Students' Perceptions of Online Learning During the COVID-19 Lockdown: The Realities of Social Justice for Rural University Students

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Abstract

Social justice is a significant feature of any democratic government that aims at providing education for all. Access to an equal education is a fundamental right of every South African school-age citizen as enshrined in the 1996 Constitution. The sudden emergence of COVID-19 shut down the global world activities and thus revealed the realities of social justice in the education system in most developing nations. Before the pandemic, teaching and learning in the South African education system had been either conventional face-to-face learning, blended learning or both in most learning institutions. The outbreak of the pandemic forcefully led many higher institutions to adopt online learning as an alternative, thereby highlighting the digital divide between poor and rich, rural and urban students. This study explored lived experiences of rural students in accessing learning activities during the COVID-19 lockdown among rural-based South African students. Data collected from semi-structured telephonic interviews with twenty students from a rural-based university were thematically analysed. The students whose homes were based in Mtubamtuba, Esikhawini, Nongoma, and Port Dunford areas of KwaZulu-Natal province were purposively selected. Mezirow's (1994) Transformation theory was used as the theoretical framework to understand the study while content analysis was used to interpretively present the findings. Findings indicated that rural students encountered a lot of challenges to access online teaching and learning due to many factors. Some of the students were not able to actively interact with their lecturers on the Learning Management System known as Moodle. Poor network from service providers hindered their regular access to the learning and assessment activities. Due to the high cost of data subscriptions, most of these students could not afford data subscriptions. Provision of data subscriptions, laptops and appropriate network SIM cards to the students by the university are recommended to enhance social justice.

Keywords

Social justice, COVID-19, lockdown, realities, transformation, online learning

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1 Introduction

One of the significant characteristics of democratic government is the provision of education for all citizens who aspire to acquire learning experiences. The emergence of COVID-19 in the global world forced countries to go on lockdown to curtail the spread of this deadly virus. Thus, all activities were grounded as people were restricted to their homes. One of the sectors greatly hit was the education sector. With schools closed and students kept at home, the need to salvage the academic calendar led to the adoption of online teaching and learning as the only alternative means of curriculum delivery. Adoption of online teaching and learning approaches, therefore, was received with mixed feelings by many rural-based students. To these rural students, it amounts to their exclusion from learning activities as they may be unable to access online learning resources. Factors responsible for their exclusion include lack of learning infrastructure, lack of electricity, lack of laptops, poor communication network from service providers, lack of computer knowledge and skills for both students and some lecturers to assist students with online learning activities. Urban settlements have enabling facilities that can promote and give adequate learning experiences to urban-based students. This explains the realities of social justice between rural and urban, the poor and the rich. According to Hall (2019), most South African students in rural-based universities are from rural areas where basic amenities are challenging them. Rurality is a term that describes human settlements whose main occupations are agricultural practices and lack basic amenities or inadequate provision of basic infrastructures. Cristobal-Fransi, Montegut-Salla, Ferrer-Rosell and Daries (2020) posit that a rural area may be described as a remote part of a country located in sparsely forests and mountains. Seemingly, Avila and Gasperini (2005) assert that rural dwellers do not have access to adequate socio-economic amenities like quality education, good health facilities, good transport, and electricity. This implies that rural people have many limitations that make them nomadic (Avila & Gasperini, 2005). South African rural areas are mostly characterized by a lack of viable social and economic activities that are technologically driven (Cristobal-Fransi, Montegut-Salla, Ferrer-Rosell, & Daries, 2020). Hall (2019) posits that the population of South African rural schools stands at 11,252 schools across the whole country. These are made up of 3060 high schools and 8192 primary schools. KwaZulu-Natal is home to many rural students in the country and has the highest child population. According to Hall (2019), 2.6 million children (62%) of the KwaZulu-Natal child population are classified as rural. In another report, the World Bank (2018) reports that 33% of South Africans may be classified as rural. Despite the significant population of students in these rural areas, South African Governments at various levels have been unable to provide quality education or make available facilities that can enhance quality education (Du Plessis & Mestry, 2019). This is why Francis and Webster (2019) describe South Africa as a paradox; a country where inequalities or social injustices exist.

The Parliamentary Monitoring Group (2020) affirms that rural education is a significant fraction of the South African education system which has existed for many years. Rural schools have suffered neglect with little or no attention given to the schools or commitment to ensuring quality education like that of the urban schools (The Parliamentary Monitoring Group, 2015). Students in the urban areas are provided with enabling environments that make them access and excel in learning experiences even during the lockdown (World Bank, 2020). Urban areas provide several opportunities for urban students to be supported with learning devices, good internet networks from different service providers, a constant supply of electricity, computer training, a comfortable environment and many others (Dube, 2020). These facilities place urban students at vantage positions over rural students in the acquisition of skills, knowledge and also in various forms of assessment (Du Plessis & Mestry, 2019). Hence, students' lived experiences during the pandemic provide various indices for the realities of social justice in South African education. Dieltiens (2008) asserts that the peculiarity of rural schools is an indicator of social injustice meted out to rural students. This explains why rural students' academic performances are lower than that of their urban counterparts in the same examinations (Ajani & Gamede, 2020). The rural students are limited in knowledge production, critical thinking and academic writing. Health precautions such as social distancing and self-isolation prohibit traditional classroom teaching and learning, to curb the spread of COVID-19 in a physical gathering of large students (Krishnakumar & Rana, 2020).

Rural students are used to traditional teaching and learning approaches, which were discouraged. Rather, full online teaching and learning, using learning management systems (Moodle), which, unfortunately, complicate access to learning activities to many students in rural areas. Thus, students living in urban areas are more privileged to access learning via various resources. Ebrahim, Ahmed, Gozzer, Schlagenhauf and Memish (2020) assert that the lockdown in South Africa created economic hardships for many families, especially rural families who seem helpless to provide resources that can be used to access online learning activities. To this end, rural students are helpless on an effective approach to online learning activities during the COVID-19 lockdown. This study argues that COVID-19 has shown realities of social justice that exists in South African education by making students in the rural areas disadvantage from online learning activities, and the online learning is only the practicable alternative to traditional teaching and learning during the pandemic lockdown, so, there is need for an inclusive practical approach to promote social justice in lived realities of rural students.

Proffering measures to address issues from COVID-19 should include approaches to address factors that deprive rural students of accessing online learning. Nkoane (2010) asserts that several factors undermine successful online teaching and learning for rural students. Du Plessis and Mestry (2019) further agreed that there is a need to devise various strategies to improve access to online teaching and learning for rural students, as these would improve and ensure a better academic future for the development of South

African human capital. Shibeshi (2006) posits that solutions should be proffered to rural students' access to online learning. Hence, this study explored the lived realities of social justice in the education system, within the rural students' contexts in South Africa during the COVID-19 lockdown.

2   Theoretical Framework

This study adopts transformation theory as a lens to view lived experiences of rural students' access to online learning as the theory explains tenets of transformation in learning experiences. This implies the rationale for the theory is to understand rural students' lived experiences of online learning activities during the COVID-19 pandemic in South Africa. Transformation theory was initially propounded for adult learning (Mezirow, 1994). Accordingly,

> Transformation theory is intended to be a comprehensive, idealized, and universal model consisting of the generic structures, elements, and processes of adult learning. The theory's assumptions are constructivist, an orientation which holds that the way learners interpret and reinterpret their sense experience is, central to making meaning and hence learning. (Mezirow, 1994, p. 222).

The sudden transformation that ushered in online teaching and learning was a shift from traditional face-to-face teaching and learning, during the pandemic in the continuation of academic activities in South Africa. The students can only access learning experiences online through various learning technologies, as a transformation that influences their academic activities positively and negatively. The use of online-only for teaching and learning activities by the universities provides continuous learning experiences without borders or restrictions at students' convenience. However, learning experiences are determined, decided or controlled by students, as access to learning is determined at their own learning pace or speed, to suit their individual differences as a new transformation in the system.

According to Mezirow (1998), the application of Transformation theory to online learning activities in higher institutions provides in-depth knowledge of the impact of the transformative system in education. The theory promotes comprehensive and in-depth descriptions of students' capabilities to construct, reformulate and validate learning from online learning experiences (Cranton, 1994). Similarly, Mezirow (1998) avows that students' approach to problem-solving through learning experiences to understand, inteprete, describe or construct meanings to the problem via online engagements is transformational learning, which differs from the traditional approach of face-to-face learning. Students are made to reflect critically on learning experiences to arrive at useful transformative insights. Mezirow (1994) affirms that students can justify their new perspectives through the construction of new knowledge in their discourse.

Thus, the main focus of transformative learning is to empower the students for rational discourses (Evans & Nation, 1993). According to Evans and Nation (1993, p. 91), students' empowerment „involves three major ideas: the notion of choice, of control of one's life, and emancipation from ways of thinking which for the particular individual have limited both choice and control". Therefore, students get transformed by being empowered as mature and autonomous students. Furthermore, Mezirow (1994) describes transformative learning as the main focus of adult education that aims at making students critically think and make an autonomous contribution to discourses, rather than gullibly accepting others' views or opinions. The transformative learning process enhances students' critical reflections, validation, and actions on „beliefs, interpretations, values, feelings, and ways of thinking" (Mezirow, 1994, p. 26). With the vast emergence of the Fourth Industrial Revolution and the adoption of learning technologies into the education system, it becomes inevitable for students to embrace the new culture of learning. The acceptance of the modern approach to teaching and learning using learning technologies comes with diverse challenges in students' assumptions, beliefs, interpretations, judgments, and expectations (Coppola et al., 2002; Lee & Tsai, 2010).

Therefore, the adoption of a transformative learning framework into this study is to view students as adult learners who can understand and transform online learning structures for their critical reflection on the discourses and act on the learning experiences (Taylor, 1998). Extant literature on transformative online teaching is limited on students' reflective capacity for a deep knowledge base of online learning and „to make their discoveries public and peer-reviewed" (Kreber & Kanuka, 2006, p. 122). This study, therefore, explores the perceptions of South African rural university students of online teaching and learning during COVID-19 lockdown, and the use of transformation theory. The theory in this phenomenon is anchored on three fundamental premises, which see rural students as active adult learners, with their transformative learning based on critical reflection, and students' transformation via pedagogical inquiry with learning technologies. This explores evidence of the existence or lack of these transformative premises on the students' perceptions of online teaching and learning in the realities of social justice for rural students' competencies.

3   Online Teaching and Learning

Online learning refers to all online approaches of accessing learning experiences without traditional face-to-face contact with the facilitators, also known as distance learning (Adarkwah, 2020; Dube, 2020; Pete & Soko, 2020; UNESCO, 2020). Online learning can be hybrid or blended learning or purely online against traditional face-to-face. The purely online activities are learning activities that are accessed over the Internet, while hybrid or blended entails learning activities through traditional face-to-face classroom sessions and online activities, via the Internet or learning technologies (Kibuku, Ochieng & Wausi, 2020). The significance of online learning includes its effectiveness in students' access to learning at their conveniences and locations. It is also cost-effective for the universities and promotes a world-class education to students (Mhlanga & Moloi, 2020; Motala & Menon, 2020).

In most universities in developed countries, online learning has been in practice for many decades, as an effective approach not to only cut the rising cost of the education system but to also make learning accessible to students without borders or limitations (Dube, 2020). Thus, the adoption of online learning is an effective approach to address the rising cost of making learning experiences available to a large number of students from dispersed geographical locations as against traditional face-to-face classrooms (Pete & Soko, 2020; UNESCO, 2020; World Bank, 2020). Furthermore, the use of online learning saves the learning institutions with limited classroom sizes to reach out to their students without borders. The goal of online learning is to provide unlimited and unrestricted access to learning at the comfort zones of the students (Robinson & Rusznyak, 2020). Evidence from extant literature affirms that online learning enhances students' critical thinking and allows self-reflection on discourses, different from the face-to-face learning experiences, as it requires them to develop their diverse pedagogies (Owusu-Fordjour, Koomson & Hanson, 2020; UNESCO, 2020; Zimba, Khosa & Pillay, 2021). Online teaching allows teachers' traditional roles to be converted to the online environment, where teachers create roles for effective and meaningful learning experiences (Dube, 2020). These roles are to make online learning interactive between the students and the teachers through various approaches (Cristobal-Fransi, Monegut-Salla, Ferre-Rosella & Daries, 2020).

Teachers' role in the online teaching and learning environment is the instructors' role, which entails social, pedagogical, technical and managerial roles (Adarkwah, 2020). The teachers engage their students in an online discussion, facilitating learning experiences in the discussions, encouraging and promoting teamwork, organization of design for discussions, as well as the technological environment for the students (Mhlanga & Moloi, 2020). Similarly, due to the global adoption of learning technologies in the education system, online learning has significantly changed the teaching responsibilities of teachers, especially in the COVID-19 pandemic. UNESCO (2020) categorises teachers' role in online teaching and learning into three: designing and organizing instructional materials,

facilitating the learning discourses, and directing the instructions. Teachers' pedagogical skills are exhibited in the „design, facilitation, and direct instruction of cognitive and social processes to realize personally meaningful and educationally worthwhile learning outcomes" (Zimba et al, 2021, p. 5).

Teachers' pedagogical skills are known to be their teaching presence by some scholars, and they significantly influence students' perceptions of learning, satisfaction, and sense of community (Hedding, Greve, Breetzke, Nel & Vuuren, 2020). The teaching presence refers to how teachers can create communities of inquiry for students with social and cognitive presence, where all the students are made to participate in the online learning, with teachers assigning responsibilities to the students. Ilonga, Ashipala & Tomas (2020) affirm that teachers' pedagogical responsibilities are critical to online learning environments (cognitive, affective, and managerial). It is their cognitive roles that enable them to engage their students in learning activities that show in-depth their cognitive level concerning how they store information, critical thinking, and mental processes. Their affective role enables them to design various tools for students to express different emotions and how to develop diverse intimate relationships within themselves and between the students and the teachers. Finally, their managerial role structures and provides teachers with various tools to monitor their students for the necessary attention.

Thus, a teacher's roles in providing online learning to the students can be situational such as a researcher, process facilitator, content facilitator, advisor/counsellor, assessor, designer, technologist, manager and administrator. Teachers can adopt these roles in different situations during students' online learning.

4   Purpose of the Study

This study aims to explore rural students' perception of online learning during the COVID-19 pandemic in South Africa. The study will also proffer how rural students can be supported to effectively benefit from online learning during the pandemic.

5   Methodology

This study adopted a qualitative approach within the interpretivism paradigm. A semi-structured interview was used to generate data from the participants. The researcher requested biographic registration data for the 2020 academic registration of registered students in the Faculty of Education and purposive sampling was adopted to select 20 students from Mtubamtuba, Esikhawini, Nongoma and Port Dunford rural settlements in KwaZulu-Natal province. These students were selected to share their lived experiences in a semi-structured telephonic interview (Creswell, 2014). All the participants were briefed about the study and were made to understand their participation was voluntary and could

be withdrawn at any stage. An informed consent letter was communicated via e-mails. All other ethical considerations were strictly adhered to.

All the telephonic interviews were audio-recorded with permission from the participants. The data analysis for the study followed a systemic procedure with the transcription of audio-recorded interviews, and the transcripts were sent to the participants to validate their information. Transcribed data were coded, and themes were generated for the presentation and discussion of findings (Braun & Clarke, 2006). Pseudonyms are adopted in the presentation of excerpts from the participants for the confidentiality of the participants (Kumar, 2014). Participants from Mtubamtuba, (M1, M2, M3, M4, M5); Esikhawini, (E1, E2, E3, E4, E5); Nongoma, (N1, N2, N3, N4, N5); Port Dunford, (PD1, PD2, PD3, PD4, PD5).

6 Presentation of Findings

Based on the systemic data analysis of the collected data from the purposively selected participants for this study, the following generated findings are presented.

6.1 *The Use of Online Learning as an Alternative During the COVID-19 Pandemic*

The inability of the educational institutions to use face-to-face approaches for teaching and online led to the introduction of online learning during the lockdown. Participants acknowledged the shift to online learning by the education system.

> We were informed that our learning activities will now be online due to Corona. Though it is to continue our studies but it is going to be difficult (PD2).

The participants established transformation from conventional face-to-face to online learning happened suddenly and fast. A participant had this to say:

> The university indeed communicated to us that due to lockdown and Corona cases in South Africa, all face-to-face activities or gatherings have been suspended. So, our classes will now be online to continue teaching and learning (E4).

Participant N1 lamented on how he can cope with the introduction of full online:

> Eish! The adoption of online for full teaching and learning is a concern to me when I heard that we cannot continue to be on campus for learning. I stay in a rural area where it is difficult to get a network for communication most times (N3).

The shift from traditional classrooms to online platforms was adequately announced. This was asserted by this participant:

> I heard the announcement that since we cannot be on campus again for teaching and learning activities, and that online classes are to be used to continue the academic year, I knew there was nothing we can do to change this despite the challenges that some of us in rural areas may face (E2).

Most of the participants admitted that the use of online learning was a sudden paradigm shift that transformed the higher education space in South Africa, and this transformation did not provide rural students with adequate support.

6.2   *The Unavailability of Network Access/Poor Network in Rural Areas*

The participants highlighted poor network as one of the main challenges to their access to online teaching and learning during the pandemic. The pandemic has created an unusual lifestyle which includes online learning that disadvantaged rural students due to poor network service that does not allow the students to benefit from learning experiences. The participants expressed poor network as a front for the digital divide:

> As you are aware, our university is a rural university, and most of the students are from various KZN rural communities. Adoption of online teaching and learning as a full approach is challenging to us. We have missed so many assessments which are online because we have a poor network from the network service providers (E3).

Network connectivity is one of the rural areas' challenges in communication. A participant indicated that network problems in his community influence his communication life, using cell phones. He said:

> As a student in the deepest rural community of Kwa-Nongoma, I am really worried about my education now, because I know the network is very bad here. Sometimes I cannot receive calls for hours or even a whole day. Now, the same network affects data for internet browsing. I have been struggling with that! (N1).

Students from various rural areas experience problems with service networks in accessing learning materials online. Another participant buttressed N1, with this:

> Eish! We are facing a serious challenge, as much as we want to participate in all activities, we are sometimes left behind due to our inability to access this thing of online learning. I stay at the outskirt of Mtuba, where networks are terribly bad in our location. It is only the students who live in towns that enjoy good networks (M5).

While another participant PD4 expressed his frustration with online learning due to poor network services as he explained this:

> I am frustrated about this online teaching and learning, and I am praying that this year will not be a wasted year. Because if you can't cope with the learning and assessment that are online, you will end up failing. That will be a waste! The use of online learning during this COVID-19 as the only option is a problem. It is a challenge for us that are from rural areas where infrastructures are problems already. We have limited or poor network to even make/receive calls not to talk of using the internet. Since we started this online learning, we have not been able to enjoy or learn like others who enjoy good networks (PD4).

Another participant highlighted that poor network remained his worry because his rural area had issues:

> Online learning is not a new thing to us, we have been using it along with face-to-face teaching. At the university, we are provided with computer labs with good internet. The university provides WIFI that we use for Smartphones and laptops at any time. But now, we are struggling with poor networks in our rural locations (N3).

As illustrated from the above findings, the participants identified poor network services as what had been affecting their cellphone communication in their rural areas but the inclusion of data for online learning limited their access to the use of online learning.

6.3 *Lack of Laptops or Smartphones to Access Online Learning*

Findings from the participants indicated their lack of common learning technologies such as laptops and smartphones to access online learning activities. Most of these rural students are from poor economic backgrounds, which limits them from buying learning technologies like laptops or good smartphones.

> As much as we are willing to learn and accept online learning, we cannot afford to buy laptops or smartphones to access online learning. We are from poor homes that cannot afford to buy these things. And the university has not provided us with laptops. We seriously do not know what will become of this academic year because of this COVID-19 (N2).

Another participant added:

> It is the lack of laptops that is limiting us from online learning. Our phones cannot do much work like that of laptops, in the university we use computers in the computer labs to assist ourselves but now, we cannot even access the university. So, how do we access learning? The first-year students are greatly affected because we have never owned laptops before, we were expected to be supplied in the university before the pandemic. So, many of us are cut off from online learning now (PD1).

The issue of the first year rural students who were meant to be given laptops was also explained further:

> Before I got the offer from the university, I was told that the university will provide us with laptops as first-year students. But this never happened before the COVID-19 pandemic lockdown. And now, online learning is the news, how do we feature in these now? I cannot afford to buy a laptop and even my phone is a small phone that cannot access too much from the internet (E5).

While another participant also explained his expectation to be provided with a laptop :

> I got information from the university that online learning will be adopted to continue teaching and learning. I was expecting to hear that laptops and data will be made available to us. The university knows that most of us are from the interior rural parts of South Africa. Without the laptops, we cannot access online meaningfully (M2).

Similar fear was expressed by another participant, who failed to get a laptop before the pandemic:

> At home, there is no single member of my family that has a laptop. Yet the school sent a message of continuing teaching and learning online. I am seriously confused and I do not know where or whom I can ask for a laptop. The truth is that online learning will be difficult for us that are in rural areas. I know I am not the only one in this situation (E3).

The socio-economic backgrounds of rural students did not allow students to purchase laptops or good smartphones that could be used to access online learning materials.

6.4 *Closure of or Absence of Internet Cafés in Rural Areas.*

Findings from the participants indicated that during the lockdown, some internet cafés in the rural communities were closed, while some revealed that the absence of internet café has worsened the crisis of inability to access online learning for them.

> We have two internet cafés in my rural area, but with lockdown, they were forced to close. The hope of visiting these places to access online became dashed for me. With the network issues, we rely on these caféto do all online activities (PD2).

The same view was expressed by another participant, who admitted that the closure affected her:

> Most of us who are students and even learners in high schools rely on the internet cafés for our online needs, but with the lockdown safety regulations, the only internet café was closed. This became a nightmare to our access to online learning (M1).

Another participant revealed that the absence of an internet café in his location worsened his situation.

> There is no internet café in my immediate location. If I need one, I have to take a taxi to the closest city. This cannot be convenient for me every day or every time. I don't have a laptop, and I am thinking of deregistration to save myself from this problem (E4).

While another participant admitted that an internet café is not ideal for him because he spent a lot there:

> Using an internet café is not a good idea at all. A few times I have used it before lockdown for my assignments, I spent so much. So, it is expensive and sometimes overcrowded with high school learners (N5).

Another explanation to support the high cost of using internet cafés was given as:

> Even though it is expensive to use an internet café in my community, the poor network connectivity is also a problem for the only one internet café in my area. And for online learning, it means I will spend more. Do I have the money for that? (N1).

Due to the socio-economic backgrounds of rural students that did not allow them to own learning technologies, they always patronised local internet cafés in their communities. However, with the lockdown, the cafés were not operating and this created problems for them as they could not have access to online learning.

6.5   *Lack of Computer Skills for Rural Students*

Some participants revealed that most rural students are unable to access online learning materials because they lack the necessary skills. The participants agreed that several learning apps exist in online teaching and learning but they were unable to access or explore the online learning apps.

> As a first-year student, I do not know how to use a computer. Our rural high school did not have that for learners. I started learning how to use a computer when I started university, we had not even spent two weeks when the lockdown started. So, I cannot use the computer effectively for online learning at all (PD3).

Another participant agreed that most of them from rural schools lacked computer skills:

> In my high school days, we were never exposed to computers. And so we cannot operate computers. I was relying on the university to train us for online learning. So, we are helpless with online learning now (E2).

While another participant believed that literacy in the computer is critical to online learning:

> It is critical that you must be computer literate for you to benefit effectively from the module contents through online learning. Hence, our competencies as rural students cannot enhance that. Our rural high schools did not prepare us for online learning innovations (M1).

The rural students were products of rural high schools, where the computer had never been used before. Hence, these rural students lacked the necessary computer knowledge, with which they could access or maximise online learning.

6.6   *Expensive Internet Data*

The participants identified the high cost of data subscriptions as a common challenge to rural students who possess smartphones or laptops that can be used for online learning activities. This they expressed:

> I have a smartphone I use for WhatsApp and other social media. Despite the poor network, my data deplete quickly and it's really expensive. So, if I need to use that for active online learning activities, I will spend more (PD5).

Participants acknowledged that the internet is expensive to use for online learning:

> A subscription for a data bundle is too expensive for online learning activities if you want to be regular with the activities. Some of our parents or family members who can support us have lost their

jobs due to the same COVID-19 lockdown. So, we don't have the means. Some of us do not have NSFAS or other bursaries to support our education (N6).

Participant E1 concurred with the expensive internet data in his expression:

Honestly, this education is important to our life. As much as we want to be part of online teaching but data is very expensive to us who live in rural areas (E1).

Another participant explained that he could not regularly and adequately use online due to high cost:

I live with my poor grandmother who is on a grant. The grant is little to cater for us. I cannot ask the poor woman to give me from that to buy data, which is expensive and I need to be buying from time to time. So, I just couldn't engage in online learning as expected (M1).

Internet connectivity is expensive in South Africa generally. The case was worse with the rural students whose economic backgrounds could not accommodate the expensive data cost.

7   Discussion of Findings

The COVID-19 pandemic placed online learning as an alternative option to face-to-face teaching and learning in various learning institutions. Thus, using online fully to deliver learning experiences becomes critical to the education system across the world (Cristobal-Fransi, Montegut-Salla, Ferre-Rosella & Daries, 2020; Owusu-Fordjour, Koomson & Hanson, 2020; UNESCO, 2020; World Bank, 2020). Although, Dube (2020), posits that online learning is not a new phenomenon in some selected South African higher institutions before the pandemic, as some students have been exposed to blended learning. However, online learning became a new approach to all students during the pandemic, without provision for leverage to all students to be included. Zimba, Khosa and Pillay (2021) aver that the adoption of online learning is to continue teaching and learning, despite lockdown/social distancing that prevent the large gathering, in controlling the spread of COVID-19. This is a transformation in the education system (Mezirow, 1994), as most learning institutions swiftly moved their teaching and learning activities online. Though, online learning is beneficial to students, as it makes learning experiences available at the comfort of students' diverse locations. This recent transformation in education is driven by three constructs according to Mezirow (1998), namely the centrality of experience, critical reflection, and rational discourse which the students should encounter in their engagement with online learning. Taylor (1998) asserts that students are provided with various approaches to construct or deconstruct learning experiences through critical engagement in their self-reflection on their prior experiences to reflect a transformation in education. In a longitudinal study conducted in Kenya, Kibuku, Ochieng and Wausi (2020) affirm that despite the benefits of accessing learning experiences online at their

convenience/locations, several rural-based students are cut off. Mezirow (1994) concurs that transformation is accompanied by positive and negative changes as it affects every society. This implies that not all transformative changes can positively transform the education system with an even significant impact.

Online learning is significantly made accessible through internet connectivity. Hence, students need good and stable internet to access learning effectively (World Bank, 2020). This implies that students can only become competent and knowledgeable through regular access to online learning activities. Adarkwah (2020) argues that the inability of rural students to have equal access to education, via online learning deprives them of their right to education. The deprivation is made prominent in various rural communities, where students lack regular internet connectivity to access online learning activities (Mhlanga & Moloi, 2020). Seemingly, Du Preez and Le Grange (2020) aver that online learning during COVID-19 has increased the digital divide against rural students who are limited by various internet network problems, which promotes social injustice in education. Social justice in education is to provide education to all rural and urban students whether face-to-face or online learning. Mezirow (1994) asserts that transformation theory advocates for absolute inclusion of all concerned to make or mar transformation in education. Motala and Menon (2020) avow that limited technological resources in rural areas remain a serious threat to the use of learning technologies, especially during the COVID-19 pandemic in South Africa. Many rural areas do not have technological infrastructures that can ensure good internet networks for learning activities (Kibuku, Ochieng & Wausi, 2020).

This explains why online learning during the COVID-19 pandemic lockdown remains difficult for rural students in different rural parts of South Africa. According to the World Bank (2020), the Fourth Industrial Revolution enhances curriculum delivery in the education system, providing diverse effective online learning opportunities to students, without any student being disadvantaged by locations or resources. Thus, students regardless of their locations should be made to access regular learning experiences regardless of their social status or geographical location (Robinson & Rusznyak, 2020). However, Dube (2020) affirms that many rural students in various South African rural locations are proportionately disadvantaged from accessing online learning due to the lack of resources. Similarly, Ilonga, Ashipala and Tomas (2020) aver that a wide digital divide exists between students from rich and poor families, urban and rural-based, high-performing and low-performing, highly educated families and less educated families. Transforming from face-to-face teaching and learning to fully online learning is a notable transformation that has globally impacted the education system (Mezirow, 1994). Students spend more time with various learning technologies to access in-depth knowledge, skills and ideas that transform their learning experiences (Quyen & Khairani, 2017; David, Pellini, Jordan, & Phillips, 2020).

The adoption of online learning during the COVID-19 pandemic is to continue teaching and learning while keeping people safe at home (UNESCO, 2020). However, its adoption is a critical plight for rural students (Owus-Fordjour, Koomson & Hanson, 2020), whose communities lack internet cafés or the closure of the existing few ones limit students to online learning. Dube (2020) recommends that the Department of Basic Education and other stakeholders should provide more community library centres with computer and internet facilities, for rural students' access to online learning free of charge. Mhlanga and Moloi (2020) further agree that rural students' use of these community libraries will enhance learning in rural areas. Rural students lack adequate computer skills in online learning, as the World Bank (2020) posits that learning is not limited to traditional face-to-face only but the integration of blended learning is an effective approach during pandemics such as the COVID-19 era. However, the World Bank (2020) identifies that most students from developing countries especially those in the rural suburbs lack the necessary computer knowledge or skills to access or maximize online instructional approaches and tools. This is why Zimba et al. (2021) opine that most rural students are the worst hit by the COVID-19 pandemic. Lack of computer skills is from students' high schools where a lack of computer facilities to train the learners for diverse online learning exists (Motala & Menon, 2020; World Bank, 2020). Ajani and Gamede (2020) posit that computer training is necessary for rural students to enhance their knowledge and skills to use learning technologies. Mezirow's (1994) transformation theory suggests that the integration of computers or ICT into teaching and learning is a welcome change in curriculum delivery and exposes students to worldwide views, and critical thinking to construct learning experiences from diverse perspectives. Adarkwah (2020) believes that the use of computer skills is enhanced by the technical know-how of the students. Du Preez and Le Grange (2020) affirm that the absence of computer resources in rural high schools is a social injustice to rural learners who are deprived of computer knowledge and skills.

Dube (2020) asserts that the social status of parents can enhance or limit students' access to quality education. This implies that students from working-class families can procure necessary learning materials or resources while students from unemployed families can only afford some learning materials with the assistance of education grants in South Africa. The high cost of data is a barrier to equal access to education for these rural students. Zimba et al. (2021) argue that despite the huge benefits of transformative ICT in the education system, it has also created a wide digital divide among students with different socio-economic backgrounds in most developing countries. Adarkwah (2020) further posits that the high cost of internet data impedes the attainment of equal access to education in African countries where blended learning is being promoted. UNESCO (2020) argues for the provision of all necessary resources to promote online learning for all students during the COVID-19 pandemic. Seemingly, the World Bank (2020) admonishes that the cost of learning resources should be subsidized by the governments and Non-Governmental Organisations for rural students in developing countries, so as not

to deprive rural students of online learning during the pandemic. Mhlanga and Moloi (2020) further opine that many rural students may be deprived of access to regular and adequate learning opportunities if they lack the necessary resources and support from the government or stakeholders. This implies why necessary transformation may not reflect in these rural students if social justice is not ensured across higher education institutions in South Africa. Similarly, Ilonga, Ashipala and Tomas (2020) submit that the high cost of data subscription is worrisome to rural students because most rural students, according to Robinson and Rusznyak (2020) are from poor economic backgrounds that limit their access to regular internet access, if not supported. In a related study conducted in Ghana, Owusu et al. (2020) assert that access to online learning by rural-based students during the pandemic era is severed due to the high cost of internet subscriptions. Dube (2020) reports that the loss of jobs due to the COVID-19 pandemic has thrown many rural-based families into harder economic situations that make it difficult for the parents or guardians to afford expensive data at regular intervals. Conversely, Kibuku et al (2020) conclude that the high cost of data subscription has impeded rural students' access to online learning. Mag, Sinfield and Burns (2017) affirm that social justice should be applied to drive inclusive education for all students in different locations, ensuring that every student has the constitutional right to access education.

The 'new normal' of online teaching and learning brought a transformative pedagogy into the higher education space in South Africa. The Mezirow's transformative theory highlighted the adoption of various learning technologies into teaching and learning as transformative, which significantly pushed the rural students into active learners, who are responsible for what, how and why they need to learn as adult learners. However, the adoption of various learning technologies by these rural students to access learning or to make a pedagogical inquiry faced diverse technical challenges at the initial conception, but the students continued to struggle with their ways to participate in online learning within the transformed higher education space.

8   Recommendations

Adequate access to online learning is critical to curriculum delivery during this pandemic crisis, to salvage and continue teaching and learning despite social restrictions. The study, therefore, recommends the following:

- The universities should endeavour to support rural students with the provision of personal laptops and monthly data subscriptions. These can be done through partnerships with multinational companies, NGOs and other stakeholders; either through lease or credit facilities.

- NGOs, religious bodies, companies and appropriate government organisations may be encouraged to donate or finance personal laptops and data subscriptions for the rural students.

- ICT training can be provided by the Department of Basic Education through the existing local high schools in the rural communities, on a small scale number to the rural students, in collaboration with ICT companies. The companies can provide learning resources that can be used as 'boot training' for the rural students. The training will enhance rural students' abilities to explore online learning resources. The training will facilitate how rural students can maximize the use of different smartphones, tablets, or normal general phones to access online learning.

These measures will ensure that social justice is promoted in the education system. Thus, closing the digital divide gap between the city and rural students during the pandemic era. Conversely, ensuring that rural students are not excluded from online learning in curriculum delivery, gives them a sense of belonging.

9   Limitation of the study

The study aimed at adding to voices on social justice for rural students in South Africa. However, the study was limited to only twenty purposively selected students from rural communities in the rural communities of North of the KwaZulu-Natal province. The study adopted semi-structured interviews with the participants to generate data.

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