

The second personal lesson that emerged was experiencing changes in our identities. Many of us occupy a "third space" (Whitchurch, 2015), where we have academic responsibilities, but at the same time also support other academic staff. We work in very small teams (usually two or three people) and so we experienced heavy workloads in supporting a large number of academics. We had to develop coping mechanisms for ourselves during this time to balance our academic and technical support responsibilities. Due to our focus on supporting others, in the face of urgent support needs, it became difficult to continue to focus on our academic responsibilities. This is noted by Participant 4, who said: "I've had to try really hard to not lose the academic side and try to remain active in research activities and make time for that." This resulted in the questioning of our identities. We also had to be "...realistic about possibilities, given connectivity and other student and staff challenges" (Participant 4).

Professional change lessons

The first professional lesson was that we had to learn to support ourselves and the others within our professional teams *before* we could support academics and students. Support to colleagues in our own teams was required in addition to supporting our academic colleagues. We also had to learn many new things, sometimes very quickly, to be able to support staff. Often this meant varying our approaches, for example, "we've gone from lots of synchronous webinars initially to more asynchronous resources and online consultations" (Participant 4). We were able to do this through the teams we were in and by reaching out to our personal networks. By working together, we were able to overcome many of the challenges. The aspect of community was invaluable in helping us to get through this period.

The second professional lesson lay in our realisation that our institutions were now able to see greater value in our roles and in the contribution we make to our universities. Before the pandemic, we tended to work with small numbers of academics who reached out to us for support, but we were somewhat invisible in the overall university operations. Now we are more visible and "the value of our roles has been seen in the support we provided to help academics to be able to make this transition… this bodes well for future collaboration" (Participant 2).

Organisational change lessons

The first organisational lesson was learning how to move from primarily operational and technological support to more strategic and responsive considerations of curriculum, pedagogy and assessment and the associated needs for the shift to distance methods. While many academics initially came to us with technological support needs, we were also able to engage in dialogue around teaching and learning practices. As articulated by Participant 2: "[T]his whole pandemic experience has encouraged academics to rethink some of their assumptions of teaching, learning and assessment."

Many academics expected us to provide solutions to challenges they were experiencing. However, over the course of the pandemic, we looked to move away from setting up or fixing things for academics and moving towards greater capability building and professional learning so that staff would be able to address issues themselves. As Participant 1 reflects: "[O]ne of the major lessons learned is our shift from working at an individual basis to thinking strategically." Therefore our support strategies and approaches to professional learning changed during ERT.

The second organisational lesson was learning how to take on greater agency in contributing collectively to systemic changes. Individually, we sometimes can become frustrated in not seeing greater changes in learning and teaching in our universities, yet "we can as collectives contribute in small ways to systemic change instead of always waiting and being disappointed that it is bigger than us" (Participant 5). We are now more able to contribute at higher strategic levels, for example, "management has come to rely on us for decision making, e.g. [implementing a] remote invigilation app in preparation for exams where we may have the third wave disrupting plans for sit down exams" (Participant 4).

Future directions

Given the lessons learned over this period, three future possibilities emerged from the reflections of how to support teaching and learning in post-COVID-19 higher education in South Africa. The first

possible direction is the expansion of blended and online teaching and learning. ERT has accelerated the use of technologies for teaching and learning and the momentum and lessons learned from this experience need to be taken forward. Although some academics yearn to go back to the pre-COVID classroom, there is now an opportunity to consider different modalities of learning and teaching. This could be done in a way that considers the best approaches for specific teaching and learning needs, and which advances contextually-relevant good practices, given differences in institutional resources and capacities. There is a need to develop positive institutional cultures around innovating in learning and teaching and providing incentives for improving learning and teaching.

The second possible direction is the changing positionality and expansion of the roles of learning and teaching support staff within higher education. There needs to be provision for greater capacity at various levels, to be able to provide the necessary responsive support for academics. This may include the recruitment and upskilling of additional staff to learning and teaching support teams. However, roles, such as academic developers and educational technology specialists, could be clarified or become more formalised, with the identification of defined career paths within higher education. Closer collaboration is required between the various stakeholders in learning and teaching and a team-based approach can more inclusively meet the needs of students. A more human-centred approach to support services is required to successfully address the needs of academics. Support needs to be seen in a holistic manner; that encompasses the pedagogical, technological and emotional.

The third possible direction is the changing nature of support through more distributed support services and different professional learning opportunities. Many learning and teaching staff as well as some academics have become used to working from home and this enhances the ability to provide distributed support, regardless of location. Additionally, the value of forming and strengthening communities of practice (both within and across universities) helps to strengthen support offerings and overcome some of the "silo thinking" often experienced in universities. Professional learning opportunities need to be provided in multiple forms and via multiple approaches to responsively meet the needs of different academics. Professional learning opportunities, for both staff and students, need to foster learner agency to deal with the disruptions that occur in life and develop the ability to engage in continuous and lifelong learning.

CONCLUSION

Forming a collective of support professionals from different institutions during a crisis enabled the sharing of emotions and the further development of practices. This led to discussions around the shifting nature of our work and roles because of COVID-19, and how we might better support lecturers and students during and after the pandemic. Using Ganz's organising pedagogy (2010) and Hochschild's (1983) theory of emotional labour enabled shared reflective practices to emerge. As a collective, over time we found that we were able to engage in authentic ways in a safe and supportive space, going from sharing our individual vulnerabilities ("story of self") to shared agency ("story of us"). The strength of the collective supported our professional practices as we became better able to make sense of our emotional labour together. However, the collective aspect made it increasingly

difficult to separate the story of "self" (personal) and story of "us" (professional).

The collective space became not only a place to share frustrations and challenges, but also an experimental space to share alternate possibilities and new ways of knowing, doing and being as we supported learning and teaching. The power of our stories as a collective began to enhance institutional and collective agency (Archer, 2007) that infused our group with the agency to manage, sustain and create change as professionals within our individual spaces ("story of now").

We hope to empower fellow academic developers and educators who have been supporting others during ERT through our description of a process for reflecting on learning and teaching which also highlights the support that may be necessary during times of crises. Despite our varying roles, contexts and lived realities over the past year, this study sees the notion of holistic academic development, as encouraged by Sutherland (2018), as an opportunity during and beyond the crisis, to radically transform the ways in which learning and teaching are understood, supported, enacted and evaluated. This article offers an approach that can be used by higher education practitioners to better understand their own experiences and, as part of a broader community, to be better able to assess the impact of different kinds of responses to learning and teaching. Adopting the proposed approach in a collaborative way can revitalise energy and re-imagine ways ahead across universities during and after any future pandemics.

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TRANSITIONING TO ONLINE MODE FOR A SUPERVISOR-LED PHD COMMUNITY OF PRACTICE

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ABSTRACT

As curriculum designers and facilitators of doctoral education pedagogy at one South African higher education institution, we critically reflect on the transitioning of a traditional face-to-face supervisor-led PhD community of practice (communal research supervision) to a fully online 'model', a reimagining brought on by the vicissitudes of the COVID-19 pandemic. This reflection responds to the erroneous tendency to critique online pedagogies in preference for in-person contact deliveries. The article suggests that establishing unique communities of practice are required for sustaining the new modes of delivery to counteract nostalgia for past operations. A forthcoming online engagement is likely to be characteristic of all higher education institutions irrespective of their former dominant methods of pedagogy. We invoke key social practice constructs, namely 'domain', 'community' and 'practice' (Wenger, 1999; Wenger, McDermott & Snyder, 2002) as theoretical heuristics in our contemplation of sustaining community vibrance and continuity. We consider the tensions that present as they relate to, firstly, developing a continually (re)negotiated joint enterprise, secondly, enabling mutual engagement, and thirdly, facilitating a shared repertoire of the community's resources in an evolving, technologically mediated mode of operation. We argue that the key enterprise of this community, namely affordances of participation (research supervision and research learning) by both core and peripheral members of the community are likely to continue to accrue in the online space, despite challenges presented by video-conferencing technologies. We contend that given the strength of its leadership, the community as a social space of academic interaction/engagement can mutate into productive new assemblages. Shared communal resources are important for anchoring the community in COVID-19 era and beyond.

Key words

community of practice; leadership; online; research supervision; joint enterprise

1INTRODUCTION

We focus on a supervisor-led research supervision community of practice (CoP) in the School of Education at the University of KwaZulu-Natal (UKZN) in South Africa and its transition to an online space. The community comprises both experienced and novice research supervisors as well as advanced and novice doctoral students. This particular community is a mutation of an historical assemblage that dates back to its 1996 genesis in the former Faculty of Education of the then University of Durban-Westville. It is currently located in the School of Education of UKZN and is led by an experienced and established educational researcher who oversees the administrative and scholarly enterprise of the community. The PhD cohort CoP does not exist as an official institutionalised structure or an official university seminar programme or course. While the broad aim of the CoP is the teaching and learning of research and scholarship, there is no defined or structured curriculum or course outcomes and no mandatory assessments.

STATEMENT OF THE PROBLEM

Higher education institutions (HEIs) globally, like all social, cultural and economic structures, had to respond rapidly to sustain their operations in the face of the COVID-19 pandemic. Dominantly, online pedagogical strategies were embraced as the practical alternative. However, the crucial concern was maintaining previous standards of pedagogical modes of delivery, especially when institutions themselves were not confident with the supplementary online pedagogical strategies. Many HEI academics in contact universities tended to approach the challenge believing that the intervention was temporary. They nostalgically expected that the past pedagogical approaches would return. As the pandemic endured, a new normal of the alternative came to be more entrenched. Curriculum designers and facilitators of academic programmes had to prepare for a robust critique of the potential and drawbacks of the new online pedagogical approach, not just as a practical strategic alternative but as a form of activating systemic capability. Whilst the focus of such reflections have primarily tended to be on undergraduate programmes, this article focuses on how online pedagogies came to be engaged in postgraduate education, particularly in doctoral education programmes. Although the focus warrants a co-ordinated review of human, physical and financial resourcing to sustain the quality of postgraduate education, this article chooses to reflect on how the academic staff rallied around the challenges.

In the discussion that unfolds, we reflect as core members and situated insiders (Chammas, 2020) of this once traditional, face-to-face community of (research supervision) practice on transitioning to a fully online mode of functioning. Such insiderness is acknowledged as a resource and does not conform to positivist expectations that neutrality or objectivity are the desired goals of a social science researcher (McNess, et al. 2015). We consider how the joint enterprise, namely the teaching and learning of advanced research competence, was carried into the online space. We contend that the strength of the traditional face-to-face supervisor-led PhD CoP (especially its strong leadership) prior to the trigger event (the pandemic), and subsequent to that, was a critical determinant in enabling the transition.

CONCEPTUALISING TRANSITION AND COMMUNITY

Conceptualising transition

The notion of transition might suggest a progressive, steady move, but transitions could also be sudden and

unprecedented. Of significance is that transitions are likely to be discomfiting. Schlossberg's Theory of Transition (Schlossberg, 2007) suggests that vagaries and fluctuations might disrupt and discommode. It is without contention that the COVID-19 pandemic has had a destabilising, trigger effect (Schlossberg, 2007) and has disturbed normal social practices (like teaching and research supervision CoPs). Schlossberg asserts that individuals' abilities to respond effectively to a sudden transition depends on four key factors: situation (what triggered the change?), self (personal psychosocial make-up), support (relationships and networks), and strategies (situation adaptation and reframing) (Schlossberg, 2007). The CoP reported on already existed as a network of support in its face-to-face mode. Strategising and reframing for an altered way of existence meant that it had to draw on and adapt its existing tangible and intangible resources during this metastasis.

Conceptualising community

Wenger (1999, p. 47) reminds us that a CoP "encompasses language, tools, documents, images, symbols, well-defined roles, specified criteria, codified procedures, regulations and contracts". His insight at the time was primarily the product of research on *in loco* learning communities (Wenger, 1999), but has been appropriated by researchers to study online learning formations. In fact, the proliferation of online CoPs as a means of networking has been a popular means of communication long before the onset of the COVID-19 pandemic (see Kirschner & Lai, 2007, for example). The pandemic has, however, triggered a rapid move to the online space.

Studies of online communities in the education sector reveal the relative success of the online space in fostering community (Banas & Wartalski, 2019), improving student collaboration (Al Hashlamoun & Daouk, 2020), facilitating the development of digital literacy and knowledge expansion in chosen fields of interest (Belaid, 2021). While McLaughlan (2021) contends that the sudden move to the online forum created a shared set of challenges which communities are likely to overcome using communal resources, the constant challenge to inclusivity that might present in the online learning space (Rice, 2021) is a threat to online community sustainability. It should be noted that CoPs are usually associated with progressive change and not sudden changes, but if the fundamentals are in place, the shock effect of even sudden changes can be managed through the strength of the core group of participants who hold the community together (Bolisani, Fedeli, De Marchi, & Bierema, 2020). CoPs are usually anchored by a core group of participants and might designate a leader who co-ordinates their activities. CoPs accommodate varying degrees of participation, including peripheral participation. Participants move between the core and periphery, depending how they perceive the value of the community's enterprise. Participation is entirely voluntary. A CoP usually acquires legitimacy when its membership comprises recognised experts (Wenger, 1999).

In the discussion that follows, we employ Wenger's three dimensions of community coherence, namely mutual engagement, joint enterprise and shared repertoire (Wenger, 1999) as conceptual heuristics to establish both gains and compromises that present as we attempt to manage the restrictions on human proximity (social distance) due to the COVID-19 pandemic.

Mutual engagement

Mutual engagement entails engaged actions and negotiated meaning-

making by community members as they build socially complex relationships. Such relationships, as they develop over time, help foster community maintenance. A necessary condition for mutual engagement that might lead to community coherence is social inclusion in what matters. It requires a concerted effort that might entail initiative and pre-emptive steps by core members to facilitate the process of mutual engagement from arbitrary interaction into a CoP. Wenger (1999) argues that mutual engagement does not rely on a homogenous grouping but is likely to be more productive when there is a diverse membership. While members might develop shared ways of doing things, each finds a unique place and crafts a unique identity. Furthermore, mutual engagement is not about individual competence but is about having a vested interest in all participants' competences – the ability to connect meaningfully to the contributions and knowledge of others through learning how to offer and accept help and working out what obstructs and what enables.

Joint enterprise

Negotiating a joint enterprise or domain (Wenger, McDermott, & Snyder, 2002) depends on a collective process of negotiation of what the enterprise is. This enterprise is always in the making and depends on creating relations of mutual accountability that become reified in terms of rules, policies and standards. This includes "developing specialised sensitivities – an aesthetic sense, and refined perceptions that influence a participant's judgement of the quality of something produced or action performed" (Maistry, 2005, p. 20).

Shared repertoire

A shared repertoire underlines the rehearsed nature of shared resources and constant accessibility for engagement. The joint enterprise results in the continuous creation of community resources, artefacts, stories, tools and discourses. The move to the online space for this supervisor-led PhD CoP induced a further layering of the (joint) enterprise as it related to apprehending and manipulating opportunities and challenges that presented in the digital space. It is not unexpected that different members of the community (both core and peripheral) would have different proclivities for the new digital forum. Part of the new learning entailed reviewing 'rules' of engagement (digital courtesies), adapting to the new mode of communication and customising community resources.

BACKGROUND AND CONTEXT: TRACING THE GENESIS OF THE PHD COMMUNITY

Wenger (1999) notes that CoPs emerge in larger historical, social and institutional contexts. They could form organically or can be deliberately and carefully cultivated or seeded (Wenger, McDermott & Snyder, 2002), much as one would cultivate a plant. As with a plant, growth cannot be forced, but healthy development can be encouraged. The CoP reported on in this article has a peculiar history and has sustained longevity dating back to 1996. It has seen its membership change over two and a half decades, but remained true to its enterprise, namely that of creating an academic space for the teaching and learning of research and scholarship at the doctorate/PhD level. Communal learning through communal supervision has historically been a valued enterprise in this CoP. This CoP has also sprouted international CoPs in a similar enterprise (Samuel & Mariaye, 2014).

The School of Education of UKZN in South Africa has an established record of developing support programmes for advanced research students. The genesis of such programmes dates back to the mid-1990s, to the former University of Durban-

Westville (De Lange, Pillay, & Chikoko, 2011). The founding members of this assemblage intended to create the conditions for research students to learn the craft of research in a supportive yet academically robust environment. This would provide an induction to academia under the guardianship of core volunteer members who took it upon themselves to fuel the research learning enterprise of cohorts of PhD students (earning the name 'The PhD Cohort Model'). Previous studies on this same CoP reveal the potential that it has for developing collaborative relationships among students and supervisors (Govender & Dhunpath, 2011), academic maturity and student autonomy (Govender & Dhunpath, 2013), improving PhD throughputs (Samuel & Vithal, 2011) and developing scholarship and reflective practice (De Lange, Pillay, & Chikoko, 2011).

Wenger reminds us that a CoP is an organic formation and is in its 'potential' stage (Wenger, McDermott & Snyder, 2002), with minimal energy expended on the conception of rigidly defined objectives. As the community moves into the coalescing and later into the maturity stage, community objectives might become more defined. If perceived as productive, CoPs are susceptible to becoming institutionalised, and their organic fluidity is likely to be compromised when this happens. Of significance is that in the last four decades, South African universities (including UKZN) have succumbed to a neoliberal meta-narrative, departing from the traditional notion of the university as a social good to fully embracing the university as serving an economic purpose (Maistry, 2015). The marketisation of the neoliberal university, a new managerialism and the emergence of a performativity and accountability culture has certainly influenced the nature of PhD research learning CoPs, with such communities now seen as key to improving throughputs, outputs, turnaround time, etc. (implicitly contributing to the neoliberal agenda). It is beyond the scope of this article to pursue the effect of the neoliberal meta-narrative on the practice of the community being reported on, except to note that the core membership has become increasingly aware of the risk that higher education performativity imperatives might have for the community.

REFLECTIONS ON THE TRANSITION TO OPERATING ONLINE THROUGH EFFECTIVE COMMUNITY LEADERSHIP

As described above, the PhD research learning CoP (in its face-to-face mode of existence) had indeed demonstrated the distinguishing features that Wenger, McDermott and Snyder (2002) recognise as elements of a functioning CoP – namely that of having an established enterprise, through mutual engagement by applying a shared repertoire peculiar to the community. The onset of the pandemic and the subsequent physical lockdown of university campuses in South Africa meant that the PhD community leadership had to immediately assess the extent to which they could continue to support their members (new and old PhD students and novice and experienced supervisors).

Strong leadership was a key issue that helped the CoP move to an online mode of interaction with relative ease. The overall leader and co-ordinator of this cohort had, prior to the pandemic, set the scene for how the community was to function by developing, in consultation with core members (other supervisors that led year-groups), a comprehensively articulated long-term plan. It became a matter of giving effect to the plan in the online space. The leader/co-ordinator, an established and respected senior academic, had maintained meticulous records of PhD student membership of this particular

community, their supervisors, topics, time in the programme and historical records of individual student progress. The leader regularly provided pointed group communication via email and administration, selflessly performed in service of the community. Wenger (1999) reminds us that CoPs rely on decisive, inspirational and gratuitous leadership, especially during times of crisis. Pre-established respect, trust and credibility, the convenance that guided mutual engagement in this CoP, carried it without much effort into the online space.

The online video conferencing platform (Zoom) was new to all members of the community, including the leadership. As can be expected, a new shared repertoire (Wenger, 1999) had to be learnt and developed. Rules of engagement, including virtual hand-raising, turn-taking, microphone muting, screen sharing and written chats, had to be negotiated as the community began to create its own online etiquette. Pre-established trust, good humour and all-round patience with learning how to navigate the virtual environment have seen the development of a nuanced repertoire over the last 18 months. Minimal time and energies are now expended on reiterating 'rules' of engagement, an indicator of a CoP in transition. Zoom sessions, for example, are recorded as a matter of routine course, allowing participants the opportunity to playback and revisit aspects of the plenaries and breakaway sessions that might inform their progress.

Almost effortlessly, this practice enacted the literature which argued that online learning should blend opportunities for both synchronous and asynchronous engagement, to allow greater affordances for access and pacing by the student body's *learning* agenda driving the efforts, rather than only the agenda of *teaching* mandates of the lecturing/academic/supervisory staff. Moreover, it facilitated entry to the programme materials and dialogues for those who experience internet connectivity challenges, especially when they were accessing the online classroom from sites of weak internet provisioning, such as in some working-class or rural contexts. This strategy proved especially invaluable for doctoral students in far-flung areas such as Mozambique and Rwanda, who were previously required to make costly travel arrangements to attend face-to-face organised community sessions.

MAINTAINING A POWERFUL SHARED ENTERPRISE IN THE ONLINE SPACE

Professional-ware: staff resourcing

The resourcing of new pedagogies under COVID times is sometimes simplistically understood to be confined to provisioning of *software or hardware* (e.g. data bundles and laptops) to provide access, rather than also to the new, specific kinds of academic, administrative and professional support ('professional-ware') required to ensure cohort management and delivery. At UKZN no additional staff workload calculations are directed towards these added staff responsibilities. Many staff report the increased onus of managing not only the pedagogy of online interaction, but also the developmental support required to allow all participants' successful interaction before, during and after online cohort seminar sessions.

Financial resourcing and staff development

The added responsibilities are not yet consciously factored in at most face-to-face institutions, as is perhaps more prevalent in those whose legislated mandate was open and distance e-learning delivery (ODeL). Erroneously also, in the South African higher education context the state subsidy conjures up a perspective that ODeL students are somewhat less

resource-intensive. This fosters a long-term enterprise that suggests that face-to-face institutions should not expect much additional resources to their staffing complement in order to embrace an alternative new pedagogical mode of delivery. Little due attention is given to what academic staffing development requirements are needed to embrace the new pedagogical space comprehensively. Simply put, there is an underestimation by government and management officers about the scale of reform effort required at varying levels of resourcing when new modes of pedagogies are introduced. The official discourse by such managers is usually one that appreciates the added burden carried by the practising staff and respects the extended mandates of activities of time and resources, but no direct substantive support to address the issues accompanies these declarations. More is expected to be done with the existing resources.

Beyond pedagogies of comfort: addressing subversive strategies during online pedagogy

The community does value formative feedback – robust, rigorous and enabling dialectic that is being established through online modes of delivery, which seem to offer 'pedagogies of comfort' that enable students and staff to work from their homes. Nevertheless, as members become more familiar with the online environmental space of pedagogy, 'creative' (or more likely subversive) strategies are being noted among those who wish to feign participation and involvement, yet are not deeply connecting into the real-time interactivity that the mode offers. For example, members may log in to the electronic space but not be physically interactive in their presence in contributing to discussions and dialogues.

Perhaps this is true of any form of pedagogical delivery. New members (PhD students and supervisors) learn how to participate and how to assume responsibility for their own and others' learnings. This intangible joint enterprise is invaluable and is realised through establishing a new online shared repertoire through mutual engagement.

Activating collaborative and respectful curriculum design

The more tangible aspect of the community's enterprise is its powerful online plenary sessions, engaging encounters led by venerable scholars in the field of educational research. Expert researchers from within the community or invited guests facilitate opening plenaries on a range of carefully considered themes. The relatively low economic costs of soliciting participation from 'visiting' lecturers provide access to a wider, diverse range of experts from varied communities, perspectives and spaces, compared to invited visiting fellows which usually draw substantial costs to host, accommodate and transport them to the institutional space.

A distinguishing feature of the ensuing discussion sessions is a culture of zealous but respectful interaction. New (and senior) PhD students are exposed to the 'conventions' of deliberations and debate in academia, an induction into what Kamler and Thomson (2006) describe as the occupied territory, a virtual space that presents new challenges for participation and access. Nevertheless, it needs to be acknowledged that the constricted time limits of sessions for formal engagement in online pedagogies with these expert resources means they are unable to tap deeply into the lived and nuanced experiences of the visiting scholar. Learning from and through them is not confined to only matters of pedagogic and disciplinary content, but could include matters of disposition, attitude and cultural richness that are best available via

spending extended time within interacting communities.

Cognitive pitch of research learning

At the end of each cohort seminar, a tradition has come to be established. Students and facilitators jointly reflect in a "harvesting of lessons learnt": about their studies, about lessons learnt during the plenary and breakaway sessions, about research approaches and strategies in general, about supervison. These collective learnings are firstly orally shared and then docuetnedin writing after the sessions. This harvesting includes personal reflection on what it means to activate a researcher identity. Increasingly, in recent times, the reflection on the mode of online delivery has also come to be part of these reflections.

Community members have come to realise that the move to a virtual space does not have to compromise the intensity and cognitive pitch of the research learning encounter. If anything, turn-taking in a video-conferencing environment gives participants time to carefully construct comprehensible arguments, questions and rebuttals. It also requires restraint to temper the urge to speak over others. The use of the chat function is encouraged as participants could deliberate with the group and with individuals: a 'new' learning to communicate that is constantly evolving.

Developing collegiality through the structure of the cohort programme

The community disaggregates into PhD year groups in breakaway virtual conferencing sessions. Each year group is led by senior research supervisors, who remain with their groups from year one through to completion. This allows PhD group supervisors and students to develop social and collegial bonds over time, intimately in tune with each PhD student's research focus and progress. A remarkable aspect is that these supervisors have no vested personal gain that might accrue from students' success in their group (unless a student happens to be under the 'official' supervision of the group supervisor). All members of each group (including supervisors) take on the role of critical friend/reader, offering and enabling critique. Students are constantly reminded and encouraged to juxtapose feedback they receive from the cohort community with that of their officially appointed supervisors, to self-manage contradictions that might occur with varying critique received (Govender & Dhunpath, 2013). A key PhD graduate attribute that is likely to develop through this kind of learning to assume full responsibility for decision making is that of autonomy and independent voice.

The continued dynamics of power in doctoral pedagogy

It should be acknowledged that even though expertise in negotiating online pedagogies holds potential for shared dialogue, the dynamics of power and history of roles and responsibilities in doctoral pedagogies are not completely removed. For example, the historical expectations – sometimes deeply embedded in cultural assumptions or supervisory models about the role of supervisors and students – frame how students and supervisors choose to see their interaction in the online space. The electronic space also embeds histories of the students' own technological literacy practices, which display their degrees of comfort at being able to use technology as a means of communication and learning.

Online literacy practices

It is argued that these literacy practices are not just about how to use the technological device (a technical matter), but also how and when and in whose presence or space one seems to enter culturally and epistemically. For example,

students/staff might choose that their personal, private home space is not to be made public; that the exigencies of the family dynamics enabling or impeding their technological interactivity (such as architectural and physical home spaces to conduct the online meeting interactivity) may be defined by household/family patterns of use of hardware and software in one's personal home, from which most members are engaging in the new online pedagogy. A middle-class notion sometimes occupies curriculum designers, who assume that all users have private demarcated home spaces in which to conduct their academic life world and interaction. Pedagogy has become an institutional matter and a spatial, personal, communal matter in the homes, lives and ambient worlds of the everyday in more immediate ways, and not all participants may be willing to share this space in equally comfortable ways.

Shared sustaining of the programme

Closing plenary sessions in which all participants gather in a virtual community to reflect on critical learnings are important in sustaining the community's existence. Individual PhD students across all year groups share their research dilemmas, breakthroughs and blockages in a joint communal space. Advanced PhD students, having acquired a language of supervisory description, can offer insights to novice PhD students. Similarly, novice research supervisors and new but experienced supervisors begin to find their voice and transition from peripheral participation to full participation in the enterprise of the community. Closing plenaries are also used to solicit the research learning needs of the membership. Such inputs inform the 'agenda' for the next online contact session. Note that outside of the communal encounter, individual PhD students and novice supervisors might set up consultative sessions with target experts in the group to pursue peculiar deliberations that might have arisen in the communal space.

Some losses

One aspect of the face-to-face community engagement that is sorely missed and that actively forges powerful social bonds is the issue of food (Dunbar, 2017). Buffet-style communal sharing of comestibles for biological sustenance was a strong 'non-academic' enterprise of this community. All participants voluntarily took responsibility for supplies of beverages and eats, for setting up and cleaning up in the physical venues that the community used on the university campus. The online format has robbed this CoP of its spontaneous humour, laughter, physical closeness and communal hospitality around meal sharing.

The movement of this once face-to-face CoP to a virtual platform might well be considered by purist online learning experts and curriculum designers as somewhat rudimentary, given the rich teaching and learning functionalities available to online course developers. As mentioned above, this PhD community's academic work falls outside the ambit of a formal course offering. However, the core leadership sees the value of expanding and extending the use of other functionalities, such as blogs. Of importance is the recognition that while video conferencing might be considered rudimentary, the community needs to constantly assess the extent to which its original enterprise is substantively engaged with through this mode of communication.

The attention to creating, developing and recognising the human, physical and financial resources to enact these innovative methodologies, like all reimaginative and creative work, requires committed action and funding for longer-term sustainability. Anything less will be to simply interpret the new affordances as

merely a mode of delivery, rather than a shift towards a pedagogical strategy for expanded teaching and, more importantly, quality learning.

CONCLUDING COMMENTS

We reflected on the transition of a supervisor-led CoP from a traditional face-face mode to an entirely online mode of operation. Theoretically, we drew on Transition Theory (Schlossberg, 2008) and Community of Practice Theory (Wenger, 1999), to examine how the community sustained its shared enterprise. Of importance for CoPs in transition is to leverage their established strengths. In this instance, it was through strong and effective leadership (including a core group of committed participants) that the CoP was able to create the conditions for adapting the shared repertoire while staying true to the community's joint enterprise, namely that of the teaching and learning of advanced research competence.

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CO-CONSTRUCTED TRANSNATIONAL LEARNING IN POSTGRADUATE RESEARCH SUPERVISION: EXPLORING ISSUES OF POWER AND TRUST

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ABSTRACT

This paper considers the challenges and affordances relating to shifts in supervisory encounters arising from the COVID-19 pandemic, within a transnational postgraduate student-tutor supervisory relationship. It explores particularly the co-constructional nature of transnational learning, reflecting on issues of power and trust, from masters to doctoral research in education practice.

Rachel and Mark worked together in a student-supervisor relationship, firstly on the *MA Education* and then on the *Doctorate in Education (EdD)* programmes, jointly offered by the Mauritius Institute of Education and the University of Brighton, UK. Rachel's research considers narrative and autoethnographic inquiry into educational professionalism, agency and becoming and parallels Mark's own research interest and experience.

Our reflections were developed through a series of email exchanges and online discussions, theorised through meta-reflection and analysis. Informed by postcolonial perspectives, the paper notes that the complexity and inequalities of power distribution in such a transnational supervisory relationship are likely to be compounded through shifts to online only encounters. A call for a more rigorous exploration into this aspect of postgraduate research supervision is made, particularly in the context of international and transnational provision.

Key words: co-constructed narrative, postgraduate research supervision, professional agency, transnational learning

INTRODUCTION

Postgraduate supervision has received much attention in the literature worldwide (e.g. Daramola, 2021; Harwood and Petrić, 2019; Trowler, 2021). Such studies have shown, for example, that poor communication between supervisor and supervisee and lack of support, negatively affect progress, while mutual trust contributes to the success of the student. When the supervision is transnational or intercultural (Manathunga, 2014), with students and supervisors of different cultures working together, there are added challenges in terms of heightened power imbalances. Recently, with higher education being disrupted by COVID-19, research has emerged into the impact of the pandemic on postgraduate supervision (e.g. Suparman, 2021; Nash, 2021), showing that COVID-19 has intensified the existing challenges. However, there appears to be little that explicitly explores issues of power and trust in transnational supervisory relationships, contextualised in relation to the pandemic. This paper aims to address this and calls for further empirical research into these issues and their interrelationship.

Drawing upon a series of email exchanges and online meetings, we reflect on challenges and affordances relating to shifts in supervisory encounters arising from the COVID-19 pandemic, within a transnational postgraduate student-tutor supervisory relationship. From our respective positions as student and supervisor, we consider how issues of trust, power and transnational learning co-constructed prior to the pandemic, enabled us to navigate the shift to remote-only provision.

BACKGROUND

The partnership between the University of Brighton (UoB) a modern, civic British university, and Mauritius Institute of Education (MIE), a parastatal institution in the Global South, is one born from a position of postcolonialism, Mauritius being a former British colony, now an independent African state. MIE and UoB have worked collaboratively on postgraduate research-based programmes for over 20 years, with UoB *MA Education* and *Doctorate in Education (EdD)* awards offered annually to experienced Mauritian teachers and educational leaders. Leadership, teaching, supervision and administration of both programmes are shared between the two institutions, with UoB tutors, including Mark, making regular visits to MIE. Prior to COVID-19, only minimal use was made of remote teaching and supervision strategies.

Having worked together in a student-supervisor relationship, firstly on the MA, then on the EdD programmes at MIE, we posit that with the move to remote-only supervision arising from COVID-19, it is important to document such experiences, to help and support other postgraduate students and supervisors navigate the challenges of such relationships. We offer this reflective piece as a stimulus for further consideration of issues of trust and power in the context of transnational postgraduate supervision and the 'new-normal' of remote learning. Italicised text is taken from emails between us during May and June 2021, supported by further meta-reflection and theorisation on our evolving supervision process in context.

POWER, TRUST AND TRANSNATIONALISM

Rachel enrolled on the MA Education as this would provide the opportunity to study with a British university, whilst living and working in Mauritius. She welcomed the face-to-face contact with tutors the programme afforded, but was apprehensive, wondering whether she would be good enough, and how as a Mauritian student, she would be

regarded by tutors and a supervisor from the UK:

> *Having previously studied issues of postcolonialism and neocolonialism, I was conscious of the cultural differences between our respective countries. I knew that you, and British universities generally, coming to Mauritius to teach us, could be seen as a perpetuation of educational, even cultural imperialism, considering especially that Mauritius is a former British colony. I realised there was an inherent power imbalance between you and me, as supervisor and supervisee. This made me insecure, afraid I would feel or be made to feel inferior and marginalised.*

Rachel's initial concern about her post-colonial positioning is interesting as it brings to the fore issues of power in transnational supervision and perhaps a level of what Bhabha (1995) terms 'ambivalence', supported by Manathunga (2010) who argues that postcolonial theory can allow students and supervisors understand both the attractions and tensions that may occur in such intercultural postgraduate supervision.

These socio-cultural, quasi-colonial issues were compounded by age and gender differences, adding further complexity, Rachel being a younger Mauritian woman supervised by Mark, an older, white British man. Alam *et al*. (2013) note these added challenges in terms of power imbalances, where the supervisor and student differ in gender, culture and language. This aligns too with Nkoane (2013) who, in exploring the concept of hegemony in postgraduate supervision, shows how dominant discourses can elevate supervisors to positions of superiority while marginalizing students, and argues for an alternative, counter-hegemonic supervision that is more emancipatory for both the student and supervisor.

In our work together, we were both aware of such discourses. Mark had supervised postgraduate students before, both in the UK and in Mauritius, but had not always felt comfortable supervising Mauritian students. He was particularly aware that many of his assumptions about schools in Mauritius, policy and education generally, were based on Eurocentric norms and values (Ashcroft *et al*., 2000). Openly discussing such cultural bias with Rachel was key to building trust in the relationship:

> *I was also aware of how many dimensions of education in the UK and Mauritius were similar, but perhaps differently situated and contextualised. When you were exploring issues of teacher agency for your dissertation, and I could see how these reflected issues common to both our contexts, this became clearer for me. This is when I felt most aware of how our supervision relationship was evolving – that we brought different experiences and perspectives to the relationship. Perhaps this was when we first developed a level of transnational understanding.*

In differentiating between assimilationist and transcultural modes of supervision, Manathunga (2014) sees supervision as a 'contact zone', mediated by the power dynamics emerging from, and related to the histories of colonialism. It is clear in our work together that Rachel was not expected to assimilate Mark's culture and ways of being:

> *You were approachable; you listened without judgment, while*

> *also supporting my own voice, my own agency. And with time, I became less insecure. Then as we moved to remote-only supervision, things were easier, as mutual trust and cultural sensitivity had already been established.*

Rachel's perceptions changed as she progressed through the MA, and then moved on to the EdD. She developed a sensitivity too, to the challenges for Mark, who, working in a culturally-contrasting environment, knew he could be perceived as an outsider:

> *I've often wondered how you were feeling when we were speaking Mauritian Kreol in class and you couldn't understand what we were saying. I would have found this so hard had I been in your place. I later realised that so many of our linguistic and cultural experiences had the potential for creating tension between us.*

With time we were able to navigate these tensions. Mark was keen to learn about education in Mauritius – concerning Rachel's school, and current policy reforms, for example– but also in relation to broader aspects of society – the position of women and the ethnic composition of Mauritius. Knowing that as a supervisor, Mark wanted to understand her experience, helped Rachel build trust in him. She felt able to discuss with Mark issues such as professionalism, agency and neoliberalism, which go beyond national boundaries. This allowed us to bring cross-cultural experiences out into the open more. Instead of seeing our differences as problematic, we embraced their disruptiveness, and valued them as opportunities to learn from each other.

As our relationship continued to develop and we further explored issues of trust and power, we saw how they had the potential to be both replicated and challenged though our supervisory relationship. This deepening understanding of the layers of diverse social positionings and conscious and unconscious knowing (Grant, 2010), enabled us to maintain a commitment to professional becoming and further development of trust. This then helped us navigate the move to remote-only supervision more easily.

COVID-19 AND THE MOVE TO REMOTE-ONLY LEARNING

When COVID-19 locked us down, the shift to remote-only learning was accommodated relatively easily by the programme partnership. Mark and other UoB tutors were unable to travel to Mauritius as originally planned, but Microsoft Teams provided a means for teaching and learning to continue. Our supervisory relationship had become established and nurtured over time, through repeated face-to-face contact. Rachel, however, still took some time to adapt:

> *Although the doctoral programme was already a blend of face-to-face contact, with some remote interaction and materials available online, the transition took some time. But you made it easier by maintaining contact through emails, and frequent encouragement. You reached out to me; you read and gave feedback on sections of draft assignments and offered support with online presentations. This helped me become confident in working with you remotely.*

Mpungose (2020), researching South African universities, found that the provision of open-access resources can help with the challenges imposed by the move to remote-only learning. Cekiso *et al.* (2019) also proposed that supervisors

use email, SMS and WhatsApp so that students are assured of their availability and constant communication with them. Yet Mpungose (2020) argues that capacity building in the use of learning management systems is still needed. UoB provided online resources and tutorials on the use of Microsoft Teams and other platforms, but for Rachel, the transition was still potentially problematic:

> *The physical distance already meant that I felt I didn't quite belong to the university back in the UK. I couldn't meet people there, attend meetings or physically access books, many of which were not available in Mauritius. But the fact that you had previously come over to Mauritius regularly, shrunk the distance a little. So, when we moved to remote-only learning, I feared a resurgence of this distance and a loss of the connection we had built. It felt too sudden and I was not emotionally prepared for this.*

Such challenges are common in students with the move to remote-only learning. A survey of eight universities in Sweden (Börgeson *et al.,* 2021) reveals that apart from the use of diverse meeting platforms and more regular supervision, during COVID-19, students need to feel they have their supervisor's emotional support. Nash (2021) argues that COVID-19 has increased student anxiety about supervision and puts forward a model to help reduce such anxiety and depression.

In our case, Mark was conscious that by coming to Mauritius, he and other UoB tutors, were essentially bringing something of their university to the students. This was important for Mark, but he knew that he was taking something back from Mauritius too, but that with COVID-19, this exchange became disrupted:

> *I was learning about how your experience as a research student in Mauritius was different to that of UK students, although there were similarities of course too. I felt as a tutor and your supervisor, it was important to reach out to you and other Mauritian students even more during the first lockdown.*

Alemu (2020) argues that Western academics and knowledge are unsympathetic to non-Western concerns and priorities. From this perspective, there was the potential for Rachel's research experience and interests being seen as irrelevant or unimportant. We knew our work together was largely based on trust, and were aware of the danger of this trust not being sustained with the move to online supervision. Rachel notes:

> *I missed the face-to-face sessions, where I would be able to meet you for tutorials, but the online collaboration worked well, largely because of the trust we had developed.*

Mark too, reflected on his experience of evolving trust in this context:

> *Working with you taught me so much about being a supervisor, how this relationship evolves and how supervision has an 'ecological' dimension to its practice. I think this element of shared learning became more important for both of us as you grew in confidence. For me, this has been a hugely important to the transnational aspect of the collaborative learning process.*

Even after we moved online, we remained open to learning from each other, and through working together, our understanding of issues of power and trust

in supervision deepened, especially in the context of the cultural differences between us. Rachel notes:

> *Looking back now, I can say I never was positioned as the 'other' in this supervisory relationship. In fact, I felt it was more of a partnership than the authoritative and unequal relationship I had anticipated. I became more comfortable discussing issues such as oppression and discrimination with you than with a Mauritian, even if it was only through emails. We don't really talk openly about these things here and maybe I needed a more objective and detached ear. But of course, these are global issues too. I felt I could bring these increasingly to my studies and my research in general, including the development of this paper!*

This level of trust and collaborative understanding of each other's position prior to the pandemic, enabled us to continue to work together effectively. We feel unsure though, that this would have been the case, had our relationship not had such a secure base, and that the level of transnationality within doctoral studies argued for by Rizvi (2010), would not have been possible. Indeed, we suspect that this transnationality is challenged immensely where such face-to-face learning and cultural sensitisation and exchange is not possible.

CONCLUSIONS

We share an orientation to narrative research and so developing a co-constructed, reflective piece such as this, aligns with our established professional perspectives and practices. We feel privileged to have been given the opportunity to work with, and learn from each other over a four-year period and feel the success of our supervisory relationship came through an evolving sense of trust and mutual regard. This has been born out of a willingness to explore issues of difference and power within the relationship, which in turn enhanced the potential for further transnational learning. We have doubts though, given the structural and cultural inequalities existing between us, that such exploration would have been possible had our initial contact been only through remote means.

We encourage wider reflection and examination of such supervisory relationships and how a commitment to furthering trust and shared understanding of issues of power and transnationality in supervision might be nurtured, particularly as remote learning now appears to have become the 'new normal'.

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