The effect of the COVID-19 pandemic on higher education institutions in South Africa: Resilience of academics

Raj Mestry iD
Department of Education Leadership and Management, Faculty of Education, University of Johannesburg, Johannesburg, South Africa
rajm@uj.ac.za

Academic staff of higher education institutions (HEI) experienced serious challenges during the lethal coronavirus disease (COVID-19) pandemic. To overcome the spread of this deadly pandemic, the South African government instituted stringent lockdown measures such as intermittent closure of universities. Apart from distance or online teaching and learning institutions, other HEIs were keen to maintain their core activities and conduct business as usual. To resume academic programmes, they advocated a transitioning from traditional face-to-face teaching to online teaching. For effective teaching and learning to be accomplished, academics were compelled to make paradigm shifts. They had to be digitally literate and technologically savvy. Academics were also confronted with challenges of poor students who experienced difficulty in procuring devices (iphones, ipads, laptops) and data, as well as securing access to Wi-Fi. Using Resilience Theory to frame the study, I explored the influence of COVID-19 on academics and their resilience to survive this deadly pandemic. Generic qualitative research within an interpretivist paradigm was employed to determine the perceptions and experiences of 13 academics from different universities during the COVID-19 pandemic. The findings reveal that the academics experienced serious emotional and psychological stress which were detrimental to their well-being. Although academics found difficulty in transitioning to online teaching, their resilience helped them cope with the extraordinary circumstances that evolved from COVID-19.

Keywords: academics; COVID-19 pandemic; face-to-face teaching; online teaching; professional development

Introduction and Background to the Problem

Globally, the industrial, agricultural and education sectors were seriously affected by the spread of the COVID-19 pandemic. As anticipated, the foundations of the higher education environment were impacted negatively by the rapid spread of the pandemic, creating uncertainty and ramifications for higher education institutions (HEIs). COVID-19 posed several unforeseen challenges related to academic programmes of teaching and learning. To curb the spread of this disease, the South African government instituted stringent lockdown measures such as closure of universities and suspension of classes.

According to the United Nations Department of Economic and Social Affairs (2020), at the onset of the COVID-19 pandemic, schools and universities worldwide were closed for 87% of enrolled students and for more than 60 million teachers and academics. Due to apprehensions about the rapid spread of the virus, universities postponed or cancelled campus activities including teaching, laboratory-based research, examinations, sports, recreation, and conference activities (Du Plessis, M, Jansen van Vuuren, Simons, Frantz, Roman & Andipatan, 2022; Tadesse & Maluye, 2020). These extreme temporary measures were taken to eliminate or reduce threats of the infection spreading to protect staff and students from the deadly virus. A significant drop in student enrolment and cancellation of studies were witnessed globally in many HEIs. While the survival of fully or partially state-owned institutions largely depended on student fees, universities were compelled to continue the teaching programme.

Since the contact mode of teaching during COVID-19 was impractical, online teaching was the only solution. This mode of delivery may be an effective tool to ensure student retention and maintain their access to learning. Prior to COVID-19, most HEIs integrated some form of online education into their coursework. Many distance learning universities already had strong online systems in place while others engaged in hybrid teaching. Academics found moving all programmes during the COVID-19 pandemic to online mode challenging. However, HEIs were compelled to adapt to conditions so that academics and students were actively engaged in the teaching and learning process.

Since academics and students had different levels of preparedness and experiences in the application of online resources, both achieved different outcomes when they transitioned to online education. Academics had trouble using online platforms to conduct examinations or to ensure quality assurance and monitor students during tests and examinations (Valizadeh, 2022). Furthermore, academics had to devise strategies to use specialised resources (e.g., laboratories) to administer practical assessments online. In fact, it was very difficult for some academics to teach specific courses (e.g., architecture) because it required hands-on features for students. Despite barriers, South African HEIs had to migrate from face-to-face teaching to online teaching. The acceptance of online teaching and learning "across different educational contexts, whether formal or informal, academic, or non-academic, and residential or remotely" (Barrot, Llenares & Rosario, 2021:7321) was inevitable. However, despite challenges academics experienced with migrating from face-to-face teaching, they

were resilient. They increasingly adopted e-learning technologies to deliver instruction interactively, share resources impeccably, and facilitate dynamic collaboration and interaction among students (Elaish, Shuib, Ghani & Yadegaridehkordi, 2019; Garcia, Falkner & Vivian, 2018). It became evident that online teaching and learning was part of an educational practice that took place through the internet to advance teaching materials; interrelate with knowledge and students; to extend support in the learning process; and conceive personal meaning and attain success from the learning experiences (Martin, F, Budhrani, Kumar & Ritzhaupt, 2019).

Various studies reported on challenges such as communications, digital literacy, student assessments, overall online education experiences, the effective use of technological tools, time management, and psychological illnesses such as fear, anxiety, and stress (Bao, 2020; Kim, 2020). In this article, I narrated the voices of academics who led and managed teaching and learning during the COVID-19 pandemic.

One of the key challenges that many academics had to endure in the "new normal" education environment was the smooth transitioning from face-to-face teaching to online teaching. The academics' primary concerns revolved around students from low socio-economic communities. These students were unable to procure appropriate technology (smart phones, iPads, laptops, etc.), data and connectivity. Compounding these, students were unable to get any moral, financial, or psychological support from their homes or institutions. Although academics found the transitioning to online teaching difficult, their resilience helped them cope with the extraordinary circumstances that evolved from COVID-19.

For academics, the shift to online education meant rethinking lesson plans to fit very different formats. The curriculum had to be reconceptualised to suit online teaching because much depended on the visibility of academics who physically led students through certain aspects of the lessons. For example, a science academic had to reconfigure most of his/her science lab teaching since students had no access to essential science equipment. It was impractical to expect academics to physically circulate around the room checking on the progress of each student. Some students take longer to absorb content readily and some are hesitant to seek help. The sudden emergence of COVID-19 constrained academics from providing online tutoring assistance or educational technology support as required by complex lesson plans. It was vital for them to apply different teaching materials like audio or video materials to their lessons, or adapt their assessment strategies (Bao, 2020) under these complicated circumstances.

For students, their challenges were associated to their new normal learning environment where their knowledge and skills of digital literacy and technical tools were interrogated. According to Buehler (2004), students faced challenges regarding the use of library resources and instructional materials as well as their experiences related to the condition of their learning environment at home. Learning resources accessible to students had been reported to significantly influence the quality of learning and their attainment of learning outcomes. The academics thus had to be sensitive to students who experienced difficulties in acquiring upgraded technological devices (iPads, laptops, smartphones, etc.), data, or securing Wi-Fi facilities in their homes, due to their low socio-economic status.

Although progress was made in response to the COVID-19 pandemic, it is important to reflect on how universities were equipped to respond to the crisis; how resilient academic staff were; and what lessons could be learnt to better equip universities and academic staff to cope with similar adversities in the future (Martin, M & Furiv, 2020). This article will be of interest to governments, university councils and academics of HEIs who must review and redesign policies that were once developed for a conventional campus-based teaching and learning contexts. University councils and academics should develop strategic plans to circumvent any barriers to education such as poor campus infrastructure, unplanned curriculum and instructional designs, constrained budgets, scarce resources, and a lack of support to academics and students.

Based on the above, the main research question was: How has COVID-19 influenced academics of HEIs in their teaching and learning. The following sub-questions were developed to answer the main research question:

- What do we understand by concepts such as COVID-19, online teaching, face-to-face teaching, and resilience in higher education contexts?
- What are the perceptions and experiences of academics about the influence that COVID-19 had on academic programmes they had undertaken?

Aim and Objectives of the Study

The general aim of this study was to determine the influence of COVID-19 on academics in South African HEIs.

The following objectives were developed:

- To understand the meaning of concepts such as COVID-19, online teaching, face-to-face teaching, and resilience in higher education contexts.
- To determine the perceptions and experiences of academics about the influence that COVID-19 had on academic programmes they had undertaken.

Literature Review and Theoretical Framework

To control the spread of COVID-19, the National Coronavirus Command Council (NCCC) in South

Africa instituted stringent measures such as intermittently shutting down various sectors, including education (Masiya, Mandiyanike, Molosiwa & Mazenda, 2021). This pandemic caught most HEI academics off-guard. To protect staff and students, HEIs urged staff to work remotely (Taşçı, 2021). Online teaching replaced the traditional face-to-face mode of teaching. These new normal measures had serious implications for academics at universities. The lockdown regulations restricted student mobility and impacted negatively on university funding. Many parents faced retrenchments or salary cutbacks, contributing to their inability to pay their children's tuition fees (Du Plessis, P 2020). The government faced substantial losses in revenue (e.g. taxation) resulting in reduced state subsidies to universities. To accommodate students who were unable to pay their tuition fees, universities were compelled to apply prudent measures to revise budgets. Most institutions suspended new staff appointments, halted promotion appointments, and abandoned fringe benefits and salary increments to staff. Universities had to revise budgets with the purpose of investing in digital infrastructure, dynamic information technology (IT) support and teacher training (Zulu, 2020).

The COVID-19 pandemic exposed academics who seldom took part in their own professional development. To improve and sustain teaching and learning, many HEIs focused on continuing professional development (CPD) for academic staff (Quaye & Haper, 2014). The scope of students' characteristics, changing pedagogies and the sudden amplified usage of technologies for educational purposes during this pandemic challenged academics' proficiency (Cleveland-Innes, 2020). The structure of academic work was becoming more intricate as academics were evolving. Prior to the pandemic, Academics faced several challenges such as content delivery, class size, student diversity, subject-related decisions, and student expectations (Brew, Boud, Lucas & Crawford, 2022). When COVID-19 emerged, they found themselves with new challenges that demanded them to explore and develop different professional development models that would support them with online teaching.

Naidu (2020) asserts that the COVID-19 pandemic has tested the resilience of education systems from early childhood education to postgraduate study. The academic staff who made extensive use of traditional teaching styles such as face-to-face teaching suddenly had to transition to online teaching. As mentioned previously, this paradigm shifts inevitably created serious challenges for many academics. It might be useful to study how academics navigated and overcame barriers created by the pandemic, both practically and psychologically. For the most part, this has to do with the conventional campus-based experience, as well as reskilling and/or upskilling the knowledge and skills of students and academics to meet the demands of innovative and non-traditional learning and teaching. This required resilience on the part of academics.

Duckworth and Quinn (2009:166) affirm that resilience is derived from the "Latin *resilire* (to spring back) which may be interpreted as bouncing back from adversity, in a cognitive or non-cognitive sense." In their research they focused on what was meant by being resilient in the face of adversity or failure, along with measuring the consistent interests or passions over a lengthy period (Duckworth & Quinn, 2009:166). Ungar (2013) studied the processes that led to positive development under stressful conditions. Their definition of resilience highlights the need for environments to facilitate individuals' navigation and negotiation for the resources that they need to cope with adversity.

Resilience is the ability of an individual (or even an organisation) to "regain balance following exposure to an adverse event. Resilience is the human capacity to meet adversity, setbacks, and trauma, and then recover from them. Resilient leaders can sustain their energy level under pressure, to cope with disruptive changes and adapt" (Southwick, Martini, Charney & Southwick, 2017:316). Resilience Theory was used to frame this study. The theory refers to philosophies about how people are affected by and adapt to challenging things like change, loss, adversity, and risk. Different types of resilience that are needed to develop and support academics during challenging times exist. These include physical, mental, emotional, and social resilience. In today's complex and dynamic realm, organisations must be able to cope and thrive in an environment of change and uncertainty. Southwick et al. (2017:315) avers that "strong leadership that promotes cohesive and interdependent teams is a critical component of a resilient organisation."

Research Methodology
Using a generic qualitative approach within an interpretivist paradigm, the effect of COVID-19 on academic staff in South African HEIs was investigated. Generic research is a "theoretically interpretive study that focuses on how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences" (Merriam, 2009:23). Interpretivism assumes that reality is not objective but multiple, and socially constructed. This suggests that one can only appreciate someone's reality through their experience of that reality, which may be different from another person's, designed by an individual's historical or social perspective. Interpretivists assume that access to reality happens through

social constructions such as language, consciousness, shared meanings, and instruments (Myers, 2008). Social constructivism suggests how we understand objects (people included), the world, and actions within that context. Andrew (2012) avers that social constructionism is a product of how the world is represented or produced through language. It was thus appropriate to apply narrative analysis which enabled me to pay careful attention to how life events were accounted for, at times reconstructed and co-constructed by academics during the COVID-19 pandemic (Riessman, 2008).

Thirteen academics employed at various HEIs (universities) situated in the Gauteng, North West and KwaZulu-Natal provinces of South Africa were purposefully sampled. Nieuwenhuis (2007) describes purposeful sampling as selecting participants who fit specific criteria. For this study, academics (lecturers used interchangeably) who had at least 3 years' experience teaching undergraduate or postgraduate students and who were employed at a level above that of academic (that is, senior lecturer or associate professor), were sampled. I used semi-structured interviews conducted in person, except for three where the participants opted to complete open-ended questionnaires. This was followed by face-to-face interviews so that incoherent or vague responses in questionnaires could be justified (Barbour, 2014) or to probe further so that the contents of the interview could be enriched (McMillan & Schumacher, 2014). Semi-structured interviews allowed those interviewed the freedom to share their lived experiences of COVID-19 that enabled me to collect rich data.

Tesch's method of data analysis was applied (Creswell, 2006). This includes an "inductive process of examining, selecting, categorising, comparing, synthesising, and interpreting" related to the transcriptions of interviews (McMillan & Schumacher, 2006:41). Lincoln and Guba's norms of trustworthiness, namely, credibility and transferability (Creswell, 2006) were observed. Triangulation, member checks and peer debriefing were used to cultivate the assurance that the data were accurately recorded (credibility). Transferability was dealt with through the provision of rich descriptions, which allowed me to have an appropriate understanding of the phenomenon under investigation. Member checks were done with the participants to ensure the accuracy of the data collection, that is, transcriptions were provided to each participant to verify the contents thereof (Creswell, 2006).

Ethical considerations such as confidentiality to conduct the study, and anonymity were observed. The participants were reassured that the aim of the research was not to judge or evaluate their academic skills but rather to determine their experiences in respect of their instructional leadership during the COVID-19 pandemic. Consent was obtained from the academic staff members. Participants were informed that they could withdraw from the study at any time. To preserve anonymity and confidentiality, pseudonyms (where applicable) and symbols were used to refer to participants (e.g., A1 refers to an academic at university 1; A2 refers to an academic of university 2, etc.).

Findings

The following themes emerged from the analyses of the transcribed interviews.

Theme 1: The Psychological Impact of COVID-19 on Academic Staff

Consistent with other related research (Ge, Yap, Ong & Heng, 2017; Mishra, Kodwani, Kumar & Jain, 2018), I aver that comprehensive shutdown of HEIs had a detrimental impact on the emotional and mental health of many academic staff members and students. The unexpected pandemic imposed social isolation and negatively impacted on staff's social interactions. This impinged on authentic collaboration with peers and students resulting in increased levels of demotivation, anxiety, and depression among academics.

Participant A1 declared:

I was wondering what on earth was going on. I also imagined what teaching and learning will be like in future if people are no longer allowed to gather in bigger groups. I think I felt despondent and pessimistic about the future.

Participant A2 concurred:

The transition was rather abrupt and volatile causing significant levels of stress, anxiety, and depression. Both the lecturers, and students felt a great deal of uncertainty due to this unprecedented situation. There was evidence of accumulated psychological symptoms as the pandemic surged. The ushering of online learning compounded the situation as digital skills were lacking and isolation of online teaching and learning contributed to mental health.

Participant A5 succinctly expressed her feelings:

I have been on an emotional rollercoaster over the first few weeks, experiencing the slow ascent of stress and a bit nerve-wracking. I suppose it's natural to feel these negative emotions in the uncertain world we find ourselves in, but these feelings can be problematic both personally and socially. Having been in a face-to-face environment since I started my teaching profession made this sudden remote teaching change a mammoth challenge/task.

However, there were academics who displayed resilience despite the emotional setback suffered by them. A6 briefly described her emotional condition but explained how she managed her emotions by accepting the situation and motivating herself and her students.

Anxiety, frustration, lack of control, out of my depth, overwhelmed. These were just some of the

emotions that I experienced. In general, though, once I had accepted that the online route was the new normal, adjustment replaced the discomfort, and I engaged in the necessary activities to progress. In so doing I managed to keep myself and my students motivated and focused on successfully completing their relevant courses rather than dwelling on the associated negatives.

Most of the participants reported that they suffered from psychological distress and symptoms of depression, anxiety, or post-traumatic stress. Although some academic staff showed levels of satisfaction with their resources and facilities to work with during this abnormal situation, others were overwhelmed, and apathy was witnessed in their teaching. Considering the "digital divide", which defines academic staff's access to IT equipment and internet, an obvious reason for apathy among academics may be attributed to them being ill-equipped to cope with transitioning to online teaching. Some academics were resilient, and the impact of COVID-19 could not deter them from undertaking their teaching responsibilities.

Theme 2: Transitioning from Face-to-face Teaching to Online Teaching

Online teaching (also referred to as e-teaching) is education that takes place over the internet. It is an umbrella term for any teaching and learning that takes place remotely or across distance without face-to-face interactions (Anderson, 2011, 2016). Traditional face-to-face teaching accommodates academic staff to make human contact with students, to teach within a specified contact time and obtain immediate feedback from students. Academics usually use traditional methods (e.g., lecturer-centred) and resources like textbooks, chats, and chalkboards. However, in the 21st century, academics must supplement teaching through advanced technological resources like the internet, computers, smart phones, and other devices to make teaching more thought-provoking, exciting, and stimulating for students and peers. In other words, advanced resources can enhance active student participation and motivate students to know more (Jansen, 2004; Waghid, 2018).

In this theme, challenges that the academic staff encountered during the post-COVID 19 pandemic was accentuated.

A3 explained her experiences in transitioning to online teaching:

The modules in the Engineering Faculty have a high level of hands-on components such as architecture was particularly disrupted by the migration to online learning. It is a special subject that utilizes specific software to produce the art and science of designing buildings and other physical structures. This category of practical subjects was designed to be physically delivered in studios (art classrooms), never remotely. Adapting for us in record time, was an enormous challenge. Working from home using information and communication technologies (ICT) created feelings of tension, anxiety, exhaustion, and decreased job satisfaction. At some point, I was a casualty of stress.

A4 captured generic problems encountered by students:

Some of the lecturers were not adequately equipped to organise, deliver, and assess distance teaching and learning. Digital skills, readiness, digital and internet access posed enormous challenges to a larger percentage of our students, especially those from vulnerable families. Connectivity, lack of devices (computers) compounded by the pocket-drilling cost of data became an obstacle. The institution had to come up with innovative ways to bridge the technology, socio-economic gaps and disparities exposed by the pandemic. Staff-development was an urgent matter to help us cope under the circumstances.

A9 expressed her discontent and helplessness with online teaching:

Nothing happened in that regard, nor did I expect any support. The only thing that I saw happening is that we were given some routers to use at home, but such routers did not have sufficient data to enable a Zoom lecture. It was hardly effective because the data allocated is more at night (00:00 to 06:00) than in the morning. At that time, no lectures were possible. Therefore, I continued to rely on my own network resources such as Wi-Fi. Because of Zoom lectures, my data got depleted before time, and I had to apply for uncapped Wi-Fi which is expensive, but I don't have alternative ways of ensuring that I can function. My assessment remained the same. Students wrote short essays and long essays. They also did seminar presentations, and we communicated through Zoom to discuss pre-seminar presentations with those who were due to present. When the time comes for them to present, I sent them a Zoom link and they used share screen to present their PowerPoint slides. Therefore, nothing changed in the assessment tasks and methods of assessment.

Once again, we witnessed the resilience of some academics. A13 displayed confidence in transitioning to online teaching:

I had absolute confidence, and I used more than one platform to teach. I even used the WhatsApp space using voice notes, links to resources, photos, file sharing, etc. Together with Blackboard, WhatsApp offered quick, immediate access, and it required less data for students to access the material. In the evaluation of both modules' students reported:

- *I felt like you were talking to me and teaching me personally.*
- *I have enjoyed learning in your module. You pushed us beyond the boundaries. We spent more time wanting to learn.*
- *This module went beyond a grade. It was learning skills that I can use in my own class one day.*
- *Covid was an opportunity for us to learn about technology and its use as a teaching and learning space.*

Through the pandemic, A5 realised her own limitations, especially when she was compelled to change from face-to-face teaching to online teaching.

> I recognized my lack of expertise, and this impacted on my self-confidence and self-esteem. I chose to seek both professional help to support my health and well-being, and to upskill my computer skills. These positive steps became mutually reinforcing. As my self-confidence grew, I became an effective lecturer. As my digital skills improved, I felt more self-confident. Importantly, I was proactive in taking steps to build my resilience and to cope with stress. The experiences and adversities that came with the pandemic forced me to build resilience.

For academics, the shift to online education meant rethinking lesson plans to fit a very different format. The curriculum had to be reconceptualised to suit online teaching, because much depended on the visibility of academics who physically led students through certain aspects of the lessons. For example, a science lecturer had to reconfigure most of his/her science labs, since students didn't have science equipment at their disposal. Academics cannot physically circulate around the room checking on the progress of each student as in face-to-face mode. Some students take longer to absorb content readily and some are hesitant to ask for help. The sudden emergence of COVID-19 constrained academics from providing online tutoring assistance or educational technology support as required by complex lesson plans. It was vital for them to apply different teaching materials like audio or video materials to their lessons, or to adapt their assessment strategies (Bao, 2020) to complicated circumstances.

Theme 3: Continuing Professional Development for Academic Staff

During interviews with participants, a question was raised about the importance of CPD of academic staff to improve teaching and learning during the pandemic. Through professional development activities, "academic staff maintain a high level of expertise and acquire new skills and knowledge that contribute to their personal growth and development, student advancement, and institutional benefits" (Bennet, Roberts, Ananthram & Broughton, 2018:279). Although CPD is integral to any HEI's transformation agenda, little attention was given to CPD during the COVID-19 pandemic. Where professional development programmes were instituted in some HEIs, the focus was mainly on the various platforms rather than providing professional development on aspects such as managing assessments, online lesson presentations, and facilitating interactive sessions with students.

According to A4, staff development focused on using various platforms:

> For our institution to remain competitive despite the disruption, it focused on reassessing and redefining the required skills, tools, methods, practices, and priorities for teaching and learning. Staff development programmes focused on various platforms which included Blackboard Collaborate, Zoom, and Microsoft Teams, which enabled virtual learning through technology. While working from home, the use of FortiClient enabled staff to remotely access all the systems of the institution. These were the most innovative, and most user-friendly tools and technologies that became critical for continuous learning.

A similar sentiment on professional development programmes was echoed by A6:

> Our institution, namely our academic support services, was very supportive. Our platform, E-fundi provided several programs to communicate with students. Video voiceover tools were available to present lectures. Continued development programmes were provided for staff. However, at times it was very overwhelming as I had to adapt to all the support provided overnight. The platform provided programs such as Skype, Zoom, Gradebook, chatrooms, padlets and one-button video recording.

However, at participant A8's institution, the professional development focus extended beyond online platforms:

> The importance my institution placed on professional development of staff in order to improve teaching and learning during the pandemic was very high. This is not surprising as my institution is among the front promoters of the Fourth Industrial Revolution (4IR) in the country. My institution promotes and offers different types of professional development programmes such as workshops and seminars on online teaching and facilitation for academic staff. Workshops on effective use of the Blackboard and other digital tools as well as online teaching tools are among the types of professional development programmes offered to lecturers. The Postgraduate School of my institution organised most of the programmes.

At A7's institution, professional development during COVID-19 was structured well and implemented successfully.

> High Priority! The University set up a number of support groups with step-by-step tutorials on a wide variety of topics to assist academic staff. These tutorials were available in both live Teams sessions (with recordings for later viewing) and in PowerPoint print format. A help desk was also set up where staff could phone in to receive remote assistance. I experienced a general sense of collegiality among staff with a common thread of 'we are all in this together' and a real willingness to help one another.

However, participant A10 painted a grim scenario of his institution:

> I was not aware of any professional development that was done except that staff have in the recent past been advised and encouraged to use Moodle. I know that many undergraduate students received some training on Moodle, especially those that did not know how to use Moodle. However, many staff in the undergraduate sector have been forced to use Moodle anyway due to large classes. For us in

the postgraduate sector, we proceeded with or without Moodle. Some of us used it while others didn't. I didn't use it myself as Zoom was sufficient to teach my module. There were definitely no formal professional development programmes offered to us during COVID-19.

Participant A12 averred:

A lot of effort was made to help those that needed support. It was generic, and a 'how-to' approach. It was not of use to me personally, but others benefited. I needed a more tailor-made approach, which I got by finding people even outside the institution who could help me. I networked with Faculty of Art, Design and Architecture (FADA) students who helped me create materials that could support app development without coding for my students. I took the initiative and found meaning in learning what mattered to me. The university's 'one-size-fits-all' approach was not for me.

In 2021 I attended the Future of Education Technology Conference (FETC) online and learned so much more about new technologies that can be used for teaching and learning. I would much rather attend these than the university's 'how-to' sessions.

As the pandemic continued, it became evident that for institutions to remain competitive there was an urgent need to reassess and redefine the skills, tools, methods, practices, and priorities required for teaching and learning online. University staff development programmes focused on various platforms which facilitated virtual learning such as Blackboard Collaborate, Zoom and Microsoft Teams. A11 showed resilience by attending professional development programmes:

I attended a few online workshops. These helped me to improve my computer skills. Learning to use FortiClient enabled me to access all university systems. Attending professional development workshops, my confidence and technology skills grew and I became a more effective teacher. I was resilient to improve my computer skills.

As A7 looked back, she reflected on how CPD helped her:

I attended several professional development programmes and paid it from my personal funds. I have no regrets because I developed strong survival skills and when the 'going gets rough', I can count on myself to find the incredible strength to move forward. No matter how hard things get (in my personal and work life), I eventually bounce back. I am indeed resilient. The COVID-19 pandemic tested my strength and resilience. I doubted whether I would cope as a lecturer if I had not attended professional development programmes.

It is evident that universities were compelled to change and innovate their curricula to accommodate online teaching and learning. During the COVID-19 period, academics' skills development was more urgent, especially against the background of online teaching, which was crucial for remote learning. However, in most institutions academics did not have sufficient time to prepare for or gain support for remote teaching during a crisis (Ferri, Grifoni & Guzzo, 2020). As a result of the unplanned transition, academics received limited support when they needed it in terms of academic, administrative, technical, and social support. However, HEIs provided some support to academics but the focus was on the application of specific platforms that were solely used by their institutions.

Discussion

In a study undertaken by Rono and Waithera Kung'u (2021:73), the findings reveal that many of the academics at universities "in Africa were ill-prepared in terms of infrastructure, online skills, appropriate devices, internet connectivity and in many cases electricity and power connectivity." These and the measures taken to limit the spread of COVID-19 led to "many of them suffering from mental and psychological effects including post-traumatic stress symptoms, depression, feelings of confusion, anger, fear, and substance misuse" (Rono & Waithera Kung'u, 2021:73).

According to Mgqwashu (2017, cited in Mpungose, 2020), since the colonisation of South Africa, higher education at almost all universities have been dependent on face-to-face teaching. The advent of online teaching in higher education with the COVID-19 pandemic resulted in serious challenges for academic staff. This unforeseen transition from face-to-face teaching to an online mode of delivery led to higher workloads for academic staff as they worked towards online teaching of content and materials and to become sufficiently adept in navigating the requisite software (Allen, Rowan & Singh, 2020). In addition to the technical and instructional dimensions, academic staff were required to attend to the social and affective dimensions of online learning to successfully support students in online learning spaces. These academics were compelled to adapt their teaching approaches without any clear direction on how to address students' needs.

Generally, most participants averred that virtual teaching cannot absolutely replace contact teaching. Instead, participants unanimously agreed that hybrid teaching was most beneficial in the 21st century. However, some participants were adamant that face-to-face teaching in HEIs was beneficial for poor students who experienced problems in procuring digital devices and data. However, certain tasks and responsibilities of academics cannot be easily transferred in the forced switch from face-to-face to online learning, especially when some online learning experiences have never been implemented before (Rasmitadila, Aliyyah, Rachmadtullah, Samsudin, Syaodih, Nurtanto & Tambunan, 2020).

Another general finding of the study revealed that academics and students were not holistically

developed in ICT, which is indispensable for the 21st century. Both students and academics acknowledged that they had a good understanding of basic digital literacy but lacked the finer, more intricate applications of technology. To get full benefits of ICT in learning for education, academics must have the basic ICT skills and qualifications (Jung, 2005). This study exposed academics and heads of departments who were not ready for the sudden shift toward online teaching. Adnan and Anwar (2020) posit that students were not ready to accept the sudden shift towards digitalisation because they did not have enough resources and skills. Initially, students and academics were not ready to transition to online teaching (Cutri & Mena, 2020) but as time passed, marked improvements were observed. Another challenge facing students and academics during online classes was data and connectivity issues. Students and academics living in remote areas faced difficulties accessing Wi-Fi due to the high cost of data. Some also experienced problems with slow internet and procurement of data.

However, a positive consequence of COVID-19 was also observed among academics. They were readily available to assist students who had problems with knowledge and skills using technology (e.g., devices such as iPads) for those who were not digitally literate. Academics provided extra tuition to those who found difficulty in understanding subject content and they were flexible with time frames, providing students sufficient time to complete assessment tasks. The online classes were effective because the flexibility and supportive nature of academics increased the level of achievement among students.

Conclusion and Recommendations

While most academic staff suffered from a lack of social interaction and communication during the lockdowns during COVID-19, academic staff and students reacted differently to the intermittent closing of universities. On the one hand, COVID-19 brought challenges: academics had to switch to online learning, and the digital divide between affluent students and those living in abject poverty widened even further. For meaningful teaching and learning to take place, academics and students had to be digitally literate as well as have the necessary tools to benefit from online teaching and learning. These tools included recent-model computers, appropriate software, stable internet connections, sufficient mobile data and enough privacy in both, academics' and students' homes to effectively engage in online tuition. Unfortunately, for many students – and indeed, academic staff – these threshold conditions were missing, especially in low-income households and for individuals living in rural areas. This made online learning very difficult.

It was evident during this pandemic that many academics suffered from stress and burnout. It is essential that university councils invest in intensive research to develop a toolkit of skills and capabilities for academic staff to be able to adapt to any crises. It is important for academics to build resilience and strengthen their resolve to respond to the immediate challenges of any such crisis and to position themselves to cope better with future crises. To build resilience is not only about governments and universities developing policies and providing services; it is about building the resilience of academics by providing emotional support and care for students.

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