

Higher education pedagogy in crisis: Challenges in teaching and learning during the Covid-19 era in Zimbabwe

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Abstract

Covid-19 placed higher education pedagogy in a crisis, particularly in Zimbabwe. This study explores the pedagogical challenges that have been caused by the Covid-19 pandemic in the Zimbabwean higher education system. The study employed the qualitative paradigm and a case study design with three universities in Masvingo province. Seven lecturers and ten students from three universities were purposefully sampled because of their richness in data. Electronic interviews were used to generate data. The major findings from this study were that lecturers faced challenges in employing interactive teaching methods. For example, lecturers in the natural sciences found it difficult to conduct experiments online. Students faced challenges in engaging in group presentations. It was also established that lecturers were sometimes not available online for consultation and this limited interaction between students and lecturers. The study concluded that there were serious pedagogical challenges that had been brought by the Covid-19 pandemic in Zimbabwe. The study recommends that a robust professional development programme on ICT based teaching be developed for lecturers to improve the quality of teaching in the Covid-19 era. Zimbabwean universities should build their own capacities to facilitate and support student learning.

Keywords: Higher education pedagogy, Covid-19 pandemic, teaching and learning, online learning, distance education

Background

The outbreak of the Covid-19 pandemic changed the pedagogical practices (Maphosa, 2021) in higher education and it might never be the same again. The usual face-to-face teaching and learning format was disrupted and universities opted for distance education and online strategies. This has ushered in insurmountable challenges in the practice of higher education pedagogy in many countries including Zimbabwe. Challenges in the teaching and learning in the higher education arena are not a new phenomenon (Bosch, Laubscher & Blankson, 2021). However, with the recent outbreak of the Covid-19 pandemic, the pedagogical challenges that have been brought in the higher education landscape are a cause for concern in Zimbabwe.

The problem of effective pedagogy in higher education during the Covid-19 era has become a crisis. The global outbreak of the Covid-19 pandemic has caused turmoil in higher education pedagogy particularly for beginning students and lecturers (Plunkett & Dyson, 2011), and the Zimbabwe higher education topography has not been spared. Covid-19 was first identified in China in 2019. Subsequently, all countries were cautioned to take responsive care (Petrie, 2020). The major strategies for public care and health protection included hand-washing, wearing face masks, physical distancing, avoiding mass gatherings and assemblies.

Many countries immediately introduced lockdown measures so as to flatten the curve and control the transmission of the virus (Sintema, 2020). Lockdown measures meant people were to stay at home all the times. All non-essential activities were suspended. In educational circles, the traditional lecture method and other face-to-face methods were stopped. Due to the total closure of higher education institutions, emergency strategies such as distance education and online strategies were adopted in the teaching and learning of students (Basilaia & Kvavadze, 2020). However, both students and lecturers faced several challenges in using these strategies. In Zimbabwe, only an insignificant number of universities had been using distance education pedagogy like the Zimbabwe Open University. Most of the universities were mainly employing face-to-face contacts. Most lecturers and students seemed not to have background knowledge on how to engage in online lectures.

Although some universities in Zimbabwe had adopted the blended learning model, lecturers and students could not cope with the drastic and sudden measures of online teaching and learning (Mbunge, Fashoto, Akinnuwesi, Gurajena, Metfula & Mashwama, 2020). The basics of online teaching and learning had not ventilated the veins of most lecturers and students. In line with the above observations, literature points to the serious challenges that were experienced in assessing students on practicum in Zimbabwe (Moyo, 2020). The abrupt closure of schools created an assessment conundrum for teacher educators with respect to supervision and assessment of student teachers on practicum under the school of education in one of the Zimbabwean universities (Moyo, 2020). Student teachers on teaching practice have to be visited in their schools and classrooms so that they are observed while teaching. The purpose of supervision is not to collect marks but to engage constructively with the student and reflect on effective teaching strategies. Online teaching and learning was thus found not to be valid in the assessment of teacher competencies for student teachers (Moyo,

2020). It is against this background that the current study sought to explore the challenges encountered by students and lecturers in universities when they switched to online learning.

Statement of the problem

Institutions of higher learning the world over are undergoing teaching and learning crisis because of the Covid-19 pandemic and Zimbabwe is not spared. Universities, in particular, have been forced to switch to distance education and online learning. Many of these institutions were unprepared for this move and this has resulted in quite a number of challenges (Marevesa & Mavengano, 2021). Universities have joined the medical fraternity in manufacturing sanitizers and other Covid-19 related materials. This has however not helped to bring sanity in methods of teaching and learning. Although there are vaccines that are being used around the world to fight the virus, apparently there are no higher education pedagogical vaccines to treat the declining quality of teaching and learning in higher education. One wonders whether universities can build back better towards improved systems of teaching and learning. In Zimbabwe, studies were done on the challenges of distance learning in the Covid-19 pandemic which pointed to technological challenges, pedagogical challenges and social challenges (Gurajena, Mbunge & Fashoto, 2021). However, those studies did not go further to look at the nature of pedagogical challenges faced in the teaching and learning in universities. The current study seeks to find out the kind of pedagogical challenges being faced in teaching and learning using online strategies. The problem can be stated as follows: What higher education pedagogical challenges are being faced in teaching and learning during the Covid-19 era in Zimbabwe?

Research questions

- What are the challenges faced by lecturers in their teaching during the Covid-19 pandemic period?
- To what extent does Covid-19 pose challenges to student learning?
- How does lack of infrastructure in Zimbabwean universities affect effective teaching and learning in the Covid-19 era?
- How does poverty affect effective teaching and learning in higher education during the Covid-19 era?

Conceptual framework: Higher Education Pedagogy

Pedagogy may be commonly defined as “the art and science (and maybe even the craft) of teaching” (Menon, 2016: 9). The roots of pedagogy can be traced back to the seventh century Europe during the introduction of organised education at monastic schools which were also known as cathedral schools (Knowles, Holton & Swanson, 1998). However, viewing pedagogy in this way fails to honour the historical experience and connect crucial areas of theory and practice. To understand the term fully, one needs to explore it from the context of accompanying learners, caring for learners and bringing learning into life (Encyclopaedia Britannica, 2015). The term pedagogy is further defined by Barton (2019) as the study of teaching; how content is presented and delivered to a learner. It is the creation of an educational process that leads to knowledge gain in the learner. In the Zimbabwean context, teaching and learning in conventional universities has been mainly dominated by face-to-face methods where the transactional distance between the lecturer and the learner is closed. The change from face-to-face to online learning has motivated the current study to explore the challenges emanating from such changes.

Theoretical framework

This study is undergirded by the Distance Education theory. Keegan (1986: 7) in his book, *The Foundations of Distance Education* synthesised several conceptions of distance education and developed a list of six "defining elements." These are the fundamental elements that guide teaching and learning through distance education.

The first element is that there is physical separation of the teacher and the learner, distinguishing it markedly from traditional, lecture-based instruction. Teaching at a distance is characterised by the separation of the teacher and learner and of the learner from the learning group, with the interpersonal face-to-face communication of conventional education being replaced by an impersonal mode of communication mediated by technology (Kegan, 1986: 8). In line with the current study, challenges might arise when the lecturer tries to use technology in delivery of content to a student online. Moving out of the traditional method of face-to-face might pose challenges of how to structure the matter to make it palatable to the student. The second is the influence of the institution. In the same vein, institutions might lack a support system to teaching and learning through technology. The use of technical media is the third defining element of distance education. Media carry the instructional content as well as unite teacher and learner.

The fourth element in Keegan's list is the provision for two-way communication between teacher and learner, ideally with the potential for student-initiated contact. Students need to consult lecturers who should be available online all the time. If students fail to get assistance on unclear issues, learning is hampered. Occasional meetings, face-to-face, is the fifth characteristic. Face-to-face meetings need to be replaced by other interactive methods between the lecturer and the student. Lecturers who fail to think of strategies of engaging students in meetings, fail to close the learning gap. The final element in Keegan's definition has been debated as optional by many researchers. This is the "industrialisation" of education, a concept based on the administrative and management aspects of teaching and learning at a distance (Kegan, 1986: 7- 8). Where the students used to do practical activities, there is a challenge of how to engage them in experiments, practicum, among others. So it becomes difficult to make learning real. All these six elements are critical to making teaching and learning effective in the Covid-19 era. Lack of these key elements creates a void and a crisis in higher education pedagogy (Kegan, 1986: 7- 8).

Technological development has facilitated the philosophy of technology mediated distance learning. It is the responsibility of lecturers to make instruction effective to suit the ever changing Covid-19 environment. The whole issue is centred on the need to reduce the distance between the lecturer and the student that has been caused by the lockdown during the Covid-19 crisis. Reducing such transactional distance brings life back to effective higher education pedagogy. The theory is relevant for the present study since it highlights the need for effective teaching and learning using distance education and online strategies. Effective teaching involves using the ideal pedagogy at different times, in different contexts to support the very best learning outcomes.

Literature review

Institutions of higher learning in Zimbabwe were hard hit by the disruptions triggered by the outbreak of the Covid-19 pandemic, particularly by the change in their mode of delivery. The traditional face-to-face mode of instruction in higher education was hit hard by the outbreak of Covid-19 (Marevesa & Mavengano, 2021). In the same vein, it is argued that the Covid-19 pandemic caused bewilderment concerning Zimbabwe's university education mode of delivery (Sibanda & Muyambo, 2020). The spread of Covid-19 and its prevention protocols

of lockdown measures set by the World Health Organisation, brought in challenges to the face-to-face delivery mode that had been used since time immemorial. Universities, particularly in Zimbabwe, had no choice except shifting from the traditional face-to-face to an online teaching and learning approach (Marevesa & Mavengano, 2021). The issues of preparedness for institutions, lecturer capacity and student readiness seems to have not been adequately addressed.

Literature points to a myriad of challenges resulting from lockdown measures instituted by governments to curb the spread of Covid-19. Students faced economic, social and psychological repercussions on their life patterns while they were away from the normal schedule of university calendars. They have become vulnerable to online exploitation. Challenges to do with accessibility, affordability, flexibility, learning pedagogy, life-long learning and educational policy (Murgatroid, 2020) have been identified as draw backs in higher education teaching and learning. Quite a number of countries have substantial issues with internet connection and access to digital devices and Zimbabwe is not spared. Since Zimbabwe is a developing country, students from poor families are facing economic and accessibility problems due to Covid-19. They are unable to afford online learning devices like laptops and smart-phones. They cannot afford to purchase equipment to perform experiments in their homes. Practical subjects have become a challenge for most students (Pokhrel & Chhetri, 2021).

The use of relevant and suitable pedagogy for online education demands expertise and exposure to Information and Communication Technology (ICT) for both lecturers and students. Some of the online platforms that are being employed to teach students include unified communication and collaboration platforms such as Microsoft Teams, Google Classroom, Canvas and Blackboard, which allow the lecturers to create educational courses, training and skill development programmes (Petrie, 2020). Pedagogy available and used for face-to-face learning is not feasible for online learning. Though a range of pedagogies have been devised for online and distance learning, teachers who are technologically backward lack literacy and proper professional development and training to assist students effectively (Sintem, 2020). Some academically competent learners from economically disadvantaged background are unable to access and afford online learning. The level of academic performance of the students has dropped due to reduced contact hours and lack of consultation with lecturers on needy areas (Sintem, 2020).

Student assessments are carried out online, with a lot of trial and error, uncertainty and confusion among lecturers and students. Authentic assessments and timely feedback which are crucial to the students seem to be lacking due to lack of online marking competencies by lecturers (Doucet et al., 2020). The challenge gets worse with large classes. In the same vein, assignments and practical tasks are carried from home so it is challenging for lecturers to find the authenticity of the work and the actual learning taking place during the learning process (Petrie, 2020; Sintem, 2020). The current study aims to establish challenges lecturers face in their teaching and marking is part of teaching. Some universities lack anti-plagiarism soft wares. Appropriate measures to check plagiarism by many institutions have put more confusion than order in assignments, dissertations and projects (United Nations, 2020).

Even before the Covid-19 pandemic, the world was experiencing a learning crisis. The Learning Poverty rate in most developing countries was very low with only 53 percent fitting well in the knowledge economy (World Bank, 2020). With increased pressure on the economic scale, a small proportion of students in higher education can meet the ICT needs and Wi-Fi bandwidth and connectivity. Increased and unstructured online learning has exposed students to potentially harmful and violent content (Pokhrel & Chhetri, 2021). In addition, during the Covid-19 pandemic, students with special needs having learning difficulties such as hearing impairment, visual impairment and mobility disabilities could not get the support, training and guidance they required (Basilaia & Kvavadze, 2020).

Research methodology

This was a qualitative study based on the lived experiences of participants (Cohen, Manion & Morrison, 2011). Qualitative research places emphasis upon exploring and understanding “...the meaning individuals or groups ascribe to a social or human problem” (Cresswell, 2014:4). The problem under investigation in this study is on pedagogical challenges in higher teaching and learning during the Covid-19 era. Using a case study design, seven lecturers and ten students from three universities were purposefully sampled because of their richness in data (Patton, 2002). The researcher is a part time lecturer in three universities and used personal contact list database to source for contact details of both students and lecturers in the three universities in Zimbabwe in Masvingo province. Literature notes that there are many examples of using existing online interactions as research materials. Interviews can be conducted by phone (Lupton, 2020) and this was the case in this study to make use of the ‘hands-off’ mode. Electronic interviews were used to generate data (Bampton, Cowton &

Downs, 2013). The researcher obtained permission from the interviewees to use the content for academic purposes. After clarifying on their time availability, twenty minutes interview sessions were organised on the phone. The participants indicated that they were comfortable using their phones and their voices were recorded using a phone. The analysis followed the principles of content analysis. Content analysis involves “identifying, coding, categorising, classifying, and labelling the primary patterns in the data” (Patton, 2002: 463). Themes emerged as mainly categorical, using content analysis, which involves “a careful, detailed, systematic examination and interpretation of a particular body of material in an effort to identify patterns, themes, biases and meanings” (Berg, 2007: 303-304).

Findings

Student related challenges

Quite a number of student challenges were raised. Both students and lecturers echoed the following sentiments:

Lecturer 4: Students find it difficult to develop their own driving questions but want to remain passive recipients. Knowledge creation thus remains a big issue.

While it is assumed that students of today are digital natives the world over, lack of exposure has affected students in the Zimbabwean context.

Student 8: We are used to doing group presentations while others are listening and then they comment. It is no longer the case. We failed to engage in such presentations because instruction was just one way.

Lecturer 2: The group presentation method has been an effective method in our traditional teaching and learning in higher education. Lack of knowledge of how to create groups and then presenting given tasks online has become a big challenge to students.

The problem of employing group method in online lectures came out loud and clear. A major problem related to learning in virtual environments is that, in group work, certain phases of problem-solving may be so difficult that the productive sharing and elaboration of knowledge through electronic tools is almost impossible. Hansen, Dirckinck-Holmfeld, Lewis and

Rugelj(1999) as cited in Tynja “la” and Ha “kkinen, (2005) have reported that one of the pedagogical challenges in an initial problem setting phase, computer conferencing was not adequate in enabling interactivity. While these studies were done way back in Finland, the findings remain relevant to Zimbabwe as a developing country that started engaging in online lessons recently.

Student 1: I live in rural areas where there is no electricity and internet connectivity. It is extremely hard for me to travel to places where I can find these services in this lockdown period as no movement is allowed.

Lack of internet connectivity hinders interaction between the lecturer and the student. The issue of lack of contact between the student and the lecturer shows dearth in terms of teaching and learning processes.

Student 2: I come from a very poor family and my parents cannot afford buying Wi-Fi bundles for me, let alone a smart-phone.

Emerging from the voice of the student was that there are basic materials that are required to initiate the teaching and learning process whose absence causes a serious learning challenge. Wi-Fi is critical as a medium to initiate and facilitate the interaction process.

Lecturer 6: Students normally understand the matter when you explain to them face-to-face. This fashion of sending messages is giving them serious challenges. Some find it difficult to comprehend and you can see this in the quality of discourses in their assignments.

The lecturer here echoed the sentiments that some students might fail to understand content that is sent through messages. Matter that is transmitted to students without clear explanation might not be clearly understood.

Student 10: Covid-19 has caused a lot of restrictions in our learning as students. Where you do not quickly understand, there is nobody to scaffold you. You remain in the doldrums. This is one of the biggest challenges.

The students took the issue of restrictions in learning is being taken as a serious drawback. Students pointed out the need for close support system that would help them in times of need. Lack of such support creates a void that becomes difficult to fill during the learning process.

Lecturer 3: Educational discourses require a language that frames the quality of the instruction during the teaching and learning process. Students have challenges in framing that kind of language in a Google classroom lecture. Pedagogically speaking, quality begins with the ability of the students to critique, which is the heart of the learning process. I do not see them being comfortable walking the walk through separated transactions.

The quality of instruction matters in the process of teaching and learning. The sentiments from the lecturer show that discourses that are easily facilitated during face-to-face are not easily substituted by means of online learning. Lack of such frequent interactions that enhance understanding is cause for concern and becomes a broken bridge for quality teaching and learning in higher education.

In line with the sentiments raised by the participants, the United Nations (2020) highlights that Covid-19 has caused a crisis among student learning. It goes on to argue that the Covid-19 pandemic has created the largest disruption of education systems in history, affecting teaching and learning in higher education. The crisis is exacerbating pre-existing education disparities by reducing the opportunities for many of the most vulnerable students, those living in poor or rural areas, refugees, persons with disabilities and forcibly displaced persons, to continue their learning (United Nations, 2020).

Infrastructure based challenges

Infrastructure challenges also ranked high among the myriad of challenges that were raised. Lecturers and students lamented the following:

Lecturer 3: Our University lacks the requisite infrastructure for us to operate efficiently using online lectures. Even the system of submitting assignments is not user friendly.

Student 7: ICT has not been properly set for both lecturers and students and most planned lectures abort.

Lecturer 6: Our systems in the university do not provide students with the opportunity to post assignments on their portals. Rather, students send their assignments to emails of lecturers. This becomes big business to the lecturers who should download all the assignments at their own expense. After

marking, the lecturer has to post back the assignments at their own cost again. There is no preparation for this method of teaching at all.

Student 9: Some of us are doing practical programmes which need laboratories for most of the lectures. Now being placed in a situation where you need experimental methods and you do not find them causes learning crisis. You need to test certain chemicals and see their reactions. How does this happen in this kind of a scenario?

The issue of infrastructure came up as a crucial matter for effective online teaching and learning. When the university lacks a proper set up of the system then teaching and learning cannot take place easily online. Most Zimbabwean universities struggle to put in place adequate infrastructure. In the higher education sub-sector, while online learning has generally taken place through recorded lectures and online platforms, some universities have postponed learning and teaching until further notice, due to the lack of information technology (IT) infrastructure for both students and teachers (United Nations, 2020).

Poverty and ICT related challenges

Effective teaching and learning in higher education is highly affected by poverty that has been caused by the Covid-19 pandemic. Poverty was cited as one of the most enormous challenges that affect the quality of the interaction between the lecturer and the student in their sharing of content. Students revealed the following:

Student 10: My parents are just poor and cannot afford all these expenses.

Student 7: Are we going to get a university for the poor in this world of Covid-19?

Student 6: My hopes to continue with education are now doomed and I do not foresee myself continuing with my degree. I cannot just meet the expenses.

Student 5: We lack adequate resources to manage purchasing laptops, ICT gadgets, internet and the like.

Student 3: We are using Google Classroom for our learning. However, our university made a situation where only paid up students would join the Google classroom sessions.

Student 3: You find only 2 students out of a class of 45 attending the Google classroom lecture. The rest are facing challenges. Data bundles to remain in the lecture are a challenge particularly to most of us in abject poverty.

Participants are clearly pointing to the fact that some students would be absent from the lecture series that will be conducted online. Being out of the lecture means not learning at all so it becomes difficult to tell how the student will grasp the concepts being taught. The lecturer is placed in a catastrophic position of how to monitor the learning of students who do not attend lectures.

Student 7: Lecturers have also tended to use WhatsApp groups for teaching. The use of WhatsApp group for the class does not help much. The same message is sent to all of us and then it is difficult to be given individualised instruction.

The online teaching and learning methods that are being used do not suit the economic status of most students. Students from poor backgrounds cannot manage to purchase data bundles for use during learning. Those who need individualised instruction cannot get it even when they need it due to lack of bundles to deepen the interaction with the lecturer. Literature argues that students are challenged engaging with the frontiers of ICT knowledge at the cutting edge of their disciplines. They lack training in ICT skills and competencies to reach excellence (Matthews, McLinden & Greenway, 2021).

The pandemic has pushed the world into the deepest global recession which will have lasting effects on higher education pedagogy (United Nations, 2020). Poverty is a cause for concern not only in Zimbabwe but the world over. The 21st Century demands that poverty has to be uprooted from society in a bid to improve the performance of students. Sen (1999:87) asserts that poverty blocks access to basic goods and services in both developed and the developing worlds. Townsend (1979:31) defines poverty as, “Lack of resources to obtain the type of diet, participate in activities and having poor living conditions and amenities which are customary or are at least widely encouraged or approved in the society to which they belong. Coley (2013:4) posits, “Poverty and related disadvantages involve many aspects in students’ lives that affect both the educational opportunities they will have and outcomes that they will likely experience.”

Lecturer challenges

Lecturers are the key drivers in the teaching and learning process in the higher education topography. There are basic methods of teaching that have to be employed in science and these seem not to be used online. The Covid-19 era has rather placed most lecturers in a teaching dilemma. Some lecturers lack dexterity in the use of ICT based teaching methods. Both students and lecturers made several remarks to this challenge. They had the following to say:

Lecturer 2: Some lecturers have big challenges using ICT in teaching. They lack professional training in it. Creating groups online is an enormous challenge.

Student 10: We are used to experimenting in our subject area. We test various soils and substances. It is highly practical and scientific by nature. In doing experiments, we require a laboratory and the experimental equipment. This is not possible online.

The scientific method of teaching is fundamental in the delivery of programmes like agriculture, geography, biology, chemistry, among others. The method requires that one observes and tests before making a statement of fact. This is the main method scientists use when asking and answering questions (Hudson, 2016). Lack of the scientific method of teaching where it is supposed to be employed leads to ineffective teaching and learning.

One of the lecturers raised issues to do with assessment challenges and lamented:

Lecturer 4: It takes me quite some time to mark one assignment online. Inserting in-text comments takes me quite some time and guiding students accordingly is one of my biggest challenges. Some of my courses even require multiple choice items. I cannot easily set and mark them online. Even inserting diagrams on the questions that I ask is a challenge for me. So my assessment might not cover all the issues that I want to, given my limitations.

While assessment plays a powerful role in student learning and is the major driver to change the way students study and focus on their course content, lecturers seem to point to their deficiencies in online assessment. The importance of assessment is reiterated in the definition of assessment by Huba and Freed (2000: 8) who say assessment is “the process of gathering and discussing information from multiple and diverse sources in order to develop a deeper

understanding of what students know, understand and can do with their knowledge as a result of their educational experiences; the process culminates when assessment results are used to improve subsequent learning.”

Student 3: The kind of marking that you see in your assignment leaves a lot to be desired. There are no guiding comments at all. You just see a mark. Most lecturers lack literacy in terms of online marking.

Student 4: It takes time before getting feedback from lecturers. They take their time yet you will be curious to know how you would have performed.

Feedback is the fulcrum of all learning at whatever level. Some lecturers find it difficult to give in-text comments and dwell on summative feedback. Limited feedback leads to poor quality learning. It is argued that limited online feedback fails to take into consideration the need for student and lecturer interaction (Selvam, 2020). It is thus important to note that summative feedback only does not make learning effective. Continuous feedback increases interaction and increases success in teaching and learning (Baran, Correia & Thompson, 2013 cited in Pete & Soko, 2020).

Lecturer 7: It is extremely difficult to depart from our old ways of teaching. The didactical and instructional methods of teaching that we are used to are no longer relevant in this era. We are really in a dilemma.

Lecturer 5: Teaching and learning in the lecture room looks at the interaction patterns that aim at changing the cognitive processes of the student. A lot of cues are used in the process. The distance that has been created by Covid-19 does not allow the two parties to see one another closely. The lecturer cannot use body parts to approve thinking styles of students.

Teaching and learning is not about sending messages to someone you do not know or see. It is about getting closer to one another in terms of knowing the face and the character. Some messages are passed on using cues depending on the nature of the person. Online teaching lacks that medium of communication. The participants showed that there is lack of dialogue in online teaching and learning. Lack of such a critical process does not stimulate students to think and to re-think the former thoughts. Openness in the dialogical process is the fountain to critical thinking, which is the goal of higher education teaching and learning.

Lecturer 3: A lot of evaluative processes are demanded during the lecturing process. Formative and summative evaluation is needed in order to proceed with concepts and matter taught. With the large classes that lecturers have at university level, individualised instruction online is not easy.

Lecturers clearly pointed out that giving individualised instruction is not an easy task while teaching online. Carrying out step by step evaluation is also complex. Teaching without effective evaluation processes might not help students to develop fully.

Lecturer 1: It is interesting to note that deans of faculty send you messages wanting to know how much you have covered. As lecturers, we just send information that pleases them. You do not know whether all the students who started the Google classroom lecture with you are still in the lecture. Some would join and move out. You cannot be checking on all this all the time.

Both lecturers and students came out clearly on the nature or challenges that are faced during online teaching and learning. Lack of knowledge of using online material was pointed out as a great limitation to effective online teaching. Both students and lecturers clearly showed that they have paucity of knowledge and lack dexterity in online issues.

The above findings concur with literature which highlights that it takes lecturers a new set of skills to contextualise and develop high quality digitalised e-content for online teaching (Saha, 2021). Lecturing staff of all backgrounds and ages have had to prepare and deliver their classes from home, with all the practical and technical challenges this entails, and often without proper technical support (Hodges, Moore, Lockee, Trust & Bond, 2020). This is a very big challenge. On top of that, a significant challenge for lecturers in higher education has been their lack of pedagogical content (Shalman, 1987) needed for teaching online (Angeli & Valanides, 2005; Kali, Goodyear & Markauskaite, 2011; Ching, Hsu & Baldwin, 2018). Lecturer challenges include lack of the pedagogical foundations and knowledge of principles needed to design for, and facilitate, meaningful online learning experiences. The issue of the need for lecturer presence in all the online teaching experiences is critical. This only works if lecturers have the capacity and knowledge of online skills (Rapanta, Botturi, Goodyear, Guardia & Koole, 2020).

Conclusions

The study concluded that lecturers faced challenges in employing teaching methods like scientific method in programmes where experiments have to be conducted before coming up with facts. It was revealed that lecturers were not always available online for consultation and that limited the interaction between students and lecturers. Students also faced challenges in engaging in group presentations and thus the group method was not being dealt with fidelity. Lecturers lacked basic training in online teaching and learning and assessment. Online teaching and learning was not being done with the tenacity it deserves due to lack of competencies required. It also emerged that students in deprived contexts were failing to attend some of the lectures due to lack of basic requirements. The quality of the feedback lecturers gave online was poor and showed lack of competence in using ICT for instructional purposes. The study also concluded that suitable pedagogy and platforms for effective teaching and learning in higher education need to be explored. Internet bandwidth was relatively low and data packages were costly in comparison to the income of the people in Zimbabwe, thus making lecture attendance very low. Higher education institutions lacked the capacity for student support to make teaching and learning effective.

Recommendations

Universities need to develop through workshops, the online communicative competences of lecturers so that they share subject or discipline specific knowledge easily with students. Lecturers need to be assisted to navigate these challenging times and emancipate teaching and learning that have been plunged into a crisis as a result of Covid-19. University leadership should provide an incremental and robust professional development programme to lecturers on ICT based teaching as a critical move towards improving the quality of teaching in the Covid-19 era. University deans and chairpersons should raise awareness among academics and students and enhance their exposure and experiences that are useful for instruction to take place effectively. Workshops on reflective practice should be conducted so that academics make changes in their approaches in a systematic manner so as to support students in their learning. The lesson learnt from the Covid-19 pandemic is that lecturers and students should be oriented on the use of different online educational tools. Policy-level intervention is required to improve this situation. There is need for higher education institutions in Zimbabwe to build the necessary support system so that effective teaching and learning is realised. The study recommends that a robust professional development programme be initiated for lecturers on ICT based teaching so as to improve the quality of

teaching in the Covid-19 era. Zimbabwean universities should build their own capacities to facilitate and support student learning.

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