

# THE EFFECTS OF COVID-19 ON HIGHER EDUCATION: EXPERIENCES OF FAMILY AND RELIGIOUS STUDIES FINAL YEAR STUDENTS AT GREAT ZIMBABWE UNIVERSITY

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## ABSTRACT

An unprecedented amount of disruption to life in general and higher education in particular resulted from the unexpected onset of the Coronavirus pandemic in late 2019. In Zimbabwe, cases of infection and the first victim of the pandemic were reported when the first semester of the 2020 academic year had just started in March. There is paucity of literature, at the time of writing this article, on Zimbabwe higher education students' experiences of COVID-19 induced online education. To fill this lacuna, this article explored the effects of COVID-19 on higher education, with special focus on Family and Religious Studies (FRS) final year students at Great Zimbabwe University (GZU). The aim was to explore level 4.2 FRS students' experiences when they were suddenly confronted with a COVID-19 induced online education. Adopting a qualitative research design where online interviews and a questionnaire were carried out with a sample of 20 male and 22 female students, we collected the students' experiences of the COVID-19 induced online education in the teaching and learning of FRS online, identified the students' coping strategies in dealing with COVID-19 induced online education, and solicited from the students their recommendations for a user-friendly online education. Employing the Just-In-Time Learning theory as the lens to analyse data, the students revealed that COVID-19 has had both negative and positive impacts on higher education in a developing country set up. We argue that while students and lecturers were confronted with numerous challenges in embracing COVID-19 induced-online education, they equally benefitted from the undertaking. We recommend that the University provides an enabling online teaching and learning environment and should prioritise

robust training of academic staff and students on the use of online teaching and learning platforms.

**Keywords:** COVID-19, Family and Religious Studies, Higher education, Online education, Great Zimbabwe University

## INTRODUCTION

On a scale that has rarely been witnessed before, the rapid appearance of COVID-19 pandemic has had a disastrous impact on communities around the world (Du Plessis and Blignaut 2020). The Coronavirus pandemic has not only stopped the wheels of the global economy, but it has affected the lives of millions of people around the world. Every facet of human life was brought to a limbo. The education sector was not spared. The pandemic is not only a health crisis, but also a political, social, religious, and educational one. In response to the pandemic, which was discovered in the district of Wuhan in China in December 2019 and was declared a health crisis by the World Health Organisation (WHO) in March 2020, governments instituted several measures to mitigate the effects of the pandemic. One such mitigatory measure was national lockdowns, where movement and gathering of people were restricted. Schools and institutions of higher learning were indefinitely closed. Zimbabwe closed its education sector's doors on 24 March 2020 (Sibanda and Muyambo 2020). It is against this background that higher education institutions and schools worldwide had to re-think how teaching and learning would be conducted. This was the *Kairos* moment for institutions of higher learning in Zimbabwe, whose first semester for the academic year had just started; there was need to pause, think, reflect and assess the options available and act in light of this historic event. Institutions of higher learning had to come up with a curriculum responsive to this pandemic, visited upon citizens with such rapidity. They had "to rethink and reimagine our curriculum, traditional methods of teaching and learning as historically practised for centuries and reflected on by curriculum theorists and philosophers" (Du Plessis and Blignaut 2020, 94). The pandemic has raised numerous concerns about the conventional teaching and learning approach used by institutions around the world that relies on face-to-face interaction. The traditional lecture method has become obsolete due to the implementation of the physical and social distance needed during this time to reduce the infection rate (Du Plessis and Blignaut 2020).

Like the other universities in Zimbabwe and internationally, Great Zimbabwe University (GZU) had to develop emergency strategies to deal with the pandemic's consequences and save the academic year. It had to speedily introduce an off-campus teaching and learning model. Although this model is not new in Zimbabwe since Zimbabwe Open University (ZOU) has been using it since its inception, perceptions about this model were negative. Owing to COVID-19, which has brought with it a paradigm shift, there are positive shifts of mindsets regarding

distance learning *vis-à-vis* the traditional face-to-face teaching and learning. GZU instituted Google Classroom as the “online teaching and learning” model interlaced with the WhatsApp and Email platforms as the media for instruction.

Given the short amount of time GZU had to respond, we are hesitant to argue that it introduced online teaching and learning; instead, it is safe to say that it implemented emergency remote teaching (Hodges et al. 2020). One must make a distinction between the two since creating an online learning model takes time and requires careful planning months before it is ready for use (Hodges et al. 2020). As a result of a crisis like the COVID-19 pandemic, emergency remote teaching refers to switching from an on-campus, face-to-face approach to an online approach by instructing remotely using Information and Communication Technology (ICT) tools to offer instruction as before (Hodges et al. 2020). After the crisis, there will likely be a switch to the original face-to-face model. It is against this background that this study sought to investigate the effects of COVID-19 on higher education, with particular reference to the experiences of 2020 final year FRS students at Great Zimbabwe University. The rest of the article is organised as follows: The next sections focus on theoretical framework, statement of the problem, and the research methodology. This is followed by the findings and discussion section, and ends with a conclusion and a raft of recommendations for policy formulation and implementation.

## **THEORETICAL FRAMEWORK**

The Just-In-Time Learning theory (JITL) was employed in this study. This theory is heavily borrowed from industry and is now being used in a number of sectors, including education during emergencies. The Just-In-Time (JIT) theory came into wide use in the Japanese shipbuilding and locomotive industries (Folinas, Fotiadis, and Coudounaris 2017). Put simply, this theory refers to a number of practices and tools that aim to satisfy the market by producing the products needed, when needed, and in the required quantity and quality (Singh and Garg 2011). The emphasis of the theory is to minimise waste in the production lines and maximise profits while meeting demand. Because of the success of the JIT theory principles in the manufacturing and production sectors, the ideas have been applied to other disciplines such as education. In the education sector, it is readily applied for the production and provision of quality education.

The JITL theory in education is a dynamic and interactive paradigm where students actively participate in their education, building knowledge and understanding situations utilizing problem-solving and decision-making skills (Hall n.d.). Constructivists, who see learning as the active participation of learners in the development of their own knowledge and

comprehension of facts, procedures, and concepts, might relate to this. Through interaction, this learning takes place. Learning evolves beyond merely the acquisition of data to a dynamic process. The adoption of online platforms by institutions of higher learning in the context of COVID-19 was, and still is, a just-in-time response to existing realities. The traditional face-to-face teaching and learning is no longer tenable, hence the need to swiftly move to online without necessarily compromising the quantity and quality of education to clients. The theory presupposes that despite the crisis of the pandemic, the end product of the education system must neither be compromised nor be of less quality. It is in this view that the study was carried out with the intention to check if the shift from the traditional face-to-face instruction to online still had the same effects and results by focusing on the experiences of final year FRS students at GZU.

## **STATEMENT OF THE PROBLEM**

While online or e-learning has become the norm for the Global North, it has remained a pipe dream in the Global South, particularly Africa. Universities in the North have made e-learning normative while those of the South were and are still struggling to fully embrace it. Given the hasty implementation of the online teaching and learning model due to COVID-19, issues of accessibility, affordability, instructor competence and learner capabilities become matters of concern. As the shift to online pedagogy opened a new window for higher education in Zimbabwe, it equally asked hard questions on the preparedness and readiness of higher education to embrace online and still remain fit for purpose in service delivery. Therefore, this study sought to unravel the challenges that confront COVID-19 induced online education and suggested ways of improving this teaching and learning model.

## **RESEARCH METHODOLOGY**

The study adopted a mixed-method approach with a qualitative dominance given that what we sought were students' experiences, views and feelings. Muchenje (2014) posits that qualitative research is mainly concerned with meanings that participants have for situations or events. Thus, the goal of qualitative research is to unravel these meanings. Qualitative research also allowed us to explore attitudes and feelings of the participants which are crucial in the research but cannot be explored using quantitative methods. A case study research design was used as it ensured that the evidence obtained enabled us to effectively address the problem as unambiguously as possible. The sample participants were forty-two (42) final year FRS students. They were purposively selected. There were twenty-two female and twenty male students of ages ranging between twenty-two and twenty-five. Of the forty-two students, ten

(five male and five female) were interviewed. The researchers conducted interviews through audios on WhatsApp because COVID-19 meant that some of the participants could not be reached for face-to-face interviews. According to Cohen, Manion, and Morrison (2011), interviews allow participants – whether they are the interviewers or the interviewees – to share their perceptions of the world in which they live, to convey how they view circumstances, and to make their opinions known. Through interviews, the researchers were able to get more information about unclear answers and inquiries. Additionally, open-ended queries were employed.

To avoid overliance on one data collection method, we triangulated the data collection methods by using the questionnaire technique. It consisted of a set of questions that were administered to the remaining thirty-two (16 female and 16 male) final year FRS students who did not participate in the interviews. These students across the gender divide were asked to share their learning experiences of FRS online. The questionnaire had both open-ended and closed questions. A questionnaire was considered one of the most effective data collecting tools when distributed to the students as it limited respondents' exaggeration as it is easy to lie through spoken word than written. The response rate was 100 per cent.

The study applied the fundamental coding procedures described by Miles, Huberman, and Saldana (2014). The interviews were first recorded, followed by a word-for-word transcription on the same day they were conducted. Following transliteration, we read the transcription to the involved students to ensure accuracy. Then, in an effort to accurately represent their understandings, modifications were made as necessary. Transcribing was done while the interview recordings were being listened to. Themes and concerns that answered the study questions were noticed as we read the notes that were transcribed.

The concepts that provided a broad framework for how the study must be performed served as the study's guiding principles. The study placed a strong emphasis on reasonable, impartial, universal, and objective principles. It addressed the following ethical issues: voluntary involvement and informed consent. Students at Great Zimbabwe University who responded to the survey received all the pertinent information about the researchers' search criteria. The decision to take part in the study was then made by them. They were also informed that, should they want to do so, they might leave the research at any time without incurring any penalty.

## **RESEARCH FINDINGS AND DISCUSSION**

In this section, we presented and analysed data. However, data analysis and discussion of findings were done concurrently. The findings of this study were based on three themes that were derived from the study objectives and these are: effects of the COVID-19 pandemic on

final year FRS students, coping strategies, and the adoption of user-friendly online education. Before moving to the three themes, the section below presents findings relating to the demographics of the study participants.

## DEMOGRAPHIC INFORMATION OF RESPONDENTS

### Gender and age of participants

Table 1 shows the gender of the respondents who were part of the study. The sample was made up of 42 level 4.2 FRS students.

**Table 1:** Participants' age groups

Sex	No. of participants	Age Groups		Marriage status	
		22-25 years	Above 25 years	Married	Single
Male	20 (47.6%)	17	3	0	20
Female	22 (52.4%)	19	3	4	18
<b>Total</b>	<b>42</b>	<b>36</b>	<b>6</b>	<b>4</b>	<b>38</b>

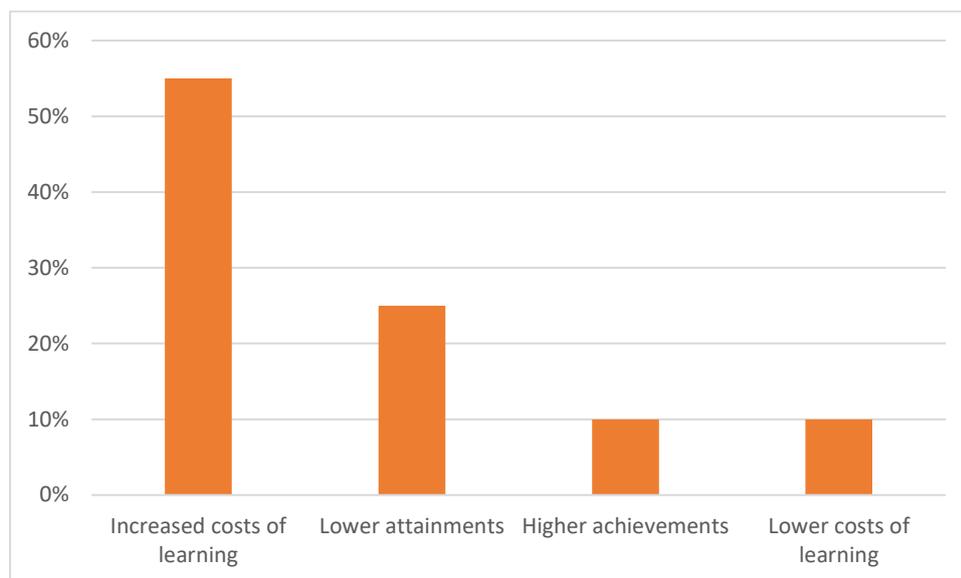
Table 1 shows the demographic factors of the participants. The study comprised 20 males and 22 females drawn from a group of 4.2 FRS Great Zimbabwe University students. A majority (85.7%) of the participants were aged 22–25, as shown in Table 1 above. The study also comprised 47.6 per cent males and 52.4 per cent females. The study achieved a near gender balance. This was purposely done to ensure that there were balanced responses from both sexes. It must be noted that it is important to ensure that males and females are equally represented in a research study sample since they may have different views or differing challenges. We anticipated different views from male and female students since some female FRS students were mothers; hence, balancing the education and family needs in this COVID-19 era would bring many and different challenges. More than ninety per cent (90.5%) of the population was not married. All the married participants were female.

## EFFECTS OF THE COVID-19 PANDEMIC ON FRS STUDENTS

Figure 1 shows the effects of the COVID-19 pandemic that were identified by level 4.2 FRS students at GZ University.

From Figure 1 we can deduce that most of the participants perceived that COVID-19 had increased the cost of learning. This is represented by 55 per cent of the sample. Students cited the need to have ICT gadgets for accessing online teaching and learning. Since GZU insisted on the use of the Google Classroom platform as the official platform for the university (Sibanda

and Muyambo 2020), students had to ensure that they had access to the internet when they needed to be in class. This meant students had to find internet cafes (shops that sell Wifi facilities). With online teaching and learning running into hours per session, this meant students had to pay huge amounts of money for the Wifi services. This means some students could not last the sessions connected to the internet, thus bringing in question the issue of social justice in higher education.



**Figure 1:** Perceptions of FRS students on the impact of COVID-19 on education

Not all students were financially stable. One student indicated, “I cannot have access to the Internet for two hours consecutively because I don’t have the money”. Wifi cafes are not conducive because they are public service areas where other people who have nothing to do with learning are found and at times these places are noisy too. The same predicament was experienced in Zambia where the majority of students were left behind due to the use of e-learning (*Lusaka Times* 2020). Similarly, a study by Kunda, Chembe, and Mukupa (2018) in Zambia indicated that the use of ICTs has a negative effect on educational outcomes since it increases the cost of education, especially for students from poor backgrounds (also see Landa, Zhou, and Marongwe 2021). The authors argue that the use ICT makes education inaccessible for the marginalised population, who form the majority of students in most developing countries.

Twenty five per cent (25%) of the students, as end-users of e-learning, held that COVID-19 has had a negative impact on education because it has resulted in lower educational achievements at the tertiary level. From the interviews, it came out that some of the challenges that level 4.2 FRS students faced were to do with connectivity. This was abundantly highlighted

in the questionnaire. One student stated:

“I stay in the remote parts of the country where internet connectivity is a nightmare. I have not been able to attend my final year (4.2) classes and I have not been able to complete my assignments on time. This has seen myself attaining average or below average marks.” (Interviewee 3).

The high cost of accessing online education was cited as one of the major challenges that FRS students were facing. The high cost of service providers’ data bundles like Econet and Net-One made it extremely difficult to complete their assignments and attend classes through platforms like Google Classroom. Some of the respondents stated thus:

“The COVID-19 pandemic has come up with challenges because of the increase in the cost of learning. Despite not attending face to face classes, we have been paying full fees and we still need to buy ICT gadgets like computers, smart phones to use for online learning.” (Interviewee 1).

“The cost of learning is unbearable because we have to buy data bundles of which network service providers give very low discounts which leaves us in a difficult position since most of our parents/guardians have dwindling sources of income to support us.” (Interviewee 2).

On the rigidity of the teaching staff, who insisted on using online teaching and learning, one student stated thus:

“We have faced challenges with the university lecturing staff who are rigid in terms of this new mode of learning. Insisting on ICT use by some staff discriminate those who cannot access these gadgets at home. The teaching staff provide little or no materials for learning yet we will still have to write examinations in February 2021.” (Interviewee 4).

On lack of investment in ICT teaching and learning by universities, one interviewee said:

“Universities have not adequately invested in online learning and many of us also lack ICT skills for online learning. Majority of the students also do not have personal computers. This makes COVID-19 a stumbling block in the attainment of education since these factors lead to low or no participation of all students in online education which has been introduced by the University.” (Interviewee 5).

Other notable responses relating to online education infrastructure were:

“Not everyone has a smart phone, worse still a laptop. This means not everyone will be able to learn. On campus, it is easy because we use institutional computers or even borrow from our friends. Now with this lockdown, it means if one has no gadget, they cannot learn.” (Interview 3).

“For me, I do not have a laptop and when on campus, I usually use the school desktops or laptops of friends. So being home, accessing e-learning resources is difficult because I do not have a smart phone too.” (Interviewer 2).

Citing Czerniewicz et al. (2019), Mbatha (2020, 123) concurs with the above by saying, “With many students having been reliant on campus-based computer laboratories, there are students who currently do not possess a personal laptop at home”. All these resonate with what Mwale and Chita (2020) found out in their study in Zambia where lack of ICT hardware, poor connectivity and power outages were the major hindrances of e-learning in higher education. The same insights are shared by Fisser (2001) and Landa, Zhou, and Marongwe (2021) who contend that for the implementation of e-learning at institutions of higher education to be successful, institutions must make sure that all instructors and students have access to the right technologies, that there are enough facilities and that these facilities are easily accessible, especially in rural areas. While this could easily be done, the COVID-19 context which prompted institutional closures called for rethinking of the ways in which ICT hardware could be provided to students while they studied at home. Similarly, Kunda et al. (2018) conclude that lack of adequate internet bandwidth, hardware (in terms of computers for both lecturers and students), and appropriate ICT infrastructure are the major barriers to assimilating ICTs in research and teaching in Zambian Higher Education. These challenges were also revealed in a South African setting where rural students at two universities had challenges of accessing online higher education (Landa et al. 2021).

On who is affected most by this sudden shift to COVID-19 induced online education, the participants indicated that the most affected section of the student body were female students (both unmarried and the married). The married participants bemoaned the impact of COVID-19 as they found it difficult to learn in a home environment. Eighty five per cent (85%) indicated that they found it very difficult to balance family needs and educational needs in this COVID-19 pandemic era. The home environment, where domestic chores weigh heavily on the female students, is not conducive for learning. The female students indicated that balancing domestic chores and online education was a daunting task for most of them. One female participant intoned:

“We are not understood at home. When you tell your people at home that you need time to attend online learning, they think you want to dodge domestic chores. They do not understand that learning can be done on a gadget where there is no physical teacher. When they see you on your smartphone, for those who have it, they think you are showing off and do not want to attend to domestic chores. It is extremely difficult to learn at home.” (Interviewee 7).

To illustrate how COVID-19 has disproportionately affected the females the most, Manyonganise (2022, 232) uses the metaphor of “a pandemic that wears the face of a woman”,

where she argues that women have been hardest hit by COVID-19 within the Zimbabwean context, with female students (both married and unmarried) in higher education being no exception as indicated by female student participants above.

To sum up the challenges that the COVID-19 induced online higher education wrought, Du Plessis and Blignaut (2020, 113) argue that “the epistemological exclusion of students from poorer backgrounds that has characterised higher education for decades could now be exacerbated by the automatic switch to online teaching, thus advantaging once more, the middle and affluent classes”. They also contend that the promotion of e-learning (or emergency remote learning) in these trying times is a band-aid solution in which traditional classroom face-to-face instruction is simply replaced with online instruction without more in-depth pedagogical and practical considerations, which may lead to dissonance (Du Plessis and Blignaut 2020).

However, from a positive point of view the participants who completed questionnaires indicated that COVID-19 has had a positive impact in revamping and upgrading of the tertiary education system in Zimbabwean universities as learning is now being done online. This has reduced the digital divide that used to be there between institutions and among students. One student participant in the questionnaire stated thus:

“With the advent of COVID-19 induced online education in universities, all students, irrespective of one’s background, are exposed in one way or another to ICT related gadgets thereby enhancing their ICT skills. The digital divide or gap that used to be there is slowly being narrowed.”

Another one stated that learning online is quite interesting and engaging as students navigate the so exciting platforms such as Google Classroom, Google Meet, Moodle and other related platforms. The participant stated thus:

“Online education makes it possible to access notes and lecture slides any time anywhere very conveniently. It has helped me, personally, to plan my day. I can easily use my smart phone for learning purposes rather than engaging in decorous behaviour we, students, get engulfed in using these ICT gadgets. The traditional way of learning where a lecturer stands in front of expectant students has been replaced by an engaging model of learning where we need to manipulate gadgets to get information.”

Similarly, another respondent to the questionnaire indicated that although the traditional way of learning cannot be equally done away with, COVID-19 induced online education has brought an interesting dimension where the lecturer is handy in directing students but students navigate the terrain on their own, thus inculcating in them virtues of teamwork, independent and critical thinking, cooperation, hard work and togetherness.

The supposed long-term benefits for the students may also play a role in their readiness to

adopt e-learning based on its alleged advantages and the resulting favorable opinion of it. The perceived advantages are in line with those put forth by Bhuasiri et al. (2012), including improved information accessibility, personalized education, standardization of content, on-demand availability, self-pacing, confidence, and greater convenience. Similar to this, Smart and Cappel (2006) come to the conclusion that students find e-learning to be incredibly flexible and convenient, with features like the ability to access the courses at any time and place and finish the units at their own pace. This demonstrates that students' reactions to online learning are determined by its perceived value, which is connected to an individual's belief.

Mwale and Chita (2020, 26) argue, "Most importantly, the fact that all students were in support of e-learning except for the associated challenges shows that in the absence of barriers to using e-learning such as universal access to e-learning platforms, availability of ICT hardware and sufficient skills to use different forms of e-learning, e-learning would be embraced based on both perceived ease of usefulness and perceived usefulness". This is consistent with the findings by Akakandelwa and M'kuluma (2017) about the satisfaction ratings of students who had access to e-learning. Mwale and Chita (2020) contend further that the readiness to adopt e-learning, despite the difficult setting, also speaks to COVID-19's capacity to influence attitudes toward e-learning and, as a result, inspire students to adapt to the new modalities of program delivery. This is due to the fact that while both intrinsic and extrinsic motivation had a considerably beneficial impact on students' self-efficacy, extrinsic motivation characteristics had a major impact on learning (Ayub 2010).

## **COPING STRATEGIES**

Given the plethora of challenges that students were confronted with when they were all of a sudden plunged into e-learning, most of the participants highlighted that they were forced by circumstances to participate in e-learning platforms. On what they employed in order to overcome some of the challenges, students indicated that they employed a number of tactics to access e-learning. One said:

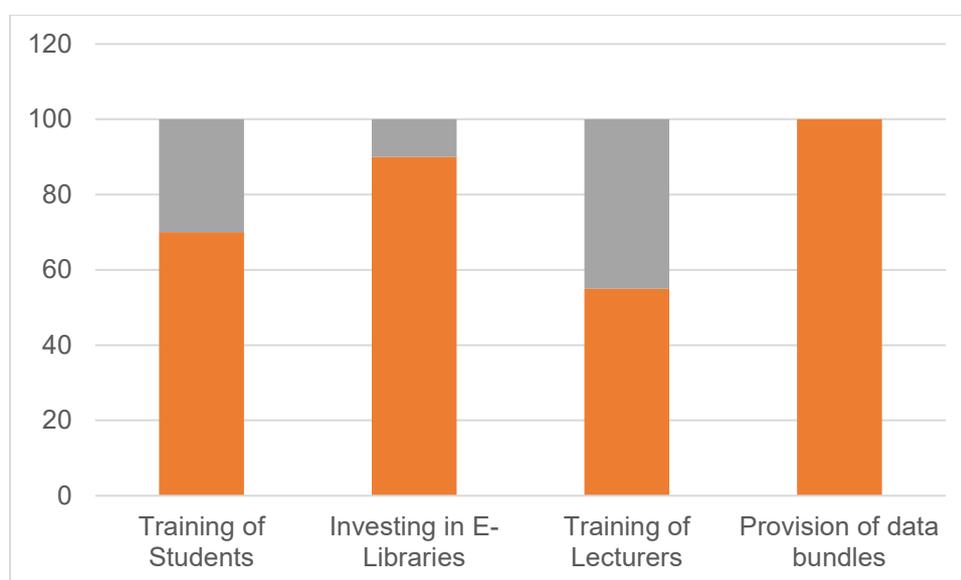
"Those who have access to online learning platforms like Google Classroom assisted us by posting notes, and announcements on our FRS class WhatsApp groups. Some lecturers have been flexible by providing learning materials and announcements on social media platforms that everyone had access to like WhatsApp. We have been using emails for projects supervision and lecturers have been cooperative. Some lecturers asked us to research and sent audios for presentations and this had been helpful in making the learning process cheaper." (Interviewer 5).

The above excerpt indicates that despite the university's insistence on the use of Google Classroom as the official platform, the WhatsApp platform was the most used platform

(Sibanda and Muyambo 2020). Students had to improvise and use WhatsApp as an alternative to Google Classroom, with the same results being attained. Chikoko (2020, 134) demonstrates that the WhatsApp platform was not only the “technology we all wash with” (readily available), but “evidently accessible and user-friendly for all students” (Chikoko 2020, 153). This is consistent with earlier research (Basitere and Mapatagane 2018; Benson and Morgan 2018; Khoza and Mpungose 2018; Mpungose 2019). While some of the lecturers could be viewed as ‘accomplices’ by not insisting on the institution’s official use of Google Classroom, they ensured that issues of inclusivity and social justice in education were realized.

## WAYS OF IMPROVING THE ADOPTION OF ONLINE EDUCATION

Respondents were also asked to suggest ways of implementing online education that are user-friendly. Responses from the questionnaire are shown in Figure 2.



**Figure 2:** Ways of improving the adoption of online education

From Figure 2, respondents were of the opinion that the best way forward in terms of improving the online learning was through investing in online libraries. This was suggested by 90 per cent of the respondents who agreed that the idea of an immovable library has been greatly challenged by the COVID-19 pandemic. As expected, all the respondents (100%) suggested that there was need for the University to help meet the costs through provision of data bundles as this would mean that most students would participate. The issues of training of lecturers and students in terms of how to access online learning and resources like online libraries also got significant support, with 70 per cent supporting the training of students while 55 per cent also supported the training of lecturers to ensure that online learning is fully embraced.

Some students even suggested that the University should engage network service providers through the government to ensure that learning sites like University websites, Google Classroom and online libraries are provided for free or are heavily subsidised. Some also suggested that students and lecturers should both go under training in terms of using facilities for online learning for it to be effectively and widely accepted by both students and lecturers.

Again, Mihailova (2006) found that dealing with queries and preparing for online teaching took more time compared to face-to-face instruction. Online teaching demands more time to prepare and plan; sometimes, more time is spent online (Kebritchi, Lipschuetz, and Santiago 2016).

## **CONCLUSION**

This article discussed the experiences of level 4.2 FRS students at GZU with the intention to find out the students' experiences on the transitioning of the traditional face-to-face teaching and learning to online higher education in the context of COVID-19. The study revealed that despite the difficulties that many students faced in accessing online education, the small number of computers that the University made available for student use, the lack of personal computers among students, the poor quality and availability of internet infrastructure and access points, some people's negative attitudes toward the use of ICT, and some students' resistance to change, there were also some gains. For example, e-learning opened new avenues for both lecturers and students where teaching and learning could happen anywhere and at any time. The teaching and learning process shall never be the same post-COVID-19 era as online education has come to stay side by side with the traditional face-to-face teaching and learning (blended education). In light of the above conclusions, the article makes the following recommendations:

- It is recommended that higher and tertiary education institutions, the private sector, and the government should all play a part in reducing the challenges faced by higher and tertiary education students in accessing educational facilities through online platforms. The government may, for example, offer tax rebates to internet providers who provide subsidies for internet access to university websites and those who provide online libraries for free. The government should also ensure that the remote parts of the country are well connected to the internet and electricity. Private players in the form of Private-Public Partnerships (PPPs) may partner government and institutions of higher learning in the provision of resources like tablets and laptops to assist students at affordable prizes .
- It is also recommended that in the meantime, lecturers must use cheaper and accessible online platforms to improve participation and accessibility. This is a short-term measure

as they wait for robust solutions to challenges posed by COVID-19 in terms of online learning.

- The University should invest in establishing well-resourced e-libraries for effective online learning. It should robustly train students and lecturers on the use of online resources.

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