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Re-imagining higher education: A cohort of teachers’ experiences to face the ‘new normal’ during COVID19

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Abstract

The Covid-19 pandemic has disrupted education of over 220 million post-secondary students, globally. A need to rise to the challenges and re-imagine ways of educating students becomes essential. This paper explores the learning trajectories experienced by a cohort of B Ed Honours students completing their degree during the COVID-19 pandemic. There is a dearth of knowledge in current research which speaks to the transition from face-to-face to synchronous and asynchronous learning for postgraduate students who are, themselves, teachers. A mixed methods approach was engaged which allowed for the students, who are in-service teachers, to contribute their experiences of the transition from face-to-face learning to online learning through questionnaires and focus group interviews. A pedagogy of vulnerability was deployed which focuses on risks of change, risks of not knowing, risks of failing and risks of self-disclosure. The framework was used to capture the essence of their experiences in: their continued learning during the pandemic and the learning platforms and instructional processes used to maintain high quality education amidst growing uncertainty. The results reveal socio-economic inequalities such as lack of access, technical devices and skills when using online platforms and its impact on current teaching and learning. The results also show that exposure to a variety of online pedagogies increased student knowledge which could be transferred to their own practice.

1. Introduction

The COVID 19 pandemic has disrupted education of over 220 million post-secondary students, challenging educators to re-imagine current pedagogies applied. Large numbers of tertiary institutions, globally, have been shut down, interrupting academic work, with the aim of halting face-to-face teaching environments. The experiences and possible challenges experienced by higher education students as they transition from face-to-face to online pedagogies is important as we, in these unprecedented times, try to find more flexible and robust pedagogical practices to meet the challenges presented. Higher education institutions need to continue delivering quality teaching and learning during the COVID19 pandemic, with a deliberate focus on “how to teach, what to teach, the teaching environment and implications for education equity” (Ali, 2020, p.16). There is a dearth of knowledge in current research which speaks to the transition from face-to-face to synchronous and asynchronous learning for postgraduate students who are, themselves, teachers.

In recent years traditional face-to-face teaching has been supplemented with technology-based teaching and digital resources. This allows educational institutions to utilize existing technology-based teaching knowledge to transition to remote teaching and learning during this time. Online pedagogies like synchronous learning, where the educator and student are present in the same virtual space at the same time, and asynchronous learning, where there is online interaction but not at the same time, forms the new basis of digitized education. Subsequently, the emergence of online pedagogy has further highlighted existing inequalities in digital access, resources and skills among students. Students who were financially advantaged and enrolled at elite educational institutions had greater access to digital resources to continue academic work; conversely, their poorer counterparts did not.

Online pedagogy changes the learning space from a teacher-controlled environment to a student-controlled environment where learning is self-generated. Donists-Schmidt and Ramot (2020, p. 587) state that “this insight forced all teachers, including those who were hesitant at first and procrastinated in their decision on how to proceed with their courses, to familiarise themselves with the various Learning Management Systems and digital platforms that were made available”. For teacher education students particularly, exposure to different modalities and the willingness to experiment with different approaches and strategies during this pandemic times, provide new contexts for teaching and learning, and more importantly learning to teach. This exposure will ultimately narrow the gap which exists around the effective use of online pedagogies as efficient learning methodology.

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during these unprecedented times, but also as a methodology for future use. This study seeks to understand the learning trajectories of a group of B Ed Honours students during the COVID-19 pandemic as they transitioned from face-to-face learning to online, synchronous and asynchronous learning, in an attempt to complete their degree. To answer the question: What are the challenges a group of BEd Honours students experienced in transitioning from face-to-face to online learning when completing their degree during the COVID-19 pandemic? It is an investigation into platforms used, management of existing inequalities during the process and continued learning during the pandemic was required.

2. Theoretical framework

This research project is framed by Brantmeier’s (2013, p. 2) theory of pedagogy of vulnerability which speaks to the “risks of change, risks of not knowing, risks of failing” that students experienced in their quest to “deepen learning” during the sudden onset of the COVID-19 pandemic. The unexpected transition from face-to-face teaching to online learning required a climate of trust, shared and co-learning, leaving both teacher educators and students vulnerable.

In teaching and learning it is not possible to separate the engagement of the mind and intellect from the feelings and emotions. Koppensteiner (2020, p.107) purports that “when facilitators and teachers only address minds and personae much of our human potential remains untapped”. In order to deepen our learning we need to allow ourselves to emerge from behind that persona, open ourselves up by expressing how we feel, who we are, our fears, our expectations and our anxieties. We have to create opportunities for vulnerability to emerge in a space that will be beneficial. A space where “participants are not forcefully unmasked ... but encouraged to explore ... their own learning” during this process (Koppensteiner, 2020, p.110).

It is, therefore, imperative that during this time teacher educators understand that student vulnerability means that they open themselves to being hurt, therefore, have to be guided “by a willingness to meet students where they are ... taking time to learn what matters most to students” through the pedagogy of vulnerability (Mershon, 2018, p. 1). During this pandemic time it was important for students to “… share personal information and admit that they did not know ...” (Brantmeier, 2013, p. 8). He further purports that “…not knowing invites opportunity...” providing students with a “chance to discover something new or new” (Brantmeier, 2013, p. 10). The existing inequalities were further aggravated which left many students challenged during online learning. The risk of self-disclosure of their home circumstances or financial constraints rendered them even more vulnerable. Brown (2015, p. 12) however, states that “vulnerability is not weakness; it’s our greatest measure of strength ... it’s being courageous ... when we are unsure and have no control over the outcome”. In this study the students, during the pandemic, presented courage and strength and deepened their learning as they moved along the COVID-19 continuum to degree completion.

3. Literature review

The sudden advent of COVID-19 has challenged educational institutions worldwide. Extensive media coverage regarding the spread of the virus left educational institutions having to shut down. Curfews were put in place, social distancing and the wearing of masks became compulsory. Educational institutions in South Africa were closed from the end of March to the beginning of June 2020. This effectively meant that no formal education took place for two months. Formal education resumed officially on the first of June for all, including teacher education institutions. Murphy (2020) reports that “extraordinary times call for extraordinary measures” and the trend adopted in education worldwide in response to the pandemic was emergency e-learning. Teaching and learning continued in this way and the 4th industrial revolution, where technology advancement is key, became a reality for all in education. The transition from face-to-face tuition to online learning came without warning. Prior to the pandemic, the percentage of internet users for developed and developing countries were 86 percent and 47 percent respectively. Currently, at least 60 percent of students affected do not have the skills or resources to access and manage online learning (UNESCO, 2020).

3.1. Continued learning during the pandemic

The world is transforming and in this transitional period we are obliged to reformulate and re-assess many basic assumptions about what comprises education. While such obligatory re-assessment can be constructive and refreshing, many values and visions that had gone unchallenged for decades need to be interrogated. Ali (2020) states that even the highest performing education systems will not be adequately equipped for full provision of online learning. Face-to-face education systems, according to UNESCO (2020), pose a threat to communities during this pandemic. While movement to e-learning may introduce a fresh and exciting pedagogy, higher education institutions, in their quest to mitigate the risk of transmission, have had to modify their teaching environments and practical activities to virtual settings (Morrison & Sepulveda, 2020). This requires integral planning and the necessary preparation may help to avoid the pitfalls and challenges related to the adoption of such immediate change. This crisis calls for online learning expertise and the necessary competences to be developed and refined. The World Bank (2020) lists various issues to be aware of during this critical time of change:

- Transitioning to online learning is a difficult and highly complex undertaking for education systems, even in the best of circumstances;
- Moving to online learning on a large scale raises equity concerns;
- Highly motivated learners, especially those with previous experience of online learning, are the most likely to take the most advantage of online learning opportunities;
- Making content available on a wide variety of devices and mobile friendly is critical;
- Supporting the use of low bandwidth including offline solutions is key to effective learning;
- Staff teaching online need to be supported;
- Universities need to negotiate with internet vendors to help provide access to online learning for students for free or at a cheaper rate;
- Providing supplemental guidance and support on how to use and access remote and online learning content can be critical; and
- Some academic subjects are easier to move online than others (World Bank, 2020).

Being an adequately resourced institution does not necessarily mean that the implementation of ICT will be easy. There are many factors that affect implementation. Staff members, for example, need to be adequately trained and ready to change their modes of teaching (Ali, 2020).

3.2. Learning platforms and instructional processes

ICT literacy has become one of the cornerstones of managing teaching and learning during the pandemic and its integration into the teaching programme is central to the development of prospective teachers. E-learning platforms have been defined as online facilitated learning which is "flexible learning using ICT resources, tools and applications, focusing on accessing information, interaction among teachers, learners, and the online environment” (Moll, Adam, Backhouse, & Mhlang, 2007). Technology integrated with education informs “how students learn” and pedagogical practices applied. In order for ICT to be assimilated, training for lecturers and students in ICT as well as support in pedagogical practices need to be provided (Ali, 2020; Morrison et al., 2020). Ali (2020) purports that integration of ICT results in changing pedagogies allows for greater engagement and collaboration. Learners...
own their learning and are guided by their own space and time. Students are encouraged by online learning environments. The responsibility of control is shifted from the lecturer to the student which promotes self-generated learning. Teachers adapt their teaching to students to allow self-regulated learning to take place. As students develop confidence and become more capable, less instruction is needed from the teacher and the students are able to generate their own learning. Bridging this gap through a process of scaffolding in a virtual space moves the students from the known to the unknown, from dependence to independence, also leading to improved skill (Mutekwe, 2018, p. 60). In this way the student adapts to the teaching and this reciprocal relation determines the level of independence the student has attained within the learning context (OECD, 2018).

3.3. Pedagogical practices adopted during COVID-19

Synchronous learning enables both teacher educator and student to be present in the same virtual space at the same time. It allows both to share various tools such as power point presentations, videos and communication via chat rooms as well as get immediate feedback (Arkorful & Abaidoo, 2015). Students, however, may enter the virtual space by using a link but occupy themselves with other concerns while the lesson is being taught (Donitsa-Schmidt & Ramot, 2020). According to Carillo and Flores (2020) teachers claim that students ‘hid behind’ their cameras since it was not compulsory for them to turn it on. This evasion resulted in lower participation rates which increased the ‘gap’ in terms of learning opportunities.

Asynchronous learning refers to online learning where there is interaction but not at the same time. Teachers can load pre-recorded videos, and use other teaching tools to disseminate information. Students can then access the work in their own time but there is no immediate interaction or feedback (Arkorful & Abaidoo, 2015). With the immediate need for online teaching, during the pandemic, teachers were obliged to use platforms to teach synchronously, asynchronously or a combination of the two. But this may be the genesis of a new, more effective pedagogy for the 21C.

Bernard et al. (2004) conducted a comparison between distance education and classroom instruction, and found that asynchronous learning showed an insignificant positive effect on student achievement while synchronous learning showed a slight negative effect. Face-to-face instruction reduced classroom time and online learning enjoys substantially more time. Students do not face the expense of travelling to campus. Parents are spared the cost of residence or lodgings. Universities save large sums by not having to maintain and clean campuses.

Similarly, Arkorful & Abaidoo, 2015 in their literary search merged some advantages of adopting online learning pedagogies which include: flexibility of time and place of learning; ease of access; opportunities of discussion in discussion forums; it improves participation - eliminates the ‘fear’ of talking to others; reduces travelling costs; allows learners to self-pace learning asynchronously; and accommodates maximum number of students, among others.

Emmanuel continues to suggest that implementing the curriculum with well-organised teacher assistance and excellent teaching and learning strategies will result in newly developed curriculum being delivered successfully. The technology-based element augurs well for the less privileged who have less access to funds. Money saved in travel, lodgings and campus maintenance can be funneled to student bursary resources.

3.4. Impact on existing socio-economic inequalities

Online learning, according to United Nations Educational, Scientific and Cultural Organization (UNESCO, 2020), can be a challenging tool as well as a promising one. South Africa led the way globally in distance learning through the University of South Africa (UNISA). UNISA was designed to assist the poor, in particular, to gain the tertiary qualifications they could not otherwise afford. The academic landscape is already set for e-learning. Just as the creation of UNISA called for an imaginative leap which was recognized and applauded locally and globally, this present crisis may stimulate a new pedagogy better and more relevant to South African students. However, access to the internet and technological devices are unaffordable for many, leaving students incapacitated for learning within their homes (Killen & Langer-Cramer, 2020). Flores and Gaco (2020) reiterate in their identification of the challenges presented to both teacher educators and students in online learning, to be inclusive of: a lack of adequate equipment for students; student involvement in learning; no adequate training for online teaching and the absence of parental support. Students who live in rural and low socio-economic areas experience lack of connectivity which further results in them ‘lagging behind’ (UNESCO, 2020). UNESCO (2020) suggests that in the hope of mitigating the challenges, universities should offer to provide students with technical devices needed. Murphy (2020), however, argues that the portability of online teaching could increase accessibility in rural areas and, in addition, argues that the flexible nature of asynchronous learning grants greater access.

Murphy (2020) contends that “the normalization of emergency eLearning would mean the normalization of a form of education that perpetuates structural inequalities of class, race, and support (Farhadi, 2019) that schools should allow students to break free from”. In order to manage these challenges and narrow the digital divide, UNESCO’s (2020) response has focused on building on existing capacity of online learning systems and providing the necessary support for teachers, students and parents.

4. Research methodology

A mixed methods approach, focusing on participatory-educational justice design, was adopted for the purpose of this research. This approach refers to the integration of both qualitative and quantitative methods to extend the depth and range of the research. In this study the researcher followed up qualitative data (a questionnaire to elicit information regarding access to data and technological devices) with the qualitative data (interviews) “intended to help explain or elaborate the previously obtained quantitative results” (Pardede, 2015, p. 234).

A participatory-educational justice design was used since it “advances perceptions about learning and development paying specific attention to how equitable processes unfold and function” (Bang & Vossoughi, 2016). In this study the ‘forced’ migration from face-to-face to online learning further incapacitated already disadvantaged students during this developmental process.

The research was conducted with the 2020 cohort of B Ed Honours (National qualifications Framework, level 8) students in the Education Faculty at a local university in Cape Town. Twenty eight students were enrolled for the Inclusive Education specialization course within the programme. The researcher was part of the teaching team for the specialization subjects in the course, which comprised Research Methods and Inclusive Education. Of the twenty-eight students, twenty students were willing and able to participate in the research. Some participants who showed an interest were not able to be a part of the research because of poor connectivity and insufficient data. The twenty students who participated in the research experienced face-to-face lectures for the first month before the pandemic struck. The onset of the lockdown in March 2020, forced the university to shut down with very little warning and teaching and learning in this programme had to continue via online platforms three months later. This sudden transition was not effected without challenges.

The twenty participants were purposively sampled since their experiences of the transition from on-campus to online learning, during the pandemic, was their reality. Smith and Osborne (2008, p. 56) imply that purposive sampling helps to find a “closely defined group for whom the research question would be significant”. Sharing their lived experience during this unique time, where many tried to replicate what was done in a normal classroom to online platforms, allowed the students to...
express their experiences. Significant information obtained from participants augured well for the investigation into their continued learning during the pandemic, learning platforms and instructional processes and pedagogies used to effect continued high quality education amidst the growing uncertainty.

Methods of data collection used to elicit, from the participants, their experiences of their trajectory throughout this transition included a questionnaire and two focus group interviews. The questionnaire consisted of close ended questions which provided statistics regarding availability of connectivity, data and technological devices as well as open ended questions discussing their experiences. Focus group interviews were used to ensure that participants could “identify, define and contextualize” their experiences and at the same time “debate, disagree and defend their views” on how they experienced the transition to the new pedagogy of online learning (Hennink, 2010, p. 208). The use of both quantitative and qualitative data collection methods intended to create an adequate ‘picture’ of their experiences in order to answer the research question: What are the challenges a group of BEd Honours students experienced in transitioning from face-to-face to online learning when completing their degree during the COVID-19 pandemic?

Quantitative data were qualitized (Johnson & Christensen, 2004, p. 425), and together with qualitative data were inductively analysed. Careful examination of the data took place during the reading and rereading process. Significant statements and meanings regarding the participants’ experiences were colour-coded to assist the researcher with the identification of themes that described their experiences in their learning trajectory during this pandemic. (Lui, 2016). To ensure the truth and accuracy of the data, member checks were conducted. The transcriptions of the focus group interviews were given to participants to check and “consider that their words match what they actually intended … and articulations, themselves, should at least have been accurately captured” (Shenton, 2003, p. 68). Multiple data sources: quantitative-questionnaires and qualitative-focus group interviews, were used to triangulate the data (Korstjens & Moser, 2018). These two sets of data were collected on different days and from different sites (since all students worked from home).

Ethical approval to conduct the research was obtained from the institution (Ref: EFEC 1-6/2020). Written consent forms were signed by all the students who agreed to be part of the research. To ensure confidentiality and anonymity the students were referred to as ‘participants’ and the institution’s name was not mentioned. They were given the right to withdraw at any time during the research process.

5. Findings and discussion

5.1. How did it all start?

Teacher education students were in a state of uncertainty, grappling with the closure of the schools they taught at as well as with the institutions they were studying at. One student teacher shared:

…we were just at home, we were just left blank. We didn’t know what was happening and when campus was going to resume and like your question … how it affected us? I was actually horrified because I thought if I had to redo this year then I was just going to leave because I refused to go through this trauma again because it’s really challenging…we lost out quite a lot of time. I can’t actually say how much but it could have probably been more than a month or two before we started remote learning.

Donitsa-Schmidt and Ramot (2020) describes this time as a difficult period where student teachers displayed signs of feeling pressured. After the first few weeks when lecturers began to ease into this new pedagogy, students started to ‘crack’ under the pressure and this impacted their emotional well-being (Donitsa-Schmidt & Ramot, 2020). Emotions and experiences of vulnerability are intimately related in the teaching and learning context and must be “acknowledged and processed through supported vulnerability for the sake of teachers’ well-being” (Straka, 2018, p.16).

Two students expressed frustration, “…by the time you get home, the classes are already halfway. So irrespective of measures that were put in place, I think some of us were left aside …” and “… we did lose out on a lot of information that was vital, that could have benefitted us in the long run, but yes we are here and we are carrying on”. Evidence of vulnerability is portrayed as the students’ experience ‘risk of failing’. The experience of the pedagogy of vulnerability, according to Brantmeier (2013, p. 3), should be seen as a transformative pedagogy, assisting students to actualize their higher education goals. Phillips, Condy and Tiba (2019), p. 195) purport that “unless we are able to embrace our vulnerability we will not reach our full potential. All we will do is to build walls that will constantly prevent us from understanding or being understood”. Institutions should, therefore, take full responsibility for thorough preparation and in-depth planning to assist students and minimize the current uncertainties and tensions as a result of these forced transitions (Ali, 2020).

5.2. Existing socio-economic inequalities

One of the foremost factors in the digital divide, during this unprecedented educational response, is the socio-economic circumstances of students and their families. The participatory – educational justice design slowly unfolds as the perceptions of the inequalities and how it impacts teaching and learning become more and more apparent (Bang & Vossoughi, 2016). Students who find themselves in financial distress cannot afford to acquire technological devices and data. Disclosure to teacher educators and peers about their financial limitations and its impact on their own learning, rendered students’ vulnerable. However, Straka (2018, p. 127) purports that “we learn through vulnerable moments that create opportunities for constructing resilience in relationships with others and ourselves”.

The results from the questionnaire are reflected in Table 1 and indicates that most students had access to WhatsApp and Blackboard, 55% had access to laptops and only 10% had access to desktop computer.

Having access to a device did not mean that there was connectivity. Only 25% of the students indicated that they always had data, 45% sometimes had data and the rest depended on data provided by the institution.

Participants in the interview responded in the following way regarding access:

… moving on to remote learning … it is going to be a problem to most of us because we grew up in places where we had no access to technologies… now we had to embark on this remote learning, so it was kind of a challenge to many of us.

…some students don’t even have laptops … like with the load shedding … we were stressed out because I wasn’t able to connect …

we’ll be given every month 10 gigabytes to work for the internet purposes and then 20 gigabyte to work at night …we should have been given the 20 gigabyte to work during the day and then 10 gigabyte during the night …

Globally, there needs to be an increased awareness that this shift to online teaching has intensified the existing inequalities which leaves students vulnerable. These inequalities result in significant barriers as

| Technical devices for online learning | No of students out of 20 | % |
|--------------------------------------|--------------------------|---|
| Desktop computer                     | 2                        | 10 |
| Laptop/tablet                        | 11                       | 55 |
| WhatsApp                             | 18                       | 90 |
| Access to Blackboard                 | 18                       | 90 |
| Android phone                        | 14                       | 60 |


a direct consequence of inadequate or no access to Wifi, technological devices and other tools needed for online learning (Kilien et al., 2020). According to Carillo and Floris (2020) a gap has emerged with regard to opportunities created for students as a direct consequence of the lack of adequate home circumstances, a lack of parental guidance and support and the lack of necessary technological tools. This is but one example of the reality as one participant iterated: “I’m staying in a township, I’m staying with neighbours who are shebeen owners, some of them, just party randomly while I’m trying to learn ... and there’s music ... and then there’s you trying to focus ...”. This resulted in around 30% of students not turning their cameras on to prevent exposing their home circumstances (Carillo & Floris, 2020; Donitsa-Schmidt and Ramot, 2020). At all costs moving to the online platform cannot risk undermining student privacy or free expression which, according to UNESCO (2020), deems thinking about online learning as the way forward, an illusion.

We need to be aware that, even though self-disclosure leaves students vulnerable, it is recommended by Brantmeier (2013) that teacher educators open up and share their own lived curriculum, motivating students to model that kind of self-examination “in order to go deeper in their learning”.

5.3. Continued learning during the pandemic

The need to increase flexibility was inevitable during the pandemic. This led to a re-imagining of alternative pedagogies which included: online teaching and the use of other technologies to manage course delivery. Many students, at first felt inadequate and vulnerable, since no opportunities to skill students were provided. These experiences of vulnerability can conjure up feelings of negativity, fear and frustration. This is evident in the responses of the following participants:

I was actually very sceptical and very nervous about the change because to me that was something unknown. I’ve never experienced it before, I’ve never worked online but now I actually love it.

I was scared at the beginning...

...now we had to embark on this remote learning, so it was kind of a challenge to many of us.

Donitsa-Schmidt and Ramot (2020) agree that students were at first given little time to adjust and adapt to the new online teaching platform. Students and lecturers were inundated with training sessions and webinars to educate them on the use of the platforms during teaching. Although students may have been quick to adapt, they still faced challenges and showed displeasure and frustration with their academic journey with some lashing out at teacher educators:

... there was not enough explanation... in the beginning of this online learning I missed two classes from my Introduction to Research lesson, meaning that I didn’t understand even when things are being recorded on the BlackBoard ... it’s hard for one to go there...

Students, for whom the transition was a bit easier responded differently:

... would like to applaud our lecturers and supervisors because they took the time in being with us in the Teams and they interacted with us. We didn’t go to bed or do an assignment without not knowing what to do ...

Straka (2018) states that ‘safe spaces’ and ‘strong interaction’ between teacher educators and students are needed to process their vulnerability. Without these, their vulnerabilities could result in a barrier developing in the teacher-student interaction, negatively impacting learning.

Furthermore, Ali (2020, p. 16) suggests that teacher educators and their students be equipped with “standardized home-based teaching and learning equipment, conduct online teacher-training and support academic research into online education, especially education to help students with online learning difficulties”. This is the responsibility of governments and education providers in their quest to limit the difficulties experienced by teacher educators and students.

5.4. Learning platforms and instructional processes

Platforms used to teach teacher education students, at our institution, included Microsoft Teams and Blackboard Collaborate for the whole class teaching component, email for submission of tasks and WhatsApp for other communication. Teacher educators had some experience of using these platforms but to be entirely reliant on them became a trial and error process. Most students, however, had to adapt to these new technologies very quickly, learning how to use them effectively during teaching and learning sessions in the course. They responded in the following way:

I wasn’t happy with the Microsoft Teams in the beginning because I didn’t know it. So it was always the fear of the unknown...

...we’re still trying to find our feet accessing the Microsoft and Zoom meetings

... the BlackBoard that was one of the modes that I struggled with ... because I couldn’t log onto BlackBoard... at some point they were busy restructuring or improving that system as well.

I also like the fact that we have more than one platform where we can use social media and technology ... if we’re done with our Team’s class and I need to ask another question, I can just ask on WhatsApp or I can send an email. So there’s another platform that makes it easier to ask questions and to engage...I’m not struggling with Teams, WhatsApp, Blackboard or the emails.

The questionnaire results were as follows: Table 2 reflects that 40% of the students felt confident with the learning platform and easily accessed it for lessons. 45% could only sometimes access TEAMS as a result of poor connectivity or no data. 15% of students did not respond.

The current cohort of students was consistently exposed to a variety of technological gadgets which include mobile phones and tablets since childhood. However, Jesse found that although 99.8% of them used their devices daily, it was used mainly for texting, social media and other applications. O’Sullivan, 2018 purports that these ‘digital natives’ do show limitations in the use of these devices. There remains an incongruence between their impressions of their knowledge and their real technological knowledge. However, students do show a certain receptiveness to this integration which is evident in one participant’s response: “...we should be prepared to learn digitally. Learning remotely shouldn’t be a problem anymore because I think this is the world that we live in now and this is our new norm and we should just move with the times”. This concurs with the findings of Morrison et al. (2020) where a student intimated: “if it had not been for this experience, I would not have learnt any advanced technology; I would have known only the basics”. Exposing student teachers to various online platforms for teaching and learning purposes will motivate them to be more fully aware of and deeply reflect on their own learners’ contexts and plights during this critical time. Their vulnerabilities now became their strength and a critical learning tool.

| Table 2 | Access to online teaching platform used during lectures. |
|---|---|---|
| Teaching and learning platform: TEAMS | No of students out of 20 | % |
| I can always access TEAMS | 8 | 40 |
| I can sometimes access TEAMS | 9 | 45 |
| I struggle to access TEAMS | 0 | 0 |
5.5. Online pedagogies

During this pandemic students were prepared to "labour, risk and play with possibilities" which interrupted the ‘normal’ learning situation, rendering them stronger than before (Rodricks, 2018). The sudden migration from face-to-face to online teaching and learning offered various opportunities to maximize learning experiences for students. Teacher educators decided to use both synchronous and asynchronous modes of teaching. The combination of the two modes satisfied the diverse cohort of teacher education students. They responded as follows:

... synchronous because when we were on Teams we were together with our lecturers and I found that was very helpful because we could engage and we could ask our questions right there...

Both, because we do get the recordings afterwards for those of us who maybe get home late on that day...

I think using just one type of learning is very monotonous ... it’s good to go back and reflect on another mode or another form at another time.

It was the abrupt need for online learning during the pandemic that forced teacher educators into synchronous and asynchronous learning. These modes revealed the urgent need for teacher educators to provide a means of communicating with students, making the transference of knowledge more accessible and assessment possible (Donitsa-Schmidt & Ramot, 2020). Inequalities are intensified because students have poor or no internet access as a result of them not being able to afford technological devices, data or they live in areas where there is poor or no connectivity (UNESCO, 2020).

Conversely, teacher educators and their students still yearn for that sense of physically belonging to communities of practice, hoping for more meaningful learning. Sitting in front of computers for long periods of time is breaking down the morale of students. Student participation has decreased along with visibility (Carillo & Floris, 2020). Two participants remarked:

I think for me ... I’m a social being. I love being around people and that is how I learn but now that I’ve become accustomed to being at home, I actually feel ... that we need to move with the times and online learning has become part of the new norm. So I think a little bit of both ...

... the advantages of the face to face ... is the interaction, the personal interaction between us, ... we’re creating a community of practice. At the moment I don’t know my colleagues ... I don’t know their names. If I should meet them in the road I wouldn’t know that we study together because I just know them by name. I don’t know their faces, I can’t recognize them, so that form of networking is lost ...

Integrating traditional face-to-face and online learning modes is referred to as blended learning (Emmanual). Blended learning ensures that there is connectedness and the development of relations between students, enhancing the social presence (Carillo & Floris, 2020). This is essential to develop strong collaboration and interactivity. One student explained why this was important for her, “You need to see the expression because that in a sense for me is motivating and uplifting whereas, looking at a computer all the time, is very cold. So there’s no warmth in the online learning”. Video meetings, phone calls and texting is a poor substitute for the personal contact, a sense of belonging and emotional support required in the professional environment.

Feelings of isolation and vulnerability have grown during this time, but Hooks (1994) argues that we cannot be empowered by the process if we do not allow ourselves to be vulnerable and to take risks. To be vulnerable is to be courageous.

6. Conclusion

The pedagogy of vulnerability is an approach that challenges teachers and students to open themselves up, to risk, to admit when you do not know and to just be human in order to learn more deeply (Brantmeier, 2013). During Covid-19 educators and students were challenged to take these risks when devising new, more cost-effective and relevant ways of teaching and learning. Wars, pandemics and natural disasters have historically precipitated invention, discovery, and recovery and educators and students are rising to this challenge and finding that many unchallenged aspects of pedagogy need to be re-thought and entirely re-imagined. Questions arise: What is education? How can we make it fairer and more affordable for all? Education responded to this pandemic with emergency E-learning protocols as a means of securitization. Already established expertise in e-learning became the focus of innovation for the path teaching and learning would take amidst fears of transmission of the COVID-19 virus. Governments and other organizations joined forces to manage the continuity of teaching and learning.

A limitation of this study points to the collection of data via online platforms. Access to internet connections and technical devices were important elements to consider. Some participants struggled with access during interviews and, therefore, it was important to be very careful with the interpretations of their responses.

This study reports upon the experiences of a group of twenty BEd Honours teacher education students as they transitioned from face-to-face learning to E-learning during the pandemic. The lack of innovative planning and preparation by institutions, in this unpredicted time, left some teachers and students feeling abandoned and vulnerable. A plethora of online platforms including Teams, Zoom, WhatsApp, emails, amongst others, were, however, made available to both teachers and students in an attempt to ready them for formal teaching and learning. Although this cohort of students are cognizant of technological gadgets, the online teaching environment was often beyond their ability. The need for online training was vital to ensure successful curriculum delivery. While the first few weeks of lockdown left students in disarray, soon the uncertainty settled and a new appreciation for alternative pedagogies arose, as teacher educators reflected deeply on their own contexts and practices.

The digital divide framed a greater awareness of the already existing inequalities. Students from poorer backgrounds and rural areas faced challenges with regard to connectivity, access, technological resources and skills shortage. The effects of learning stemmed from poor communities and home circumstances where students chose not to engage or risk their privacy which would render them vulnerable. For teacher educators this awareness could be reflected upon and connected to their own classrooms and learners.

Exposure to a variety of online pedagogies increased student knowledge which could be transferred to their own practice. The combination of synchronous and asynchronous teaching and learning were used to deliver the curriculum to teacher education students. Active engagement and collaboration during lessons were few, yet students requested “more interactivity and collaboration in digital learning” in a study conducted by Killen et al. (2020). There was a preference for face-to-face pedagogy to be included since the human factor was important to students. Their vulnerabilities surfaced as the need for a connectedness and a social presence became more evident.

7. Recommendations

The government, in their planning and preparation, should promote specific, central platforms for all teaching and learning and provide adequate training to all teachers and students. This uniformity will auger well for connectivity within and across all institutions, promoting greater collaboration nationally.

To minimize the existing socio-economic inequalities all students should be provided with a suitable space to work, a laptop or suitable
device on loan, and data to ensure that teaching and learning can take place. As the pandemic evolves, teaching organisations should consider a valid and more affordable pedagogy, including face-to-face instruction with computer-mediated instruction. It is an opportunity to develop quality education partially in conventional classrooms where a renewed purpose for learning is created and partially via online platforms where the strengthening of the ability to work with digital technologies for learning occurs.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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