

First-year Students' Best Online Learning Experiences: The Voices of Geography Students

Arorisoe Sibanda^{1*}, Sadhana Manik²

¹ Department of Education, Environmental Learning Research Centre, Rhodes University, Grahamstown, South Africa

² Department of Geography Department of Geography, University of Kwa-Zulu Natal, Durban, South Africa

*Corresponding Author: sibandaarorisoe@gmail.com

Article History:

Received 2024-11-29

Accepted 2025-04-16

Keywords:

online learning

connectivism

students' experiences

ABSTRACT

The experiences of students in first-year university modules continue to be an area of global interest. It is well known that COVID-19 triggered a sudden pedagogical shift to online learning, and at present, teaching and learning in many institutions feature a blend of online and face-to-face instruction. The grand narrative in higher education literature during the COVID-19 was students' experiences with online learning challenges. This paper departs from this narrative to focus on students' best online experiences at the University of KwaZulu-Natal, one of the poorest provinces in South Africa. The study was a mixed-method instrumental case study in a predominantly 'face-to-face' institution (before the pandemic occurred). Our theoretical architecture employed Connectivism (Siemens 2005) learning theory closely aligned with collaborative learning. We draw on the data from one campus, the School of Education, in a large class where 667 first year Geography students were asked to complete an online questionnaire (a high response rate of 35% was achieved). We purposively selected this sample as we were both lecturing the module, and an in-depth exploration of our students' experiences provides valuable insights that contribute to the advancement of our scholarship of teaching and learning. Students' best online teaching and learning experiences included their supportive lecturers, enhanced interactions and engagement with the lecturer, easy access to teaching and learning materials uploaded to the 'learn' platform and access to technological advancements and training, which led to improved online skills. There is the potential to provide the impetus for fashioning a more nuanced hybrid teaching and learning environment for first-year first generation students from low socio-economic backgrounds who are in a large class setting. We recommend, for the future, a greater balance in the curriculum between multiple modes of instruction to support flexible learning, given the widening of access into higher education.

INTRODUCTION

At the height of the COVID-19 pandemic and currently, there are institutional concerns both locally and internationally about incoming first year students given the widening of access into higher education, greater numbers of first-generation poor students and the critical link between students' initial experiences and academic success. It is well known that the pandemic triggered a sudden pedagogical shift to online teaching and learning, and at present, teaching and learning in many institutions feature a blend of online and face-to-face instruction (Sharma & Shree 2023). The experiences of students, perceived to be a 'vulnerable' group in their first year of study at university was an area of global interest pre-COVID-19 for at least two decades (Perry & Allard 2003; Hausmann et al. 2007; Tinto 2012; Espinoza

et al. 2018, 175; Manik & Ramrathan 2018; Van Breda 2018) given the widening of physical access into higher education, greater numbers of first-generation students in higher education and neoliberal concerns about throughput, completion, graduation and drop-out rates. Students in their first year at university still continue to dominate scholarly interest locally (Faloye & Ajayi 2022; Nyar 2021) and internationally (Glass 2023; Sharma & Shree 2023).

During the COVID-19 pandemic, these concerns grew substantially, especially the critical link between students' experiences and their academic success against the backdrop of the pandemic (Donitsa-Schmidt & Ramot 2020; Usher & Barak 2020; Singh & Thurman 2019; Singh et al. 2020; Sharma & Shree, 2023; Tang et al. 2020). The pandemic, with social distancing as a priority, triggered a pedagogical migration to fully-fledged online teaching and learning, as face-to-face instruction had to be abandoned. Nyar (2021, 77) called it a 'double transition' for students to navigate their first year and impact of the pandemic. The grand narrative in higher education literature during the COVID-19 pandemic was that of students' experiences of their challenges with online learning (Almahasees et al. 2021; Almaiah 2020; Al-Salman & Haider 2021; Bozkurt & Sharma 2020; Ribeiro 2020). Whilst there are several studies on students' experiences in their first-year modules, most of these experiences have been based on socio-economic and academic challenges faced by learners (Boelens et al. 2017; Dlamini & Naidoo 2022; Ribeiro 2020; Manik 2014; Tinto 2012) rather than their positive learning experiences.

Meng et al. (2024) undertaking a global literature review of online learning, notes that the literature from the students' lens on their experiences of online learning during the pandemic, is sparse. This paper explores students' best experiences of online teaching and learning during the COVID-19 pandemic given that there continues to be a component of online teaching and learning evident in 'face to face' public institutions post the pandemic. Thus, this paper addresses a gap in the literature related to university students' best online experiences in first-year large class modules. Large classes have become the norm in public higher education institutions (HEIs) in post-apartheid South Africa as universities sought to transform by widening access to accommodate previously disadvantaged students (Badat 2014). In this paper, we purposefully depart from a negative narrative of challenges which has dominated the literature on online learning (Garcia- Morales 2021) during the pandemic, to focus on students' best online experiences as we believe that positive online teaching and learning experiences can be developed further in public HEIs, like the case study institution in South Africa. We present arguments to initiate this discussion and to re-direct research attention towards positive student experiences for program and institutional development. We argue that students' positive online experiences can be harnessed to strengthen HEIs' student support programmes and better contour curriculum design, post the pandemic.

Context of the study

School education for Africans during apartheid was of a poor quality when compared to other South African racial groups where there was greater government investment per learner than for the African learner (Badat 2014; Faloyi & Ajayi 2022; Manik 2017). Thus, the re-construction of higher education was critical to engineer a democratic society in SA given that the majority Black (African, Coloured and Indian) population had been disadvantaged during apartheid when compared to Whites (pre 1994).

Transformation in higher education in post apartheid South Africa is driven by the White Paper on Higher Education (1997) which has an embedded social justice prerogative to redress the past racial inequalities. The White Paper on Higher education (1997) set the tone with the widening of access into higher education for the Black majority population who were prevented from participating in any public higher education institution of their choice during the National Party's apartheid rule (Badat 2014; Faloyi & Ajayi 2022). The widening of physical access into higher education is a social justice thrust for the

previously disadvantaged Black population comprising an African majority. More than twenty years into democracy, the racial identity of the majority student population has now altered to being largely African. The Council for Higher Education (CHE 2022) revealed that there was phenomenal growth by almost 12% in undergraduate student enrolment between 2014 and 2019 at public face to face HEIs. There was a drop in enrolment during COVID-19 and after the pandemic, enrolment began to increase again. The CHE (2022) revealed that 45% of undergraduate students who enrolled in 2014, dropped out, with 55% graduating in 5 years after commencement.

The higher education discourse on First Generation Students (FGS) who are African and require support, began to recently dominate academic circles. For the South African context, students are deemed to be first generation when their parents have not attended any post secondary/higher education institution and it is underpinned by a deficit belief that they are less prepared for university life. Ajani (2024) highlights that equity of outcomes is a dilemma as 35% of White students graduate after 3 years of study when compared to 23% of African students. Equity of outcomes forms part of this critical discourse on FGS. Thus, there have been concerns about the success of these first-generation students. The discourse on the articulation gap between school and university gives rise to the perception of underprepared students (Dhunpath & Vithal 2012) and this is evident with the majority of students at the case study university being from quintile 1-3 schools (disadvantaged with limited access to digital tools) who are now filling lecture theatres. Equally now, HEIs in South Africa have realised that they are underprepared for this majority student population where challenges abound of an academic and socio-economic nature. The discourse on epistemological access and now epistemic access have become mainstreamed in the corridors of public higher education in SA (CHE 2022; Cross 2018; Higher Education Monitor 16 2024; Morrow 1994, Themane & Mabasa 2022). Epistemological access involves moving beyond physical access to universities and it incorporates student support, forms of guidance and collaboration (Morrow 1994). Epistemic access extrapolates from epistemological access to place emphasis on students actively participating to overcome learning barriers (Cross 2018). It is envisaged that with epistemological and epistemic access, students will attain the necessary disciplinary knowledge, academic skills and cultural capital to achieve success and graduate timeously.

The University of KwaZulu-Natal, located in one of the poorest provinces of South Africa, is a public higher education institution comprising five campuses and offering a contact (face to face) model of teaching and learning. At the University of KwaZulu-Natal, the COVID-19 pandemic presented an additional challenge for students in their first year as the majority were and still are first-generation students who had to adjust to the demands of academia whilst physically being in their homes (peri urban and rural) and not at the residences of the urban based campuses. This academic adjustment was in addition to the devastating health impacts of the pandemic on themselves and their families (Dlamini & Naidoo 2022; Hew et al. 2020; Mhandu et al. 2021; Manik & Tarisayi 2022). Whilst UKZN is a traditional face-to-face teaching and learning institution, the pandemic forced a migration to full-blown online teaching and learning for a three-year period ending in December 2022. There has since been modes of teaching and learning using synchronous and asynchronous options weaved into program design, however only 30% of module instruction can be online whilst 70% has to be face to face.

This paper hones on student data of a first-year geography module from one campus as both authors are from the department of Geography, so convenience played a role but neither of us were teaching the module which was the unit of analysis for this paper. Our intention was to tap into students' best experiences in the discipline to be able to contribute to future planning and preparation on curriculum design and student support in Geography, in addition to contributing to an institutional study by the University Teaching and Learning office focusing on student success in first year modules.

The unanticipated arrival of COVID-19 and UKZN responses

Online teaching and learning has become a buzz phenomenon since the outbreak of COVID-19. The COVID-19 pandemic has caused detrimental effects on education both globally and locally (Drane et al. 2020; Godber & Atkins 2021; Onyema 2022). COVID-19 was declared a global pandemic by the World Health Organization (WHO) at the beginning of 2020 (Onyema 2022). There were national lockdowns which followed that forced universities and schools to close to contain the spread of the virus and ensure social distancing. The Economic Times (2020) reported that the COVID-19 pandemic created the largest global disruption of education in history. In an effort to stop the COVID-19 pandemic, the South African government imposed a nationwide lockdown in March 2020. All education facilities were immediately closed. Nyar (2021, 77) explains that South African higher education was 'caught off-guard'. With regards to the case study institution, UKZN, Vice Chancellor Professor Poku declared on Sunday, March 22, 2020 that the university would immediately go into lockdown and that all students had to leave their residences and exit the campus to prevent the spread of the pandemic. Face to face instruction was halted.

In 2020, South African universities chose to immediately switch to online teaching and learning phrased as Emergency Remote Teaching (ERT). Nayar (2021, 07-08) explained that universities in South Africa had "to hastily engage in relatively new and largely untested online teaching and learning systems... adversely impacting the number of students, and staff who do not have access to the requisite technologies and connectivity, or even electricity in the case of those staff and students from poor or low-income backgrounds". Whitelaw et al. (2022) reviewed the literature on learning in higher education during COVID-19 and reported on online learning and its effects on undergraduate students' academic performance at a South African university. We note that public institutions across South Africa did respond quickly by commencing with online lecturer and student training and support, and the case study institution, the University of KwaZulu-Natal, was no different (Manik & Tarisayi 2022). Thus, online teaching and learning were the university's intervention strategy for the continuation of academic calendar and the prevention of student dropout from higher education study programmes. Webinars and peer support networks were introduced to assist lecturers and students who lacked a basic understanding of online learning (Manik & Tarisayi 2022).

Despite the scholarship on the academic difficulties with online learning (Faloyi & Ajayi 2022; Saleem et al 2024), with repercussions for university funding and ranking based on throughput and dropout rates Liu (2005) there is a distinct gap on students' positive online experiences which ensured their retention and continuation of the academic year. This research explores the best online learning experiences through the prism of students' learning contributing to filling this gap.

Accessing students' voices are valuable during and post the pandemic and Davis et al (2024) state that students' articulations about their learning experiences can benefit all stakeholders be it the students, lecturers and HEIs. When students engage in sharing their experiences, it is beneficial to everyone contributing to what Cureton (2016) calls students' 'psychological contract' with the university. In a paper on effective leadership for undergraduate experiences, Felten et al (2016) outline 6 principles, of which two have critical relevance for this study, namely collaborative practices and encouraging a culture of decision-making where students and their online learning are prioritized. Thus, students were accessed for their expectations and experiences during COVID-19 as part of this large class so that the Geography discipline could use the findings to better understand students' online experiences and to refine module offerings with greater student support for first generation students so that epistemological access to university life is facilitated. The institution, despite being a face to face institution, always had a component of online learning.

In addition, accessing first generation students' voices are important for their success at university. From an institutional lens, neoliberal values of throughput and drop-out rates are driving government funding and ranking hence understanding and responding to first generation students' experiences can positively influence their success and institutional standing. Cureton (2016) states "if a student feels that their expectations of higher education are not being met, this can generate violations of their psychological contract which is a set of powerful unspoken rules of engagement with the university." He avers that there could be psychological damages to students mentally if their expectations are not met by their positive experiences and the authors also believed that if staff had specific expectations of their students and these were not reached, there would be repercussions for students and the university.

Theoretical framework

Connectivism Learning Theory (CLT), which is closely aligned to collaborative learning, provided a suitable framework. It has been reported that Connectivism is a learning theory for the digital age and it is relevant to online learning (WGU May 27 2021). Connectivism is linked to collaborative learning as both theories resonate on the foundation of building strong relationships between people for learning. Connectivism emphasizes the role of social networks, digital tools, and the learner's ability to navigate and make connections in the online learning environment (Downes 2010; Siemens 2005). The CLT theory was introduced as a coherent theory by Siemens in 2004 and it acknowledges the value of technology in education. Connectivism learning theory emphasizes the importance of networks and connections in the learning process. It is particularly relevant to online learning during the pandemic which necessitated a widespread shift to remote and online education and it still retains relevance for institutions that desire to build their online curricula within the framing of the fourth industrial revolution. Connectivism recognizes that learning is not limited to individual knowledge acquisition, but it is enhanced through interactions and connections with others and technology. There is also a deep reliance on online and digital tools, which can be harnessed to contribute to the provision of deep learning. The value of connectivism is extensive; informing instructional strategies, promoting collaboration and engagement, and enhancing learner autonomy in online learning environment (Downes 2022; Garcia 2018). The attribute of learner autonomy has particular relevance for first year first generation students in developing learner independence in higher education, a common challenge for students and one that was exacerbated by the circumstances of the pandemic (Pham & Nguyen 2020).

METHOD

The study was undertaken in 2022 during the first semester at one of UKZN's campuses. An instrumental case study design was selected as the approach since it is "useful for exploring and understanding the process and dynamics of change" (Simons 2009, 14). The research study was located within the interpretivist paradigm. This relates to our research purpose to explore students' best online experiences during the pandemic when universities transitioned to online teaching and learning. Also, a case study seeks to gain "an intensive, holistic description and analysis of a single phenomenon" (Stake 1995, 27) and, in this study, it was first year predominantly first-generation Geography Education students' best experiences. The sample was purposively selected, as we were both lecturers for the module on this particular campus. Focusing on a single campus enabled a more nuanced and contextually grounded exploration of students' learning experiences within a shared institutional and pedagogical setting. This focused approach enhances the depth, relevance, and credibility of the findings, which significantly contribute to our scholarship of teaching and learning. However, we acknowledge that the single-campus focus may limit the generalisability of the findings to broader institutional contexts. The study was part of

a bigger university ASAF (Access and Success Forum) project, which falls within the Teaching and Learning office. It was reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (HSSREC), and the protocol reference number for this study is HSSREC/00003054/2021. Thus, ethical considerations were carefully followed throughout this study, ensuring that research participants were protected from potential harm. The aim of the larger research study, from which this paper draws its data, was on staff and first-year students' expectations and experiences. The study was mixed methods by design, and the tools for data generation were questionnaires in Google form format that were uploaded on the students' online platform, LEARN 2022. Thus, students responded online to a link shared with the class on their learning platform. We received 234 completed questionnaires out of a class of 667 expected questionnaires, hence the response rate was 35% which is considered satisfactory. Qualitative thematic analysis (Braun & Clark, 2022) was used to analyze the data by generating themes from the responses of learners. The process commenced by reading and re-reading students' responses to each of the questions, what Braun and Clark (2022, 229) call 'data engagement'. This led to coding that informed the creation of themes. We were guided by Braun and Clark's (2022, 229) assertion that 'the point of coding is to find evidence for themes.' The themes are therefore considered to be a second level of data analysis (Braun & Clark, 2022: 229).

FINDINGS AND DISCUSSION

Findings

Extrapolating from Nyar's (2021) assertion of students experiencing a 'double transition' (first year and COVID-19), we can contend that this paper leans on students' experiencing a 'triple transition' (first generation, first year and the COVID-19 pandemic) at the time of this study. There were a few experiences identified by students as being collectively significant and constituting their best online experiences. These comprised of supportive lecturers engaging deeply with students and students having access to institutional provision of teaching and learning materials and technology 'training' which improved their technological skills.

Enhanced interactions with supportive lecturers

The high quality of engagement with lecturers was significant for the student support and students shared their experiences of enhanced interactions which were provided on demand, commenting on the level of deep engagement with their lecturers. The majority of students perceived their lecturers as extremely supportive and they commented that this was key to their learning during the pandemic. The study findings revealed that lecturers were not merely helpful to students when they requested for assistance but they offered them constant support through various formats. One of the research participants stated:

"Lecturers are very understanding and are supportive"

when students require help. Another research participant similarly commented on the extent to which lecturers would provide learning support materials before and after lectures:

"The lectures were great. The lecturer used videos to help us gain more knowledge about the course".

Students believed that the lecturers provided them with ample learning support through teaching tools like videos and online platforms (Learn 2022, Zoom and WhatsApp), which enhanced their learning.

In addition, lecturers' ability to support students was based on the former's communication skills. One of the students explained:

"The lecturers always respond to our emails, texts and they actually care about us, for example if we have a quiz coming up, the lecturers know that Learn 2022 (the online platform) does remind us but they still send us emails encouraging us to study and remind us of the test."

The effective communication that students received from their lecturers enhanced the quality of their interactions with their lecturer and facilitated their learning. In addition, lecturers further supported students by allowing them sufficient time to complete their assessments and there is adequate support provided. It was stated by one of the research participants that:

"We are given enough time for assessments and lecturers are by our side."

These verbatim quotes establish that although the lecturers were not physically at the side of the students, because they were responding timeously to questions and queries, students felt that their lecturers were close by. The students received positive learning experiences because of the nature of the academic and pastoral support which they received. Students reported that the enhanced interactions and engagement were also evident during online lectures and outside of the lecture schedule times. One of the students reported on the best experience as:

"to ask a question to your lecturers at the same time you get a problem, not waiting for a long period or to go to university so that you can talk to a lecturer".

As such, online learning enhanced individual personalized learning between student and lecturer as opposed to previous face to face learning where students' interactions with lecturers were within the confines of the campus perimeter and within the stipulated consultation time slots that lecturers have pinned on their doors.

The research findings also revealed that online learning enhanced interaction and communication between and amongst students. One of the students stated that there are forum discussion platforms where students discuss content and review each other's work. One of the students stated that:

"Best experiences of teaching and learning is writing in the forum discussions".

Thus, students perceived forum discussions via the online platform as a valuable extension to their online lectures. LEARN 2022 was perceived as a suitable platform which promotes effective learning through positive interactions and deep engagement between lecturer and students.

Easy access to teaching and learning materials

The research findings revealed that part of students' best online learning experiences included resource provision by the institution: easy access to teaching and learning materials supplied by the university. One of the students stated that one of the best experiences was:

"listening to zoom classes that were recorded, when I need clarity in some cases".

Thus, students are benefitting in terms of zoom lecture recordings which can be accessed on demand after the lecture. This facility is not available in the case of contact lectures. In addition, another student added that online learning is their best learning experiences in higher education because of

"learning materials being available always online even after lessons".

The research participant revealed that online learning is good explaining that:

"everything is well organized in this remote learning method that we use, which makes it little stressful for us..."

Furthermore, another research participant reported,

"I was able to learn from the comfort of my home and do my work at my own pace".

These verbatim quotes revealed that students experienced features of online learning such as easy access to teaching and learning materials and because materials were well organized online, they felt less stressed academically in navigating through the material.

Access to technology and improved technology skills

The research findings revealed that students believed that online learning promoted their access to technology and improved their technological skills and this is significant as the province is one of the poorest and as such access in public schools to technological innovations for learning is limited. Interestingly, students did not comment on experiencing 'technostress' and it was evident that the foundation of this lay in their feeling of inclusion- being inducted into university technology. One of the research participants stated,

"I am able to use electronic devices and able to learn online".

Thus, online learning helped students to master the skills of using their laptops and connecting to platforms like LEARN 2022, zoom and teams etc. for online learning. Also, it was revealed that that this experience was something new which they were not exposed to in both primary and secondary schools especially if they were from disadvantaged public schools. One of the students stated,

"I experienced becoming familiar with online things because I was not using online things when I was in high school."

Students reported that online learning and assessments exposed them to using a laptop on a regular basis and thus allowing them to be familiar with it through daily use. One of the students stated, "Learning how to use a laptop and also, how tests can be conducted via quizzes."

To some learners it was also a great experience to know how to use electronic devices for learning purposes which implies that they were previously either not using the devices or using it to a lesser extent. One of the research participants stated that it was a great experience

"to know how to use my computer for learning".

Some of the verbatim quotes which revealed that online learning enhanced access to technology and improved technical skills included the following:

"Being exposed to internet and being able to use a computer for the first time in the university"

"Online learning has been the best experience; I am now exposed to technology"

"Learning while on a tour, when going to a shop, or wherever. The way it is so easy to learn was my best learning experience"

"Joining zoom meeting and get a chance to ask a lecture a question related on what we are studying"

"Learning online has taught me so many things about technology use"

These verbatim quotes indicate that students benefitted significantly from online learning as they learnt how to navigate through the learning site using a computer and undertake online assessment tasks apart from accessing the content materials for their lectures.

Furthermore, the research findings revealed that students were satisfied with online learning as they believed that online learning was better than they had anticipated how it would unfold. One of the research participants stated that

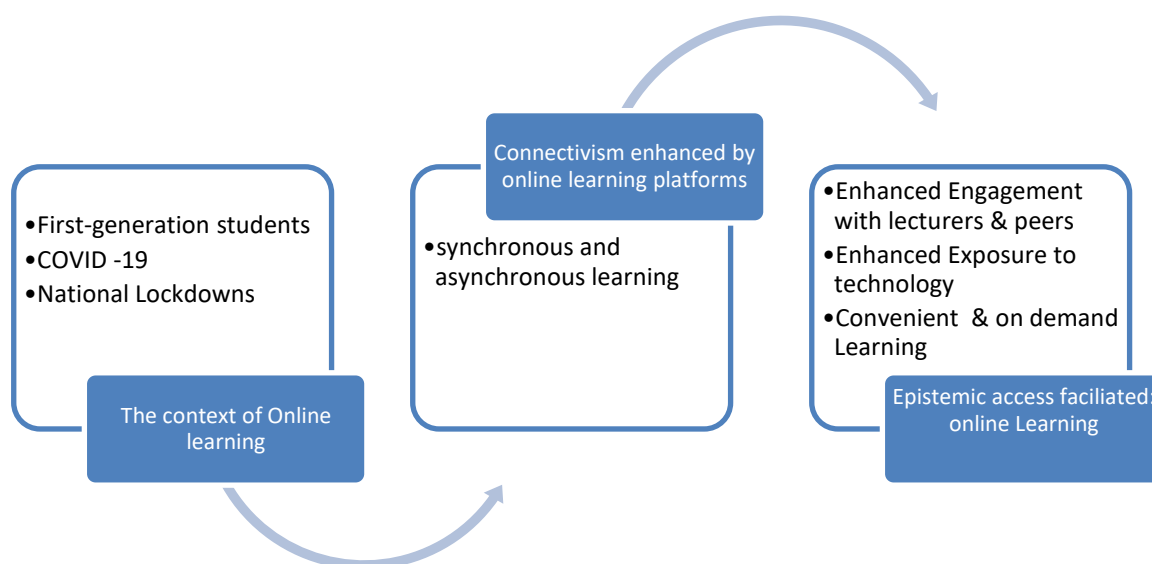
"I had discovered that online learning worked better than I thought. I had learned so much about using a laptop".

The research findings revealed that online learning was perceived as a positive experience that promoted deep learning for students; it enhanced convenient learning and exposed and extended students' technological knowledge and skills. They perceived online learning as fast tracking their technology training in their first year, and this was significant for students who are from disadvantaged backgrounds where they have not been exposed to the internet and having/using a computer. This confirms the findings of Al-Salman & Haider (2021) and Yan et al., (2021) who reported that the quality of the online experience (including instructional and assessment quality) improved students' attitudes toward online learning, indicating that it was a positive experience for them.

Discussion and Theorization

This section presents a model that was developed based on the research findings about students' best learning experiences in a first-year large class module. The model was developed from the analysis of the research findings through the analytical lens of connectivism. It signals the value of context and connecting in providing enriching experiences of online learning that facilitate epistemic access for undergraduate students in first year modules.

The context, processes and experiences of students' first year online learning during COVID -19



Source: Sibanda and Manik (2025)

The model anchored in online learning illustrates the mechanisms, processes and experiences of Geography Education students in a large class, first year module during COVID-19 which facilitated epistemic access. It shows the online platforms that were utilized by UKZN which allowed lecturers and students to collaborate (synchronously and asynchronously) during the times when face to face interactions were not possible due to COVID-19 pandemic and national lockdowns. The research findings indicated that online learning improved the success of students during COVID-19 where connectivism was enhanced by the use of online platforms such as LEARN 2022, Zoom meetings and the creation of WhatsApp groups. Online learning can clearly be used to enhance student support for a large class of first-year students and support is an essential construct for epistemological access. First-year first generation students are reported by to be the most vulnerable group of students to drop out in tertiary institutions (CHE 2022; Nyar 2021) and thus support and collaboration efforts to facilitate their

epistemological and epistemic access by both the lecturer of the module and the institution are crucial to ensure their retention and graduation.

Our argument is that online learning should continue to feature more significantly (than 30%) in teaching and learning at UKZN now that the pandemic has receded given that a large class of first year students expressed how deeply entrenched their best experiences were in new online pedagogical approaches and the current growth of technological avenues of teaching and learning. First year students' best experiences were deeply couched in exposure to new technology previously denied to them by virtue of their disadvantaged schooling. This online pedagogical migration now propelled them to access learning at their own convenience regardless of their location as well as affording them access to interact with their lecturers on demand through eLearning platforms. The model is discussed in detail below under the three subheadings: convenient learning, heightened exposure and enhanced engagement.

Convenient and on-demand learning

The research findings revealed that students believed that online learning was beneficial. The research findings revealed that students continued to access education during the national lockdowns and this was made possible by use of online learning platforms. For UKZN, the commonly used online platforms were LEARN 2022, Zoom meetings and WhatsApp groups. LEARN 2022 allowed students to interact on forum activities, enhancing collaboration and connectivism amongst students and their lecturers. Zoom was the main platform that lecturers used for instruction during their lectures. It was convenient for learners as lectures were recorded, and students could play the recordings as many times as possible to enhance their understanding of concepts and processes in Geography (Carter 2020; Cavanaugh et al. 2009; Suryaman 2020). Students who could not access online lectures for some reasons (such as power outages) could easily catch up on lectures by playing the recordings later when electricity had returned. WhatsApp was also used for easy communication among students and for on-demand interaction between students and their lecturers. Students could consult via WhatsApp whenever it suited them. Thus, online learning promoted convenient on-demand learning as students accessed education in their homes without risking their lives by physically interacting with lecturers and other students during COVID-19. Thus, online learning promotes flexibility in accessing and utilizing educational resources, regardless of time and place. It was also asserted (Rosell 2020; Meng et al 2024; Saleem et al 2024), that online learning is convenient for crisis situations such as the COVID-19 pandemic. Almahasees et al. (2021), also reported that online learning has useful learning platforms and it promotes access to learning materials at students' convenient times.

Heightened exposure for learning and assessment

Online learning exposed students to online learning platforms, which engendered learning opportunities. The research findings revealed that students perceived online learning as an immense opportunity, which exposed them to more learning opportunities, such as collaboration with their peers on tasks and interacting with their lecturer about content and assessments. The research findings revealed that the use of Zoom meetings was new to them, and the exposure to Zoom allowed them to navigate through the learning platform, and they were progressively acquiring the skills to set meetings on their own for their peer discussions. Also, online learning compelled each student to have a laptop or smartphone so that they could learn, connect and collaborate with peers and lecturers. Furthermore, online learning exposed students to online assessments such as multiple choice questions (MCQ), students were writing assessments online and MCQ tests was one of the assessments that was preferred by students because it allowed them to get instant feedback. This finding aligns with findings by Rosell

(2020), who reported that online learning platforms house study materials, questions, model answers and it provides an avenue for feedback on assessment tasks.

Thus, online learning exposed students to technology, new learning platforms and online assessment methods despite the scholarship advancing that there can be an element of 'technostress' associated with digital learning for students (Faloyi & Ajayi 2022; Saleem et al 2024). As Saleem et al (2024;01) indicated, any form of technostress can be mitigated by the support of the lecturer or institutional assistance and in this current study, the quality of learning improved as a result of students interacting regularly with their lecturer.

Enhanced engagement

Saleem et al (2024) note that there are two threads (module support and institutional support) to online student support to provide quality learning experiences and in the current study, it was evident that students were extremely satisfied with their module support. The majority of students' online engagements increased as a result of the use of online tools and platforms. Online learning enabled deep interaction between students and their lecturers, which improved their relationship (Rasheed et al. 2020) and this led to students expressing their satisfaction (Saleem et al, 2024). This is one of connectivism's key tenets which is in contrast to earlier face-to-face learning, where interactions between students and lecturers took place only within the confines of the campus and during the designated consultation times that lecturers had posted on their doors. Thus, online learning enabled greater module connectivity which subsequently promoted collaboration and engagement between students and other students and their lecturer (Rahimi & Van Oostveen 2022).

We contend that before COVID-19, there was limited use of online learning platforms which limited online collaboration between students and their lecturer. The learning tasks and abilities necessary for students to succeed in the digital age are supported by online learning and the value of Connectivism as a Learning Theory is evident (Siemens 2005) in this context. Online learning has access to useful learning tools and it grants 24/7 access to education platforms, allowing for around the clock preferences for student learning. It also offers flexibility, regardless of place and time especially in the South African context currently being plagued by energy disruptions (electricity cuts). As also evident in the literature, it also provides students with questions, answers are given freely, and it provides feedback on the assigned course content (Rosell 2020).

CONCLUSION AND RECOMMENDATIONS

There are multiple advantages of online teaching and learning in terms of epistemological access for first year first generation students if the infrastructure has been provided as was done at UKZN and as such their best online experiences can be utilized to strengthen large class module offerings and support students in similar environments in higher education. UKZN decided to return to face-to-face instruction in 2023, but we argue that UKZN will not completely discard online learning as there are other circumstances that now warrant online learning to be a regular feature such as load shedding and in the event of student protests as was experienced in 2024. We recommend that the module coordinators and institution use the student feedback about their large class online learning experiences to begin discussions on online student satisfaction for large class sizes, strengthening their online programme design, extending institutional regulations on the percentage of online learning and planning for future challenges. SA is in an energy crisis with load shedding and the possibility of grid failure (Matsheta & Sefoka 2023; Muller 2023). Without university generators, no power for hours will impact teaching and learning in face-to-face institutional settings. In addition, scientists have warned that the COVID-19 virus will continue to mutate, and the pandemic will not end (World Health Organization 2020). Most

interestingly, a recent trend has been for UKZN post-2022 to suddenly switch to online learning when students are protesting. Additionally, we argue that there are significant prospects for institutional learning in terms of learning effectiveness through online learning, strengthening student support and engaging staff and management to build a technologically advanced academic environment for first year students. Strengthening online environments can enrich programme design for first generation students if there is module and institutional support.

Thus, there are significant prospects for institutional learning in developing quality online learning, greater student support and engaging staff and management to create online environments that engender success.

Disclosure Statement

No conflict of interest was reported in this paper. The study is support by funding from ASAF at UKZN.

Funding

This work was supported by the UTLO, the Kresge Foundation and the NRF/SARChI research grant.

REFERENCES

- Almahasees, Z., Mohsen, K., & Amin, M. O. (2021). Faculty's and students' perceptions of online learning during COVID-19. *Frontiers in Education*, 6, 638470. <https://doi.org/10.3389/feduc.2021.638470>
- Almaiah, M. A., Al-Khasawneh, A., & Althunibat, A. (2020). Exploring the critical challenges and factors influencing the E-learning system usage during the COVID-19 pandemic. *Education and Information Technologies*, 25, 5261–5280.
- Al-Salman, S., & Haider, A. S. (2021). Jordanian university students' views on emergency online learning during COVID-19. *Online Learning*, 25(1), 286–302. <https://doi.org/10.24059/olj.v25i1.2470>
- Badat, S. (2014). *South African higher education in the 20th year of democracy: Context, achievements and key challenges*. HESA.
- Boelens, R., De Wever, B., & Voet, M. (2017). Four key challenges to the design of blended learning: A systematic literature review. *Educational Research Review*, 22, 1–18.
- Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to corona virus pandemic. *Asian Journal of Distance Education*, 15(1), i–iv.
- Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. *Qualitative Psychology*, 9(1), 3–26. <https://doi.org/10.1037/qap0000196>
- Carter, R. A., Rice, M., Yang, S., & Jackson, H. A. (2020). Self-regulated learning in online learning environments: Strategies for remote learning. *Information and Learning Sciences*, 121(5/6), 321–329.
- Cavanaugh, C. S., Barbour, M. K., & Clark, T. (2009). Research and practice in K-12 online learning: A review of open access literature. *The International Review of Research in Open and Distributed Learning*, 10(1), 1–22.
- Collett, K. S., Dison, A., & Du Plooy, L. (2024). In pursuit of social justice in South African higher education: Exploring the relationship between epistemological access and the development of students' academic literacies. *South African Journal of Higher Education*, 38(4), 1–20. <https://dx.doi.org/10.20853/38-4-5949>
- Council on Higher Education. (2022). *Understanding epistemic access and success for historically disadvantaged students in South African universities*. Ali Mazuri Centre for Higher Education.

- Cross, M. (2018). *Steering epistemic access in higher education in South Africa*. CLACSO.
- Cureton, D. (2016). The secret of their success. In G. Stevenson, D. Cureton, & L. Clouder (Eds.), *Student attainment in higher education*. Routledge.
- Davis, C. R., Hartman, H., Turner, M., Norton, T., Sexton, J., Mendez, D., & Mendez, J. (2024). "Listen to the feedback of students": First-generation college students voice inequalities in schooling brought on by the COVID-19 pandemic. *Journal of College Student Retention: Research, Theory & Practice*, 26(1), 151–175.
- Dhunpath, R., & Vithal, R. (2012). *Alternative access to higher education: Underprepared students or underprepared institutions?* Pearson.
- Dlamini, J. B., & Naidoo, G. M. (2022). First-year student experience-using digital media for teaching and learning amid COVID-19 pandemic at a rural-based campus. *Universal Journal of Educational Research*, 10(3), 195–204.
- Donitsa-Schmidt, S., & Ramot, R. (2020). Opportunities and challenges: Teacher education in Israel in the Covid-19 pandemic. *Journal of Education for Teaching*, 46(4), 586–595.
- Downes, S. (2010). New technology supporting informal learning. *Journal of Emerging Technologies in Web Intelligence*, 2(1), 27–33.
- Downes, S. (2022). Connectivism. *Asian Journal of Distance Education*, 17(1). <http://www.asianjde.com/ojs/index.php/AsianJDE/article/view/623>
- Drane, C., Vernon, L., & O'Shea, S. (2020). *The impact of 'learning at home' on the educational outcomes of vulnerable children in Australia during the COVID-19 pandemic*. National Centre for Student Equity in Higher Education, Curtin University.
- Faloye, S. T., & Ajayi, N. (2022). Understanding the impact of the digital divide on South African students in higher educational institutions. *African Journal of Science, Technology, Innovation and Development*, 14(7), 1734–1744. <https://doi.org/10.1080/20421338.2021.1983118>
- Felten, P., Gardner, J., Schroeder, C., Lambert, L., & Barefoot, B. (2016). *The undergraduate experience: Focusing institutions on what matters most* (pp. 137–138). Jossey-Bass.
- Garcia, R., Falkner, K., & Vivian, R. (2018). Systematic literature review: Self-regulated learning strategies using e-learning tools for computer science. *Computers & Education*, 123, 150–163.
- García-Morales, V. J., Garrido-Moreno, A., & Martín-Rojas, R. (2021). The transformation of higher education after the COVID disruption: Emerging challenges in an online learning scenario. *Frontiers in Psychology*, 12, 616059. <https://doi.org/10.3389/fpsyg.2021.616059>
- Glass, L. E. (2023). Social capital and first-generation college students: Examining the relationship between mentoring and college enrolment. *Education and Urban Society*, 55(2), 143–174.
- Godber, K. A., & Atkins, D. R. (2021). COVID-19 impacts on teaching and learning: A collaborative autoethnography by two higher education lecturers. *Frontiers in Education*, 6, 647524. <https://doi.org/10.3389/feduc.2021.647524>
- Hausmann, L. R. M., Schofield, J. W., & Woods, R. L. (2007). Sense of belonging as a predictor of intentions to persist among African American and white first-year college students. *Research in Higher Education*, 48, 803–839. <https://doi.org/10.1007/s11162-007-9052-9>
- Hew, K. F., Jia, C., Gonda, D. E., & Bai, S. (2020). Transitioning to the "new normal" of learning in unpredictable times: Pedagogical practices and learning performance in fully online flipped classrooms. *International Journal of Educational Technology in Higher Education*, 17(1), 1–22.
- Higher Education Monitor 16. (2024). *Understanding epistemic access and success of students from historically disadvantaged backgrounds in South African universities*. Council on Higher Education.

- Kapasiasa, N., Paul, P., Roy, A., Saha, J., Zaveri, A., Mallick, R., & Chouhan, P. (2020). Impact of lockdown on learning status of undergraduate and postgraduate students during COVID-19 pandemic in West Bengal, India. *Children and Youth Services Review*, 116, 105194.
- Liu, N. C., & Cheng, Y. (2005). The academic ranking of world universities. *Higher Education in Europe*, 30(2), 127–136.
- Manik, S. (2014). Shifting the discourse: Student departure in the context of relative deprivations. *South African Journal of Higher Education*, 28(1), 148–163.
- Manik, S. (2017). What is being done? Ubuntu in student support programmes in public higher education institutions in South Africa. In M. Shah & G. Whiteford (Eds.), *Bridges, pathways and transitions: International innovations in widening participation* (pp. 189–208). Elsevier.
- Matsheta, R. M., & Sefoka, I. M. (2023). Load-shedding in South Africa: An immediate threat to the right to education. *Journal of Educational and Social Research*, 13(1). <https://doi.org/10.36941/jesr-2023-0020>
- Meng, W., Yu, L., Liu, C., Pan, N., Pang, X., & Zhu, Y. (2024). A systematic review of the effectiveness of online learning in higher education during the COVID-19 pandemic period. *Frontiers in Education*, 8, 1334153. <https://doi.org/10.3389/feduc.2023.1334153>
- Mhandu, J., Mahiya, I. T., & Muzvidziwa, E. (2021). The exclusionary character of remote teaching and learning during the COVID-19 pandemic: An exploration of the challenges faced by rural-based University of KwaZulu Natal students. *Cogent Social Sciences*, 7(1), 1947568. <https://doi.org/10.1080/23311886.2021.1947568>
- Moosa, M., & Bekker, T. (2022). Working online during COVID-19: Accounts of first year students experiences and well-being. *Frontiers in Psychology*, 13, 794279. <https://doi.org/10.3389/fpsyg.2022.794279>
- Morrow, W. (1994). Entitlement and achievement in education. *Studies in Philosophy and Education*, 13(1), 33–47.
- Muller, M. (2023). Load shedding as a result of failures at the political-technological interface. *South African Journal of Science*, 119(9/10), Article 16595. <https://doi.org/10.17159/sajs.2023/16595>
- Nyar, A. (2021). The 'double transition' for first-year students: Understanding the impact of Covid-19 on South Africa's first-year university students. *Journal of Student Affairs in Africa*, 9(1), 77–92.
- Onyema, E., Nwafor, C., Obafemi, F., Sen, S., Fyनेface, A., Sharma, A., & Alsayed, A. (2020). Impact of coronavirus pandemic on education. *Journal of Education and Practice*, 11(13), 108–121. <https://doi.org/10.7176/JEP/11-13-12>
- Pham, T., & Nguyen, H. (2020). COVID-19: Challenges and opportunities for Vietnamese higher education. *Higher Education in Southeast Asia and Beyond*, 8, 22–24.
- Rahimi, E., & Van Oostveen, R. (2022). Connectivism and online learning during the Covid-19 pandemic: A systematic review. *Journal of Online Learning Research*, 8(1), 33–59.
- Rasheed, R. A., Kamsin, A., & Abdullah, N. A. (2020). Challenges in the online component of blended learning: A systematic review. *Computers & Education*, 144, 103701.
- Ribeiro, R. (2020, April 14). How university faculty embraced the remote learning shift. *EdTech Magazine*. <https://edtechmagazine.com/higher/article/2020/04/how-university-faculty-embraced-remote-learning-shift>
- Rosell, C. (2020). COVID-19 virus: Changes in education. CAE. <https://www.cae.net/covid-19-virus-changes-in-education/>
- Saleem, F., Chikhaoui, E., & Malik, M. I. (2024). Technostress in students and quality of online learning:

- Role of instructor and university support. *Frontiers in Education*, 9, 1309642. <https://doi.org/10.3389/feduc.2024.1309642>
- Sharma, L., & Shree, S. (2023). Exploring the online and blended modes of learning for post-COVID-19: A study of higher education institutions. *Education Sciences*, 13(2), 142. <https://doi.org/10.3390/educsci13020142>
- Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2(1), 3–10.
- Singh, K., Srivastav, S., Bhardwaj, A., Dixit, A., & Misra, S. (2020). Medical education during the COVID-19 pandemic: A single institution experience. *Indian Pediatrics*, 57(7), 678–679.
- Singh, V., & Thurman, A. (2019). How many ways can we define online learning? A systematic literature review of definitions of online learning (1988–2018). *American Journal of Distance Education*, 33(4), 289–306.
- Suryaman, M., Cahyono, Y., Muliansyah, D., Bustani, O., Suryani, P., Fahlevi, M., & Munthe, A. P. (2020). COVID-19 pandemic and home online learning system: Does it affect the quality of pharmacy school learning? *Systematic Reviews in Pharmacy*, 11(6), 524–530.
- Tang, T., Abuhmaid, A. M., Olaimat, M., Oudat, D. M., Aldhaeebi, M., & Bamanger, E. (2020). Efficiency of flipped classroom with online-based teaching under COVID-19. *Interactive Learning Environments*, 31(2), 1077–1088.
- The Economic Times. (2020, July 30). Covid-19 pandemic created largest disruption of education in history, affecting 1.6 billion students: UN SG Guterres. <https://economictimes.indiatimes.com/news/international/world-news/covid-19-pandemic-created-largest-disruption-of-education-in-history-affecting-1-6-billion-students-un-sg-guterres/articleshow/77344094.cms>
- Themane, M. J., & Mabasa, L. Y. (2022). Epistemic access and success of historically disadvantaged students during the COVID-19 pandemic: A South African experience. *Perspectives in Education*, 40(1), 18–38.
- Tinto, V. (2012). Enhancing student success: Taking the classroom success seriously. *The International Journal of the First Year in Higher Education*, 3(1), 1–8.
- Usher, M., & Barak, M. (2020). Team diversity as a predictor of innovation in team projects of face-to-face and online learners. *Computers & Education*, 144, 103702.
- Van Breda, A. D. (2018). Resilience of vulnerable students transitioning into a South African university. *Higher Education*, 75(6), 1109–1124.
- Whitelaw, E., Branson, N., & Leibbrandt, M. (2022). *Learning in lockdown: University students' academic performance during COVID-19 closures* (SALDRU Working Paper No. 289). Southern Africa Labour and Development Research Unit, University of Cape Town.
- World Health Organization. (2020). *Coronavirus*. https://www.who.int/health-topics/coronavirus#tab=tab_1
- Yan, L., Whitelock-Wainwright, A., Guan, Q., Wen, G., Gasevic, D., & Chen, G. (2021). Students' experience of online learning during the COVID-19 pandemic: A province-wide survey study. *British Journal of Educational Technology*, 52(5), 2038–2057. <https://doi.org/10.1111/bjet.13102>