

**Zimbabwe higher education institutions' preparedness in responding to Covid-19 induced disruptions to education**

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**Abstract**

*This paper explores the preparedness of Zimbabwe's Higher and Tertiary Education institutions and their response to the disruptions to teaching and learning caused by the Covid-19 pandemic. The pandemic affected the education sector worldwide with billions of students being forced to operate from home after their respective governments declared lockdowns. Social measures were adopted to protect learners and lecturers from the spread of the virus. Alternative modalities and strategies of teaching and learning were adopted in order to prevent learning losses to students during the lockdown period. The qualitative phenomenological design was employed to describe experiences that most Zimbabwean institutions of higher learning went through during the Covid-19 pandemic induced lockdown. Purposive sampling was employed to select twenty-eight participants from three conveniently selected higher learning institutions in Masvingo Province. Nine participants each from each institution and one participant from the parent Ministry were involved. Data were collected using questionnaires and interview guides sent through e-mail. The findings indicate that the Ministry, as reflected in its institutions, was ill-prepared for e-learning, notwithstanding the learning that took place virtually during the lockdown. The research concludes that the Ministry of Higher and Tertiary Education, Science and Technology Development (MHTESTD), Zimbabwe should not only encourage its institutions but capacitate them to embrace technology in teaching and learning. To ensure quality education, it is recommended that the Ministry should strengthen the academic, technological and psychological support for lecturers and students as they struggle to adjust to virtual teaching and learning.*

**Keywords:** Covid-19, higher education, higher and tertiary education institution, transition, online

**Introduction**

Globally, the education sector has experienced massive turbulence with millions of students out of colleges and universities as a result of the outbreak of the coronavirus (Covid-19) pandemic. Covid-19 is a health epidemic that developed into a global pandemic following its

emergence in China in late 2019. Its outbreak has heavily affected the lives of billions of people across the world with an expected huge impact on the global economic, social and political lives and national budgets. The World Health Organisation (WHO) declared Covid-19 a Public Health Emergency of International Concern (PHEIC) in March 2020 (World Health Organisation, [2020](#)). Education is one of the sectors which has been heavily affected by the Covid-19 pandemic. According to the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2020) more than 1.5 billion students, 91% of the world's student population, have been affected by the Covid-19 outbreak. In some cases, such as in Zimbabwe, college and university students have not been able to go on campus because the institutions have been closed in order to minimise the spread of the virus.

Huang et al. (2020) warn that lack of public information and awareness of the pandemic and what other countries, institutions and communities do to guard educational opportunities during the pandemic poses a great challenge to education leaders at various levels of educational governance. This affects their level and state of preparedness to combat the challenges related to the pandemic. This is in a context where the sudden and unprecedented Covid-19 outbreak has disrupted life in general and higher education in particular. Many governments globally have initiated the implementation of mitigatory measures. The measures generally included flexibility in quality assurance requirements, capacity building initiatives to ease the transition from face-to-face to online learning, the financial motivation of learners and lecturers, and suspension of student loan payment (Duong, Luo & Wang, 2019). As a result of this, higher education leaders have been forced to improvise on the modes of teaching/ learning during the pandemic. University and college lecturers, especially from developing countries such as Zimbabwe, have however struggled to implement broad-based online teaching as compared to developed countries (Cao et al., 2020).

Generally, online programmes and learning had not been fully embraced. Institutions of learning and people in general appeared so obsessed with the traditional on-campus programmes and face-to-face tuition that they were caught unawares by the Covid-19 outbreak. For instance, some countries had imposed strict regulations regarding online education with others imposing additional constraints that reflected a negative perception of distance learning. In Peru, for example, there was a 2014 higher education law which disqualified professors who attained their doctoral degrees online from becoming faculty

deans (Brown & Salmi, 2020). However, because of the Covid-19 pandemic most countries had to relax their quality assurance criteria to support the swift transition to online education. Most governments, Zimbabwe included, recommended that institutions establish quality online programmes.

Unlike in Zimbabwe, most other countries responded swiftly to address the challenges posed by the Covid-19 pandemic. For example, the central government of China responded promptly when the Covid-19 first broke out. The Government trained 16 million lecturers to deliver teaching via remote platform and guaranteed the provision of network service resources (Ministry of Education of China, 2020). The Chinese Ministry of Education worked with several telecommunication operators to ensure that they provided fast and stable networks for online teaching and learning (Ministry of Education of China, 2020). There were emergency policies issued for quality teaching to mitigate the negative impact of the pandemic on learning. These included a free cloud online learning platform, a free national television channel broadcasting related resources mainly targeting remote areas, and free online lecture guides and textbooks available to all (Chen et al., 2020). The government of China arranged for free online simulation teaching and high quality online courses to more than three thousand universities and colleges. These became operational by 17 February 2020, indicating the guidelines of the nature of online learning, considering the reduced number of learning hours (Ministry of Education of China, 2020). They designed an action plan required to support institutions to strengthen their online education and technological skills as well as helping with psychological adjustment to online teaching. In addition, they also equipped lecturers and students with knowledge on health education, prevention and control of the pandemic.

In developed countries such as the United States of America and France colleges and universities donated to, or loaned devices to students as well as offered them internet bundles for them to access online resources. This was meant to ease the economic hardships experienced by students from low-income families and also to reduce the digital divide between the rich and the poor (Vazquez, 2020). Some institutions offered crash programmes to lecturers and students on how to use digital platforms and how to apply effective online teaching. Wang and Zhao (2020) observed that institutions with fully functioning teaching

and learning services found themselves in a better prepared position to support their academic community in the transition to online education than those without.

The higher education sector in most sub-Saharan African countries including Zimbabwe, face major power supply challenges (Zhong et al., 2020). Such countries' governments need to guarantee power supply as well as stop enforcing internet shutdowns and restrictions, a growing practice to silence political dissent in Africa (Brown & Salmi, 2020). Research in developing countries with low broadband capacity and limited internet access such as Botswana, Cameroon and Angola, found out that opportunities for online learning were constrained, especially in rural areas where most students lacked computers (Zhong et al., 2020). Even worse, in poorer countries, students from disadvantaged groups faced greater difficulties with their colleges and universities struggling to launch distance learning programmes. A study by Daniels (2020) established that poor countries lacked sufficient educational resources, instructional designers, strong institutional capability to deliver the lectures and an adequate understanding of the specifics and distinctions of online education.

Due to the increasing spread of the Covid-19 virus, some countries like the United States, Germany, Denmark, Australia and Taiwan stepped in to support higher education in Africa, during the pandemic period (Wang & Zhao, 2020). They provided funds that enabled the transition to online education in some education institutions. However, institutions' individual capacities and preparedness still needed to be explored, especially in poor sub-Saharan Africa.

Higher education institutions need to support the establishment of effective forms of online teaching by freeing institutional capacities and resources. These resources include tools students and lecturers use to create or access educational content, curriculum resources which directly support students in acquiring knowledge and skills. It also involves professional development resources that support lecturers to develop their skills to teach remotely or augment their capacity to support and guide students on their content as they learn independently at home (Chen et al., 2020).

The provision of infrastructure for online teaching by institutions is an investment that is likely to benefit the student during the current situation (Huang et al., 2020). It also

contributes to the well-being of the student during the crisis by maintaining a sense of normalcy and regularity in an unpredictable situation where the continuity of education activities and functioning of individuals is constrained by the limitation of movement (Chen et al., 2020). Physical infrastructure is necessary. That is, the lecturer needs some room to work from even during the online deliveries. Lecturers also need to be supported with other resources such as computers and internet facilities. Likewise, students also need institutional support to access such gadgets (Ministry of Education of China, 2020). The same would be desirable for Zimbabwean institutions of higher learning.

In tandem with WHO directives and guidelines, on 24 March 2020, the Government of Zimbabwe announced the closure of colleges and universities which were subsequently directed to switch to online learning. Under these sudden directives, the institutions had to prove their worthy through the kind of support they would give to their lecturers and students.

### **Theoretical framework**

Several theoretical frameworks can be employed to explain how individuals and organisations can deal with natural disasters. However, this study was informed by the Theory of Planned Behaviour (TPB) (Ajzen, 1985). The Theory of Planned Behaviour (TPB) has the individual's intention to perform certain behaviour as an essential feature. According to Ajzen (2012) the individual's intention is assumed to capture the motivation that influences behaviour. Ajzen (1985) argues that intentions are determined by three preceding motivating factors, namely; attitude, subjective norms, and the degree of perceived behavioural control. Attitude refers to the degree to which the individual has a favourable or an unfavourable evaluation of the behaviour in question. Subjective norm refers to the perceived social pressure to do or not to do the behaviour. The degree of perceived behavioural control refers to the perceived ease or difficulty of performing the behaviour. Ajzen (2002) postulates that as a general rule, the more favourable the attitude and subjective norm toward a behaviour, and the greater the perceived behavioural control, the stronger should be a person's intention to perform the behaviour under consideration. Intention, in turn, is viewed as one direct precursor of the actual behaviour. However, the level of success will depend not only on one's intention, but also on such partly non-motivational factors as availability of requisite opportunities and resources that represent people's actual control over the behaviour. This

theory helps in understanding the behaviour and actions of institutions, lecturers and students in relation to the shift from face-to-face to online teaching and learning in the context of the Covid-19 pandemic.

Zimbabwe's higher education sector had to have a multi-pronged approach to counter problems caused by the outbreak of the Covid-19 pandemic. Firstly, it had to minimise the morbidity and mortality arising from the virus among university lecturers and students. Secondly, it had to ensure continuity of learning through mitigating the interruption of the students' learning by maintaining quality education to students and their learning environment (Mukeredzi, 2020). Thirdly, it had to safeguard the right to quality education for all students during and after the Covid-19 pandemic, depending heavily on strengthening teacher capacities so as to efficiently respond to the learning needs of learners. Fourthly, it had to support lecturers and students to prevent the spread and transmission of the Covid-19 virus (Mukeredzi, 2020). Lastly, it had to facilitate the safe return to campuses for both students and lecturers after the Covid-19 emergency. Given the above, the study is carried out to investigate Zimbabwe Higher Education institutions' preparedness in responding to the Covid-19 induced disruption to education. The study thus sought to;

- determine the preparedness of the Higher Education Ministry's institutions to transition from face-to-face tuition to virtual learning.
- evaluate the responses by the MHTESTD to the Covid-19 pandemic in line with the WHO requirements.

### **Methodology**

The research used the qualitative phenomenological design to describe the experiences lived by different stakeholders in the Zimbabwe higher education sector in response to the emergence of Covid-19 pandemic. According to Creswell (2013), phenomenology describes or focuses on experiences, events and occurrences to give a better understanding of meanings of what several people experienced. The research design was found to be appropriate as it provided researchers the opportunity to assess the preparedness of the Zimbabwe Higher Education institutions in ensuring smooth online teaching and learning during the Covid-19 pandemic.

### **Sample and sampling procedure**

Convenience sampling was employed to select higher education institutions which participated in this study. The basis for adopting this approach was ease of access to information under Covid-19 restrictive regulations on movement and the availability of participants based on the selected institutions.

A sample of twenty-eight participants was purposively selected from three conveniently selected higher and tertiary education institutions -one university, one polytechnic and one teacher's training college. Nine participants each from the three institutions and one Ministry representative, the Human Resource Assistant in the Secretary's office from Zimbabwe's Ministry of Higher and Tertiary Education, Science and Technology Development (MHTESTD) representing the government and the parent ministry were selected. The parent Ministry representative was coded as Participant 1. From each of the institutions, one management representative each, who was also directly linked to academic issues, was coded as Participant 2, 3, 4. Two lecturers each from each institution were coded as Participant 5, 6, 7, 8, 9, 10 and participated. Six students each from the relevant institutions were also selected as respondents and they were coded as Participants 11, 12, 13...28. According to Cohen, Manion and Morrison (2007) purposive sampling is a technique where researchers handpick the cases to be included in the sample on the basis of the researchers' judgement of typicality or possession of the particular characteristics being sought. In this way, researchers build up a sample that satisfies to the research's specific needs.

### **Instruments**

The study used online questionnaires and telephone interviews to carry out the research in compliance with the Covid-19 regulations. From the parent Ministry, the intention was to find out if the government had enough resources to support its institutions and the budget for the shift to virtual learning. The institutions' management could provide information on the institutions' preparedness for both staff and students. The study also intended to find out from the management if the institutions had enough resources and budgets for the gadgets and facilities to be used for online teaching and learning. The other issue was whether the lecturers and students were fully capacitated for the sudden shift. Lecturers had to answer on their preparedness to carry out online lectures and if they had the required gadgets. They also

had to explain if they had been trained on how to teach using online platforms and their attitude towards the change. Learners' questions were on their preparedness, attitudes and capacitation towards the change from face-to-face to virtual learning. They also had to explain if they had funds for internet services and the gadgets to use during the Covid-19 era. Online interviews and questionnaires allowed participants to express themselves naturally on higher education institutions' preparedness to embrace online teaching and learning.

Before collecting the data, prior informed consent was obtained from the participants, and they were assured of their anonymity and privacy if they participated in the study. Responses from the participants were recorded and transcribed immediately after the interviews and on receipt of the questionnaire responses.

### **Data presentation and analysis**

The data collected from the participants were presented in the form of words and text. The qualitative data were analysed through content analysis. Content analysis is defined as a research method for the subjective interpretation of the contents of texts through the systematic classification process of coding and identifying themes or patterns (Cohen, et al., 2007).

### **Results**

The study sought to establish the extent of preparedness of Zimbabwe's higher institutions of learning and their response to the disruptions caused by the Covid-19 pandemic in education. The thematic approach was used to discuss the results.

Responses from online questionnaires and interviews showed that the Covid-19 pandemic caused a lot of anxiety among higher education stakeholders including the MHTESTD and its affiliate higher education institutions. For instance, on 24 March 2020 higher education leaders in Zimbabwe followed WHO guidelines by first closing all institutions and announcing precautionary measures regarding teaching and learning during the Covid-19 era. Following government instructions, Zimbabwean universities, polytechnics and teacher's training colleges braced themselves for a transition to online learning. As results show this was not without challenges.



### **Theme 1: Preparedness to engage in online teaching**

From the results, most of the participants indicated that the government itself was found to be largely unprepared to handle the Covid-19 pandemic. However, Government directed all higher education institutions to close as the first measure to combat the pandemic. Institutions were to operate virtually using digital platforms to ensure that learning was not disrupted. Material for online lectures had to be developed in order to achieve this project. There were challenges however. Respondents raised the point that most lecturers lacked skills for virtual teaching as they had not been trained. The sudden shift to conducting lectures online left educators especially those with little or no experience of teaching online with a negative impression of the platform.

Responses from university lecturers showed that most universities in the country heeded the call to conduct lectures online. Both lecturers and students expressed some satisfaction that online sessions could enable student-lecturer interaction. Polytechnic lecturers, however, noted that all colleges had suspended learning indefinitely and did not offer online tuition. On being asked as to why they had not heeded to the ministerial call to offer online tuition, Participant 7 from a polytechnic college had this to say,

*The courses we offer are of a practical nature. There is no way we can offer practical, technical and vocational tuition online. Naturally, students need to be physically present on campus where there is sufficient equipment. Given that there is need for equipment for students to practise with, online tuition is practically impossible.*

From the findings, most participants highlighted that higher education leaders had to make sure that quality assurance requirements were adhered to, to ensure a smooth transition from face-to-face to virtual learning. Participants noted that one strategy would be to initiate capacity building for lecturers and students.

Other participants mentioned the need for institutions to provide adequate resources to ensure successful virtual learning. These resources include technological infrastructure necessary for virtual learning such as laptops, radio, television, tablets and smartphones and efficient network connectivity. Lecturers especially mentioned the need for tools and applications such as Google Classroom, Zoom and Microsoft Teams used to create or access educational content.

In line with the above, Participant 1 from the Ministry of Higher Education explained that: “The Ministry was making deliberate effort for the adoption of virtual learning by embracing technology as a tool for teaching and learning but gearing up to teach online takes a significant amount of time and effort.”

Participant 2 from management also indicated that:

*There are many things to take into consideration before moving on to virtual learning like the infrastructure, resources like the gadgets and data needed by both lecturers and students and how to assess the quality of education delivered as all participants will be operating from their homes.*

Participant 5(interviewed) indicated that:

*Due to inadequate or uneven access to technology and other basic resources necessary to change tuition from face-to-face to virtual learning, some lecturers engage their students in a virtual environment but others struggle to.*

From amongst the students, Participant 15 said:

*We come from different backgrounds with some staying in rural areas where we do not have functional broadband access. Others are here in town but are from poor families, which cannot even afford the data to connect to virtual learning. It worries us that changing instruction from face-to-face to virtual learning could worsen equity issues indicating that some measures were not put in place to cater for students both in rural and urban setups.*

Participant 4 from management also added that:

*As the pandemic came without a warning, it was not easy for both lecturers and students to quickly adopt to change as they were used to their traditional way of teaching and learning and some of them are showing a negative attitude towards change, but some have accepted the change.*

## **Theme 2: Responses to the crisis**

From the results of the survey, the Covid-19 crisis presented an opportunity to higher education institutions to implement e-learning platforms. At the height of the Covid-19

pandemic, lecturers did not have a way of delivering learning content to students who were trapped in their homes, indefinitely. While higher education authorities indicated their readiness to transition to the new education system, the main challenge was access to effective online platforms. They also had to consider how well-equipped and accustomed to online teaching their institutions were as well as the lecturers' and students' preparedness to engaging in online teaching and learning.

It was found from the findings that as much as institutions wanted to engage in virtual learning, some lecturers were still ill-equipped and inexperienced to cope with a fast transition to online learning. Respondents highlighted that they were supposed to use platforms like Google Classroom, WhatsApp and Zoom to deliver their lectures but most of them were not competent to use the applications. Within the university under study, some few departments were well prepared to use any of the applications whilst the rest were only familiar with WhatsApp. In support of WhatsApp platform, Participant 3 from the university indicated that: "We welcome the move by our leaders because social media platforms are cheaper and easier to use and also convenient in terms of cutting costs such as bus fare and accommodation, especially in universities".

Participant 2 also highlighted that:

*In this contemporary world, the use of advanced technology is becoming dynamic as we are able to access the library and other books on the internet from home saving time but what is important is for our administrators to assist with the necessary resources and also train both lecturers and students on how to use the platforms.*

At the polytechnic and teacher training colleges under study, the students were still confused with the instruction to migrate to virtual learning as they had not been properly notified of the move.

Results indicate that in response to the Covid-19 pandemic, the Zimbabwe higher education Ministry initially engaged telecommunication companies to provide access to online learning material for disadvantaged students who might not have resources to access the internet. According to The Zimbabwe Herald (2020) these service providers were advised not to charge students when they visited university websites to obtain learning material. It was

however also noted that not all institutions were seriously using online platforms at the beginning.

Respondents from the polytechnic and teachers' colleges said that they were not happy with the Ministry's directive as they felt left out in the original arrangement for online teaching and learning. Respondents felt the Ministry preferred universities to them, and they were thus doing very little in terms of virtual learning.

Participant 9 said:

*It seems the Minister is worried about university students only because as for us, we were supposed to open on the 5<sup>th</sup> of May but nothing is being done to compensate us for the lost time and we were not introduced to online education.*

Participant 7 had this to say:

*To transform to virtual learning seems impossible as most of our colleagues are in the rural areas where it is difficult to get access to the internet because of the geographical location of these places. In addition, some of the students cannot afford the data and gadgets for online education.*

It was however found that although the MHTESTD had advised the mobile network operators (MNO) to provide zero-rated access to university and college students, this only applied to university and college websites. If a student had to use Zoom, WhatsApp, Google or Google Classroom, they were not exempted. Thus, learners had to incur additional expenses to access these services. In fact, the different MNO were offering special data bundles to both students and lecturers who would purchase to facilitate online teaching and learning.

## **Discussion**

The study found out that not all Zimbabwean institutions of higher learning were affected in the same way. As the results indicate, the university seemed better prepared than either polytechnic or teacher's training college. The directive to maintain social/physical distance to mitigate the spread of Covid-19 disturbed the normal functioning of colleges and universities in general.

Results showed that authorities of both public and private education institutions tried to ensure that learners continued to access educational opportunities. Though at different rates, the institutions gradually put in place alternative online approaches for students and lecturers to continue with their lectures where face-to-face lectures were not possible. They also worked out appropriate mechanisms which made the affected institutions to work in a safe environment. These findings are in line with what has happened in most countries where education authorities had to create modalities focusing on completing the on-going academic year and the following one in the event that a vaccine had not been developed.

The strategy developed by Zimbabwe's MHTESTD was however found to be short-term in as far as it focused mainly on mitigating the immediate impact of the pandemic. It focused mostly on public awareness, prevention and control and making sure that learning continued through the provision of remote learning services. Again, although it was a directive from the parent Ministry to adopt and implement virtual learning, some lecturers and students were found to have negative attitudes towards the change. As has been propounded by the Theory of Planned Behaviour, some lecturers and students were willing to change but lacked proper skills and training. Due to lack of preparedness and training there were no infrastructure and resources put in place to cater for online teaching and learning.

### **Conclusion**

It emerged that most colleges and universities in Zimbabwe struggled to migrate to online teaching and learning because of different challenges. This meant that lecturers and students alike found it difficult to access and adjust to the new online learning platform. The study concluded that there was need to develop strategies and mechanisms to strengthen support for all students from different backgrounds. These strategies should ensure continuity of teaching and learning despite the outbreak of the coronavirus pandemic. It was discovered that as much as technological infrastructure was essential for education, there were also other strategies needed during the Covid-19 pandemic period. Such strategies included the re-skilling of lecturers, provision of internet bandwidth and curriculum resources so as to support students as they continue with their studies using online platforms.

### **Recommendations**

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The study recommends that the MHTESTD should share online resources and experiences with its various institutions of higher learning equitably, especially in times of emergency such as the Covid-19 pandemic. Colleges and universities are also urged to share resources and experiences amongst each other. The study also recommends collaboration between institutions of higher learning and the country's mobile network operators (MNO) in the provision of affordable bandwidth for internet access to learners.

Universities and colleges are encouraged to intensify capacity building programmes for lecturers and students in order to fully integrate online teaching and learning. The MHTESTD should also work with content creators for television and radio channels so that they provide tuition to students who are in remote areas via television and radio. There is also need for the parent Ministry to make sure that there is internet connectivity to students in rural areas and data should be subsidised to assist students from poor backgrounds. Institutions need to have positive attitudes towards virtual learning as it has become the new normal during the Covid-19 pandemic. Lecturers and students are encouraged to adjust their minds so as to embrace virtual teaching and learning.

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