Challenges of Teaching and Learning under Lockdown at Wits University: Implications for the Future of Blended Learning

Fezile Wagner
https://orcid.org/0000-0002-1599-3485
University of the Witwatersrand
fezile.wagner@wits.ac.za

Mxolisi Masango
https://orcid.org/0000-0002-0220-8281
University of the Witwatersrand
mxolisi.masango@up.ac.za

Shirra Moch
University of the Witwatersrand
Shirra.Moch@wits.ac.za

Greig Krull
https://orcid.org/0000-0002-0690-5869
University of the Witwatersrand
greig.krull@wits.ac.za

Ryan G. Wagner
https://orcid.org/0000-0003-2741-3676
University of the Witwatersrand
Ryan.Wagner@wits.ac.za

Laura Dison
https://orcid.org/0000-0002-1626-4954
University of the Witwatersrand
Laura.Dison@wits.ac.za

Diane Grayson
https://orcid.org/0000-0002-5363-9372
University of the Witwatersrand
Diane.Grayson@wits.ac.za

Abstract

In response to social distancing regulations of 2020 aimed at curbing the spread of the COVID-19 virus, universities had to rapidly transition from face-to-face learning to Emergency Remote Teaching and Learning (ERTL). University students and staff faced many barriers to reliably accessing online platforms, together with widespread psychosocial challenges associated with the pandemic. This article reports on these challenges, juxtaposing the experiences of university staff members and students at the University of the Witwatersrand, Johannesburg (Wits). This study used a mixed methods design and drew on two university-wide surveys for staff and one for students, followed by in-depth interviews (IDIs) and focus group discussions (FGDs). Of those invited, 9% of the student body and 7% of staff responded, with 43 students and 22 staff members participating in the interviews and discussions. Three overarching challenges emerged for both staff and students: 1) *physical limitations*,

UNISA
Progressio
Volume 45 | 2024 | #14226 | 18 pages
https://doi.org/10.25159/2663-5895/14226
ISSN 2663-5895 (Online), ISSN 0256-8853 (Print)

including poor access to reliable internet, compounded by persistent power outages; 2) *pedagogical challenges* as staff and students adjusted to a new learning modality; and 3) *balancing* aspects of personal life and wellbeing with work and studies, including remaining productive while contending with family responsibilities and emotional challenges brought about by the pandemic. The study highlights several issues, including structural considerations and the importance of promoting a sense of community and belonging, that should be considered as the University transitions to blended learning.

Keywords: COVID-19; teaching and learning; wellbeing; higher education; blended learning; South Africa

Introduction

In March 2020, following the government's declaration of a national state of disaster (Republic of South Africa 2020), the University of the Witwatersrand, Johannesburg (Wits), like other South African universities, suspended all contact activities, including teaching and learning. This marked the beginning of an extended period of confusion and apprehension on what was to come (Nyar 2021) and heralded the introduction of a new mode of teaching and learning, Emergency Remote Teaching and Learning (ERTL) (Charles Hodges et al. 2020). This new mode of learning, which took place fully online, provided a practical means of saving the academic year whilst adhering to strict lockdown restrictions (Wits 2020; Landa, Zhou, and Marongwe 2021; Motala and Menon 2020).

Challenges faced by South African students with ERTL have been well documented (Motala and Menon 2020), with difficulties ranging from infrastructural challenges and non-conducive learning spaces to precarious financial positions due to job loss, all coupled with the electricity crisis resulting in frequent power outages (van-Schalkwyk 2020; Gittings et al. 2021; Laher et al. 2021). These challenges to productive learning raised important questions, especially the physical barriers to including students from disadvantaged backgrounds (Themane and Mabasa 2022). The impact of the pandemic on mental health was less disproportionate, with students from all demographics reporting a multitude of negative feelings, including isolation, anxiety, and grief (Landa, Zhou, and Marongwe 2021; Laher et al. 2021).

Although the literature on the impact of COVID-19 among South African higher education institutions (HEIs) has given us important insights, it has often been through the lens of the student experience (Laher et al. 2021; Themane and Mabasa 2022; Fouche and Andrews 2022). This paper introduces the perspectives of university staff members and demonstrates that there is an intersection between the challenges that staff and students faced during ERTL. Understanding these challenges will allow for the proactive mitigation of potential challenges to learning as institutions move to blended learning (Wits 2019).

Problem Statement

The March 2020 declaration of a national state of disaster compelled universities to suspend all contact activities, leading to the swift implementation of Emergency Remote Teaching and Learning (ERTL). While instrumental in salvaging the academic year during strict lockdown restrictions, this online mode of learning presented a myriad of challenges for South African universities. There remains a notable gap in understanding the challenges faced by university staff members during this time: how staff experiences compare with student experiences, how lessons learnt can improve future adoptions of ERTL and understanding the implications of these lessons as institutions transition to blended learning.

Research Objectives

This research aimed to address this gap by introducing staff members' perspectives, identifying the overlapping challenges faced by students and staff during ERTL and recognising critical factors gleaned from ERTL during lockdown that could facilitate the successful shift towards blended learning.

Literature Review

This literature review briefly covers the key implications of the rapid transition from face-to-face instruction to ERTL that impacted both students and staff. It is divided into three sub-themes: i) access and connectivity, ii) pedagogical redesign and technological adaptation, and iii) psychosocial impact.

Access and Connectivity

The immediate challenge in implementing ERTL was the issue of access and connectivity (Themane and Mabasa 2022; Motala and Menon 2020; van-Schalkwyk 2020). Institutions put in place several measures to ensure that the shift to ERTL was equitable. This included providing students and staff with devices, zero-rating critical educational websites, and data allocation (Landa, Zhou, and Marongwe 2021; Nyar 2021; Motala and Menon 2020; Wits 2020). Given these provisions, the main connectivity challenges faced by students proved to be infrastructural. Poor cell phone signal, particularly for students residing in remote areas, coupled with insufficient data and compounded by an erratic power supply (loadshedding) brought about the physical lack of access of many students, particularly those from disadvantaged backgrounds (Themane and Mabasa 2022; Landa, Zhou, and Marongwe 2021; Laher et al. 2021; Fouche and Andrews 2022).

Pedagogical Redesign and Technological Adaptation

Apart from infrastructural needs, a successful pivot to ERTL necessitated that teaching staff quickly adapt to using multiple online tools and technologies for teaching and learning (Nyar 2021). There were limited opportunities for capacity building, and

efficient collaborations between various institutional departments and across academic and professional staff boundaries were essential (Phakeng, Habib, and Kupe 2020; Krull and MacAlister 2022). Perhaps the most challenging was a pedagogical redesign that enabled remote learning without compromising epistemological access (Motala and Menon 2020). This redesign was continuous and iterative. It included getting a tally of existing institutional online teaching and learning tools, understanding their capabilities, where relevant- unlocking further functionality, acquiring other appropriate technologies, and addressing integration challenges.

Further, staff required guidance on the pedagogical knowledge needed for online instruction and assessment (Bekker and Carrim 2021). Ongoing support in navigating digital environments was fundamental for both staff and students. In short, efforts towards the pedagogical redesign and technological adaptation were critical and only achieved through collaborative efforts from various stakeholders inside and outside HEIs (Krull and MacAlister 2022).

Psychosocial Impact

In addition to access issues and new pedagogical approaches, the COVID-19 lockdown presented psychosocial challenges. Mental distress arising from uncertainty on how the pandemic would progress, unfavourable living conditions, loss of income, food insecurity, fear of infection and bereavement, especially among students, have all been widely reported (Nyar 2021; Laher et al. 2021; Motala and Menon 2020; Themane and Mabasa 2022; Olawale et al. 2021). Although there are limited accounts of staff member experiences, there is evidence that staff faced similar challenges (Badaru et al. 2022) while also dealing with the risk of burnout due to workload and work-related stress (Olawale et al. 2021).

Conceptual Framework

Maslow's hierarchy of needs model (Maslow 1943), which argues that there are five needs for self-actualisation, guides this work. COVID-19 and its impact on teaching and learning can be reflected through each of the need domains:

1. *Physical*—These were important in COVID-19 as students needed to abruptly vacate university residences (Nyar 2021), leaving some with no stable accommodation. There was increased food insecurity risk largely due to income loss (Laher et al. 2021; Nyar 2021), all of which are critical needs necessary for well-being.

2. *Safety and security—A*lso important in this context as the lockdown and the subsequent university residence closure and other social distancing protocols were safety measures. However, this did not diminish the fear of exposure or 'coronaphobia', which significantly affected both staff and students (Olawale et al. 2021).

3. *Love and belongingness—T*he pandemic, through physical distancing, disrupted staff and students' social experience at the university, in many instances leading to feelings of isolation (Olawale et al. 2021). This meant that staff and students needed to be creative in finding other channels (such as WhatsApp) for social interactions (Themane and Mabasa, 2022).

4. *Self-esteem*—Understood as feelings of accomplishment and achievement—was a challenge for the ERTL, as some staff and students had trouble gaining sustained access to online learning platforms (Motala and Menon 2020) and engaging with new assessment methods that brought about uncertainty for both staff and students (Fouche and Andrews 2022).

5. *Self-actualisation*—The challenges of the pandemic and the move to ERTL impacted the personal growth of both staff and students, as research productivity plummeted and opportunities for experiential learning were limited (van-Schalkwyk 2020).

Maslow's hierarchy of needs model provides a framework for HEIs to consider when reflecting on the impact of COVID-19 and the move to ERTL on both staff and students. It also provides a basic outline of domains that interventions can prioritise in meeting the holistic needs of staff and students in the university setting.

Methods and Procedures

Context

This research was conducted at the University of the Witwatersrand, Johannesburg (Wits), an urban South African university. In 2020, Wits had an enrollment of approximately 41,000 students, with 62% and 38% of students pursuing undergraduate and postgraduate studies, respectively (Wits 2020).

Research Design

This study used a cross-sectional, mixed-methods research design. The research design integrated qualitative and quantitative approaches and allowed for improved reach that captured the complexity of the topic. This approach also allowed data to be corroborated, enhancing the validity of the findings. Self-administered, web-based questionnaires, one for students and one for staff were used to capture quantitative data. Focus group discussions (FGDs) and in-depth interviews (IDIs) were used to collect qualitative data.

Study Participants

A sample of students and staff aged 18 years and older was drawn, and those selected were invited to participate. Groups of staff and students with limited access to online platforms or devices and who were unlikely to complete the online questionnaire were

prioritised for the qualitative work. In addition, representation across faculties, genders, ages, staff categories, levels of study (for students) and programme type (for students) was considered for the qualitative work.

Procedure

Data collection took place between September and November 2020. Prospective study participants for the surveys were recruited via email. Following an online consent process, participants completed the self-administered online surveys using the zero-rated REDCap online survey platform (Harris et al. 2019).

For the qualitative work, participants could choose to participate in one activity (either the IDI or FGD), which was contingent upon providing consent. To maintain participant anonymity during IDIs and FGDs, pseudonyms were assigned. All FGDs and most IDIs were in English, with a few IDIs conducted in isiZulu and Sesotho. IDIs and FGDs were recorded and saved on Zoom and MS Teams. Following interviews, data were labelled by date, meeting time, participant pseudonym and the data collector. No information was included in the audio recordings that could identify the participants. The audio recordings were translated (where necessary) into English and transcribed.

Variables and Measures

The project team, which included representatives from all university faculties and key central departments, including Academic Affairs, Student Affairs, and ICT, collectively designed the study instruments. Validated tools were used to screen for anxiety and depressive symptoms.

Socio-Demographic Variables

Demographic variables of interest included race, faculties and departments students were enrolled in/staff belonged to, students' level of study, the type of programmes students were enrolled for, student programme type and staff category.

COVID-19 and Lockdown Related Variables

The research also aimed to capture factors related to COVID-19 and the lockdown. The variable 'Exposure to COVID-19' indicated staff and student participants who were infected with COVID-19, those whose close friends and/or family had become ill because of COVID-19, and those who expressed concern about getting infected. The variable 'Home working environment' indicated those with access to a working computer/ laptop and reliable internet. Finally, the variable 'Biggest challenges of lockdown' identified participants who had various challenges, including cyberbullying, gender-based violence (GBV), food insecurity and high workload.

Mental Distress

The 7-item Generalised Anxiety Disorder questionnaire (GAD-7) was used to screen for anxiety symptoms, and the 2-item Patient Health Questionnaire (PHQ-2) to screen for depressive symptoms. The GAD-7 self-report questionnaire uses a two-week recall (Spitzer et al. 2006). The PHQ-2 also uses a two-week recall to screen for depressive symptoms (Arroll et al. 2010). Both the GAD-7 and PHQ-2 utilise four response categories: i) not at all, ii) several days, iii) more than half the days and iv) nearly every day. The GAD-7 has a scale from 0-21, and the score categories are 0–4 minimal anxiety symptoms, 5-9 mild anxiety symptoms, 10-14 moderate anxiety symptoms, and 15-21 severe anxiety symptoms. The PHQ-2 has a scale from 0-6. The score categories are 0–2, unlikely major depressive disorder, and 3-6, likely major depressive disorder. Similar studies have used these tools (Wagner et al. 2022; Visser and Law-van Wyk 2021).

Data Analyses

The quantitative data underwent cleaning and analysis using Microsoft Excel (Version 15, Seattle, USA) and STATA software (version 14; College Station, Texas, USA). Descriptive statistical analyses were conducted on all quantitative variables.

Two senior researchers analysed the qualitative data using a thematic analysis approach. They reviewed the IDI and FGD transcripts independently and extracted common themes from the data. From these themes, each researcher developed a provisional coding framework. Following discussion and comparison, the two frameworks were synthesised into a single framework for the analysis. One of the researchers then coded all transcripts with the final coding framework using NVIVO 12 Pro software. This process was followed separately for student and staff transcripts.

Results

A total of 3 510 students, 9% of the enrolled student population, completed the quantitative survey. Students who participated were mainly female (64%), African (63%) and registered full-time (85%) for undergraduate studies (68%). Most students were pursuing general Bachelor's degrees (36%), and most were from the Faculty of Humanities (30%).

A total of 505 staff (7% response rate) completed the survey. Staff respondents were mostly female (68%), white (48%) and academic (51%).

Table 1: Demographic Characteristics of Study Participants

	Students	**Staff**
Sex	**N (%)**	**N (%)**
Female	2 243 (64)	344 (68)
Male	1 262 (36)	159 (31)
Not specified	-	2 (0)
Race		
African	2 217 (63)	151 (30)
Chinese	20 (1)	-
Coloured	162 (5)	34 (7)
Indian	429 (12)	54 (11)
White	682 (19)	243 (48)
Faculties and Departments		
Humanities	1 056 (30)	89 (18)
Commerce, Law & Management	749 (21)	68 (13)
Engineering	566 (16)	49 (10)
Health Sciences	560 (16)	85 (17)
Science	576 (16)	53 (10)
Other departments/ units	3 (0)	161 (32)
Level of study		
Postgraduate	1 126 (32)	
Undergraduate	2 384 (68)	
Programme type		
General Bachelors Degree	1 250 (36)	
Professional 1st Bachelors Degree	1 097 (31)	
Undergraduate Occasional Students	37 (1)	
Honours Degree	290 (8)	
Occasional Student Postgrad	12 (0)	
Postgraduate Diploma	199 (6)	
Masters Degree (Research and Coursework)	350 (10)	
Masters Degree (Research)	136 (4)	
Doctoral Degree	136 (4)	
Programme type		
Full time	2 979 (85)	
Online	18 (1)	
Part Time	510 (15)	
Staff category type		

Professional and Administrative Staff		228 (45)
Academic Staff (including joint)		264 (52)
Other		13 (3)

More staff members (8%) reported being infected with COVID-19 than students (3%). Furthermore, 68% of staff knew someone close to them who had been infected, and 70% of staff members expressed concern about getting infected; these figures were 58% and 68%, respectively, for students.

Regarding the physical environment, most students and staff had access to functioning laptops (85% and 91%, respectively) and reliable internet (66% and 57%, respectively). For students, the top three challenges of lockdown were high workload (65%), family responsibilities (60%) and working from home (59%). For staff, the top three challenges were restriction in movement (60%), high workload (50%) and family responsibilities (49%) (Table 2).

In terms of mental distress, 20% of students reported severe anxiety symptoms, while 43% reported severe depressive symptoms. Of staff, 20% reported severe depressive symptoms, and 10% reported severe anxiety symptoms.

Table 2: Challenges Related to COVID-19

	Students	**Staff**
Exposure to COVID-19	**N (%)**	**N (%)**
COVID-19 infection	105 (3)	41 (8)
COVID-19 infection of close friends and family	1 755 (58)	345 (68)
Concern of getting infected	2 386 (68)	354 (70)
Home working environment		
Access to functioning computer/ laptop	2 934 (85)	460 (91)
Access to reliable internet	2 317 (66)	288 (57)
Challenges of lockdown		
Working from home	2 070 (59)	157 (31)
Boredom	1 544 (44)	88 (17)
Confidence navigating online platforms	1 158 (33)	125 (25)
Cyber-bullying	281 (8)	39 (8)
Family responsibilities	2 106 (60)	246 (49)
Food insecurity	702 (20)	70 (14)
Gender based violence (GBV)	491 (14)	59 (12)
Domestic violence	421 (12)	61 (12)
High workload	2 282 (65)	255 (50)
Limited space to study/work	1 720 (49)	155 (31)
Restriction in movement	1 895 (54)	301 (60)
Other	211 (6)	65 (13)
No challenges	35 (1)	34 (7)

Mental distress		
Severe anxiety symptoms	702 (20)	51 (10)
Severe depression symptoms	1 514 (43)	101 (20)

Qualitative Findings

The sample included: for IDIs; 20 students and 10 staff, and for FGDs; 23 students and 12 staff members. There were three student FGDs, each comprised of 7 to 9 students, and two staff FGDs, one consisting of 7 support staff and the other of 5 academic staff.

Various themes emerged from the qualitative data. These themes were categorised into three broad categories. The first theme was *Challenges with technology*, which encapsulated themes on data accessibility and connectivity. The theme *Pedagogical drawbacks and advantages* captured matters about learning and teaching strategies, managing workloads and the consequences of lockdown on teaching and learning. The final category was *Multidimensional impact on wellbeing*, which included household/domestic challenges and mental wellness themes.

Challenges with Technology

The FDGs and IDIs with students revealed that most students had access to data through the monthly data provision from the university or through their means. Students who relied primarily on the monthly data allocation from the university faced multiple challenges. The first challenge was that early in ERTL, students who used mobile phone providers other than the university's initial chosen provider had to buy new SIM cards to access data. Secondly, several students reported insufficient data allocation and often had to buy additional data to meet their needs. Finally, students frequently struggled with poor cell phone reception and intermittent internet connectivity. The poor reception and internet connection were often attributed to frequent power cuts, which disrupted studying and working:

> "the connection one was a problem, it was a problem that cost because now when we started classes on Teams […] you were always late on class, if you have data you have connection issues." Student- IDI 5

> "So we wouldn't have electricity for a week and then when you log in you've got so much work and you can't manage it. I've missed uhm submission dates, I've missed quizzes, I've missed important announcements […] I never knew when they were happening because, wow, they were probably happening when we didn't have electricity..." Student- IDI 10

Pedagogical Drawbacks and Advantages

While there were a few exceptions, most students struggled with learning under lockdown. Students found online learning impersonal; they found asking questions during online lectures daunting and awkward. They also found that getting opportunities

for one-on-one consultations with lecturers required more effort and took longer as email responses were often delayed. The class subject matter would have changed by the time students secured appointments with lecturers.

> "When you're on campus, there's an in-depth and nuanced dialogue with the students in class and the lecturer which can [be] carried into the lecturer's office, you know for further, um, immediate clarification." Student- FGD 3

Not only were engagements with lecturers affected, but students also commented that organic class discussions and debates, common in face-to-face learning, could not be replicated on online platforms. This was particularly challenging for new students, who felt they had missed out on being immersed in the Wits' academic culture.

> "The atmosphere [in remote learning] no longer allows you or enables you to engage and critically think. We used to challenge each other in class, challenge each other's ideas and engage and that will also enable others to think and engage." Student- IDI 5

Students also commented on adjusting to the new assessment methods. Some students were unsure whether approaches such as open-book exams adequately tested their knowledge. Students commented on the increased opportunity to cheat during tests, as it was possible to communicate on platforms such as WhatsApp during tests to discuss answers.

However, not all aspects of learning were negatively affected. Academic staff members also noted some surprises in the new learning modality. For example, some cohorts of students seemed to understand complex topics better and performed better when assessed. This was attributed to students being able to replay recordings. Students listed this as one of the key benefits of learning online. They mentioned that having lecture recordings that they could refer to was invaluable.

> "…We found in any case that they've actually performed better, their understanding seems to be better, on average, then in previous years, which is very interesting and unexpected. And we think it has to do with the fact that they don't have to take lectures, all the information was given to them and they can go over it again and again…" Academic Staff- FGD 1

Both staff and students commented on the increased workloads during lockdown and working late into the night. Students attributed the heavy workload to making up for lost time, academic staff compensating for the lack of practical activities, and lecturers thinking they had more time due to the lockdown.

> "It was actually a lot. It required well at least a week but then now you were given I think about two days to complete the whole thing, of which at some point came as a mission impossible. But then again, we did it, eish [gosh], we had to." Student- IDI 17

Staff also noted that with the increasing workload, they were working far beyond the standard working day. A staff member from the ICT department commented on how students would contact her late in the evenings for support with overnight data. Teaching staff also reported working weekends and evenings to connect with students, as this was when most students were online.

> "As soon as they get your number they will call you at 10 pm to tell you that they can't access their data and they need to submit stuff." Staff- IDI 10

Multidimensional Impact on Wellbeing

Several factors related to living conditions and general well-being made studying and working during lockdown challenging. This included limited access to quiet physical space where students and staff could work for extended periods. Furthermore, household and domestic demands competed with work and studying, such as childcare and chores. An important theme to emerge was the greater expectations placed on female staff and students regarding caregiving and taking on the greater share of household responsibilities.

> "The support wasn't enough at home since they expect you to do some house chores, you need to clean the house, wash the dishes, while like, when I'm staying at res [student residence hall], I know I'm eating at dining hall and I don't have like that time to wash dishes…" Student- FGD 1

Participants had a fear of contracting COVID-19 and were also concerned for their friends and family. A student who tested positive for COVID-19 recalled feelings of being overwhelmed with information and being unsure of whether he would survive. A few staff and students reported losing several people close to them and commented on the lack of closure after their passing.

> "The challenge is that we are left with broken hearts because we were not able to help the family out or to attend the funeral." Staff- IDI 12

Staff and students were also candid about their mental wellbeing during the lockdown. Several stressors, such as household tensions, fears of physical violence, and a lack of in-person contact with peers, led to feelings of confinement and loneliness. Students also felt that poor communication from lecturers induced feelings of anxiety among students.

> "…but the longer they take to communicate a way forward the more anxiety comes to the students" Student- IDI 8

Staff members also commented on the financial stress and burden brought about by the pandemic. Cleaning and security staff commented on how the pandemic led to their family members and friends being laid off, speaking on how this impacted their financial well-being and the expectation that they would provide support.

> "... [COVID-19] affected me greatly because I'm the one that used to help them a lot, they used to think that my job is better than theirs. They have thrown everything into my hands, expecting me to buy this and that". Staff- IDI 12

Discussion

The COVID-19 pandemic significantly impacted higher education worldwide. In South Africa, universities worked hard to salvage the 2020 academic year, with most moving to ERTL (van-Schalkwyk 2020). The migration to ERTL at Wits and other universities amid a raging pandemic was incredibly challenging for both students and staff and had an impact on several aspects of their lives, including epistemic access, pedagogical approaches and well-being (Themane and Mabasa 2022 Laher et al. 2021; Nyar 2021).

Factors aligned to the physical safety and security pillars of Maslow's hierarchy emerged from the survey, including challenges with food insecurity and issues around COVID-19 infection. The findings of the current study are congruent with previous literature. The current study found that 68% of students expressed concern about getting infected with COVID-19, which is in line with findings from another South African institution that found 73% of their students were moderately or extremely fearful of contracting COVID-19 (Visser and Law-van Wyk 2021).

Connectivity issues also emerged as an important challenge, although most students had access to functioning laptops and computers. Concerns regarding device access did not recur in the qualitative interviews, which can be attributed in part to the university device loan programme (Wits 2020). The qualitative data strongly focused on physical barriers to learning under lockdown. These challenges are critical and directly impact students' productivity, potentially impeding their ability to feel accomplished and reach their full potential (or self-actualisation). Issues surrounding unpredictable power outages, poor cellular reception, and inadequate data allowance are aligned with findings from other empirical studies (Laher et al. 2021; Themane and Mabasa 2022; Fouche and Andrews 2022).

The current study revealed that staff members faced challenges similar to those faced by students. Both students and staff reported family responsibility and high workload as some of their biggest challenges. These findings were elaborated on in the interviews and discussions, with students reporting tight deadlines and staff members noting extended working hours. These findings corroborate those of Olawale et al. (2021) and Badaru et al. (2022), who reported on the challenges staff faced with poor connectivity, power outages, and expanding scopes of work during ERTL. These results, from both staff and students, on structural barriers provide important considerations for undertaking online components of blended learning (Wits 2019), a mode of learning that is gaining traction after the pandemic (Wits 2019). ERTL uncovered critical infrastructural inadequacies that led to unequal access to learning platforms and loss of

productivity (Themane and Mabasa 2022). Future hybrid learning models must address these structural challenges to ensure equitable learning.

Staff and students also commented on the challenges of teaching and learning online, including the lack of interpersonal engagements with peers and lecturers. Staff members noted that, in certain instances, students performed better under ERTL. This was aligned with other findings where teaching staff observed increased engagement with readings and improved understanding of concepts, leading to improved scores in formal assessments (Bekker and Carrim 2021). This evidence is important for future blended learning as it suggests that a well-designed blended approach can present opportunities to enhance the teaching and learning experience (Bates 2022). However, ERTL did uncover shortcomings, particularly around online assessment practices (Landa, Zhou, and M orange 2021; Themane and Mabasa 2022), with crucial implications for future blended learning. The skills and strategies acquired from ERTL and the flexibility of blended learning can allow staff to optimise their academic offerings, leveraging the benefits of online platforms and in-person interactions.

Finally, both staff and students reported high levels of mental distress, including high levels of depression symptoms among students. These results are aligned with findings from another South African HEI, which revealed that depression affected 35% (compared to 43% in the current study) of students during the 2020 lockdown (Visser and Law-van Wyk 2021). Mental distress was likely brought on by several matters, as highlighted in the qualitative data, including struggles with isolation and confinement, poor experience at home that made it difficult to work or study, the need to constantly balance university duties with home responsibilities, financial stress due to job loss, and grief due to the passing of family and friends. These findings, which compound physical needs such as income with needs for belonging, are consistent with findings from similar studies involving staff and students (Laher et al. 2021; Themane and Mabasa 2022; Fouche and Andrews 2022; Badaru et al. 2022). Similar work found that female students were at higher risk for anxiety and depression during the pandemic (Visser and Law-van Wyk 2021). This can, in part, be attributed to additional domestic responsibilities, such as caregiving, which are required of female staff and students.

Concluding Remarks

Using a mixed methods approach framed by Maslow’s hierarchy of needs model, this work highlights several key challenges shared by students and staff, including challenges with connectivity, balancing home and university responsibilities, and coping with the pandemic's mental toll. By proactively addressing these challenges, institutions can prepare for future teaching and learning disruptions. Establishing sustainable solutions for addressing connectivity issues is crucial, given that these pose a significant obstacle to ERTL. Additionally, improving communication strategies, encompassing direct interactions between staff and students and utilising virtual platforms to foster community formation, is imperative for mitigating uncertainty and

combating the prevailing sense of loneliness many staff and students experienced during lockdown. Lastly, the experience of ERTL and the lockdown highlighted the urgent need for upskilling staff and students with positive coping mechanisms to assist in combating mental distress. Given the emotional toll associated with emergency measures like ERTL, these coping skills are indispensable for both groups.

These lessons from ERTL may be useful as universities embrace blended learning. In this new mode of teaching and learning, important considerations are required to circumvent the challenges experienced during the COVID-19 pandemic and the introduction of ERTL. In doing so, universities can reap the potential benefits of integrated learning approaches and ensure staff and students have a sense of community, even remotely.

Acknowledgements

The authors would like to acknowledge the study Reference Committee for their contribution to this research and the Centre for Statistical Analysis and Research (CESAR) for supporting the qualitative component of this work.

Ethics

This study received ethical approval (H20/06/22) from the University of the Witwatersrand Human Research Ethics Committee (non-medical) and (M210712) from the University of the Witwatersrand Human Research Ethics Committee (medical). Permission was also received from the University Registrar to collect data.

Funding

This research project received funding from the Kresge Foundation, Siyaphumelela "We Succeed" Project, Grant G-1912-287858.

References

Arroll, Bruce, Felicity Goodyear-Smith, Susan Crengle, Jane Gunn, Ngaire Kerse, Tana Fishman, Karen Falloon, and Simon Hatcher. 2010. "Validation of PHQ-2 and PHQ-9 to Screen for Major Depression in the Primary Care Population." *The Annals of Family Medicine* 8 (4): 348–53. https://doi.org/10.1370/afm.1139.

Badaru, Kazeem Ajasa, Kemi Olajumoke Adu, Emmanuel Olusola Adu, and Ntombozuko Duku. 2022. "Teaching in a Pandemic: An Exploratory Study into University Instructors' Perceptions of Work-from-home Opportunities and Challenges during the COVID-19 Lockdown in South Africa." *International Journal of Learning, Teaching and Educational Research* 21 (7): 286–304. https://doi.org/10.26803/ijlter.21.7.15.

Bates, Anthony William. 2022. *Teaching in a Digital Age: Guidelines for Designing Teaching and Learning-Third Edition*. Vancouver: Tony Bates Associates Ltd. https://pressbooks.bccampus.ca/teachinginadigitalagev3m/.

Bekker, Tanya, and Nazir Carrim. 2021. "Education Lecturers' Perceptions of Organising Systematic Online Teaching and Learning during COVID-19 Pandemic Conditions in 2020 at Two Selected Universities in South Africa." *Journal of Education* n84. https://doi.org/10.17159/2520-9868/i84a03.

Fouche, Ilse, and Grant Andrews. 2022. "'Working from Home Is One Major Disaster': An Analysis of Student Feedback at a South African University during the Covid-19 Lockdown." *Education and Information Technologies* 27 (1): 133–55. https://doi.org/10.1007/s10639-021-10652-7

Hodges, Charles, Stephanie Moore, Barb Lockee, Torrey Trust, and Aaron Bond. 2020. "The Difference Between Emergency Remote Teaching and Online Learning." Educause Review. 2020. https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning.

Gittings, Lesley, Elona Toska, Sally Medley, Lucie Cluver, Carmen H. Logie, Nokubonga Ralayo, Jenny Chen, and Jane Mbithi-Dikgole. 2021. "'Now My Life Is Stuck!': Experiences of Adolescents and Young People during COVID-19 Lockdown in South Africa." *Global Public Health* (6): 947–63. https://doi.org/10.1080/17441692.2021.1899262.

Habib, Adam, Mamokgethi Phakeng, and Tawana Kupe. 2020. "Three South African Vice-Chancellors Paint a Post-COVID Picture for Universities." The Conversation. August 2, 2020. Accessed 11/07/2023. https://theconversation.com/three-south-african-vice-chancellors-paint-a-post-covid-picture-for-universities-143490.

Harris, Paul A., Robert Taylor, Brenda L. Minor, Veida Elliott, Michelle Fernandez, Lindsay O'Neal, Laura McLeod, Giovanni Delacqua, Francesco Delacqua, Jacqueline Kirby, and Stephany N. Duba. 2019. "The REDCap Consortium: Building an International Community of Software Platform Partners." *Journal of Biomedical Informatics* 95 (1): 103208. Academic Press Inc. https://doi.org/10.1016/j.jbi.2019.103208.

Krull, Greig E., and Fiona MacAlister. 2022. "Rapidly Orienting Academic Staff for Emergency Remote Teaching: Responsive Approaches for Academic Professional Learning." *Academic Voices*, January, 283–94. https://doi.org/10.1016/b978-0-323-91185-6.00029-x.

Laher, Sumaya, Katherine Bain, Nabeelah Bemath, Victor de Andrade, and Tasneem Hassem. 2021. "Undergraduate Psychology Student Experiences during COVID-19: Challenges Encountered and Lessons Learnt." *South African Journal of Psychology* 51 (2): 215–28. https://doi.org/10.1177/0081246321995095.

Landa, Nhlanhla, Sindiso Zhou, and Newlin Marongwe. 2021. “Education in Emergencies: Lessons from COVID-19 in South Africa.” *International Review of Education* 67 (1–2): 167–83. https://doi.org/10.1007/s11159-021-09903-z

Maslow, Abraham H. 1943. “A Theory of Human Motivation.” *Psychological Review* 50 (4): 370–96. https://doi.org/10.1037/h0054346.

Motala, Shireen, and Kirti Menon. 2020. “In Search of the ‘New Normal’: Reflections on Teaching and Learning during Covid-19 in a South African University” 26 (1): 1–20. https://doi.org/10.10520/ejc-sare-v26-n1-a6.

Nyar, Annsilla. 2021. “The ‘Double Transition’ for First-Year Students: Understanding the Impact of Covid-19 on South Africa’s First-Year University Students.” *Journal for Students Affairs in Africa* 9 (1): 77–92. https://doi.org/10.24085/jsaa.v9i1.1429.

Olawale, Babawande Emmanuel, Bonginkosi Hardy Mutongoza, Emmanuel Olusola Adu, Isaiah Omodan Bunmi, and Ac Za. 2021. “COVID-19 Induced Psychosocial Challenges in South African Higher Education: Experiences of Staff and Students at Two Rural Universities.” *Research in Social Sciences and Technology* 6 (3): 179–93. https://doi.org/10.46303/ressat.2021.37.

Republic of South Africa. 2020. Declaration of National State of Disaster: Disaster Management Act, 2002 by the Minister of Cooperative Governance and Traditional Affairs. Government Gazette. South African Regulation 3 (3) Section 27 (2) of the Disaster Management Act, 2002 (Act no. 57 of 2002). Accessed 30/05/2023. https://www.gov.za/sites/default/files/gcis_document/202003/43096gon313.pdf.

van-Schalkwyk, François. 2020. “Reflections on the Public University Sector and the Covid-19 Pandemic in South Africa.” *Studies in Higher Education* 46 (1). https://doi.org/10.1080/03075079.2020.1859682.

Spitzer, Robert L., Kurt Kroenke, Janet B.W. Williams, and Bernd Löwe. 2006. “A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7.” *Archives of Internal Medicine* 166 (10): 1092–97. https://doi.org/10.1001/archinte.166.10.1092.

Themane, Mahlapahlapana Johannes, and Layane Thomas Mabasa. 2022. “Epistemic Access and Success of Historically Disadvantaged Students during the COVID-19 Pandemic: A South African Experience.” *Perspectives in Education* 40 (1): 18–38. https://doi.org/10.18820/2519593X/pie.v40.i1.2.

Visser, Maretha, and Eloise Law-van Wyk. 2021. “University Students’ Mental Health and Emotional Wellbeing during the COVID-19 Pandemic and Ensuing Lockdown.” *South African Journal of Psychology* 51 (2): 229–43. https://doi.org/10.1177/00812463211012219.

Wagner, Fezile, Wagner, Ryan G, Kolanisi, Unathi, Makuapane, Lerato, Masango, Mxolisi, and Gómez-Olivé, Frances Xavier. 2022. “The Relationship between Depression Symptoms and Academic Performance among First-Year Undergraduate Students at a South African University: A Cross-Sectional Study.” *BMC Public Health* 22 (1). https://doi.org/10.1186/s12889-022-14517-7.

Wits. 2019. “Wits Learning and Teaching Plan 2020-2024.” Johannesburg.

“Wits 2020 Annual Report.” 2020. Johannesburg. Accessed: 20/07/2023 https://www.wits.ac.za/media/wits-university/students/academic-matters/documents/2020%20Annual%20Report.pdf.