Campus and Classroom Based Higher Education: The Effects of Covid-19 on Teaching and Learning in Zimbabwe.

Evans Magaisa[1], Tasvika Moyo[2], Engelbert Chamunorwa Wilson[3], Makokoro Paradzai Prince[4] , George Shava[5]

[1]Department of Construction Economics and Management, National University of Science and Technology, Zimbabwe
[2]Zimbabwe Republic Police Bulawayo Professional Updating Centre
[3]Zimbabwe Republic Police SARPCCO Centre of Excellence, Harare.
[4]Department of Technical and Engineering Education and Training, National University of Science and Technology, Bulawayo, Zimbabwe.
[5]Department of Technical and Engineering Education and Training, National University of Science and Technology, Zimbabwe

DOI: https://doi.org/10.47772/IJRISS.2023.7504

Received: 24 May 2022; Accepted: 26 December 2022; Published: 19 May 2023

ABSTRACT

The coronavirus (COVID-19) pandemic significantly affected the mode of delivery in higher education worldwide, with Zimbabwe not being an exception. The goal of this study was to understand how the coronavirus pandemic positively and negatively affected teaching and learning in higher education in Zimbabwe. Literature on how higher education in Zimbabwe has been operating before the pandemic was reviewed. A further attempt was made to understand how COVID-19 changed teaching and learning in higher education institutions in Zimbabwe. In order to understand this, firstly an effort was made to appreciate how the Government reacted in a bid to control the spread of the pandemic. Secondly, the effects of the actions of the government on teaching and learning in higher education institutions were assessed. Thirdly, adaptation techniques adopted by higher learning institutions in order to survive in the new normal situation were probed. The inevitable, new strategies, which include an increase in the use of distance education, e-learning, online teaching, were appraised in order to realize their positive and negative effects on the achieving of student outcomes. The study concluded that the most significant effects of COVID-19 on teaching and learning in higher education in Zimbabwe are delayed syllabus coverage by instructors, compromisation of students' right to quality education, lack of sufficient resources for standardised learning of students, level of literacy in the computer technology on both instructors and learners and additional costs in learning such as acquiring e-learning gadgets, WIFI and internet accessibility. However, higher education benefited from the emergence of COVID-19 in advanced use of ICT, globalisation in networking by students in various Institutions through online learning and innovation by students through opening of learning forums such as Google classroom and student mobile libraries. The study advocates for continued use of E-learning methods in teaching and learning to counter COVID -19 consequences, adoption of all teaching strategies in Higher and tertiary education and maximum use of ICT in teaching and learning for sustainability. The findings will benefit Ministry of Higher and Tertiary Education, Universities and other institutions of higher learning and research boards in Academic Institutions. Being only based on the review of literature carried out as a snapshot of an ongoing situation, the study recommends an empirical inquiry for further research, to potentially more deeply interrogate the effects of COVID-19 on both students and educators.

Keywords: Coronavirus pandemic, Government, Higher education, Zimbabwe

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS |Volume VII Issue IV April 2023

INTRODUCTION

Sitting at the apex of the education system and supporting all the lower levels of education, higher education is a catalyst for economic transformation, which lies at the nexus of growth, jobs and competitiveness, preparing professionals and skilled labour as well as serving as an incubator of research (World Bank [WB], 2017). Mahulae, Lumbanraja & Sihaan (2020) concur that the success of educational institutions in carrying out their roles in producing quality human resource output is very important in creating the next generation and is centred on the interaction between students and educators.

Having begun in Zimbabwe in the 1950s with the establishment of the University College of Rhodesia, now the University of Zimbabwe, the foundation of the interaction between students and lecturers in higher education is traditional ways of imparting knowledge to students, that is on-campus and face-face teaching (Kurasha, 2015: 1). However, due to technological advancement, teaching and learning in higher education institutions internationally has been going through a gradual, continuous evolvement from the traditional face to face teaching to blended learning, that is a combination of face to face and online teaching (Kastner, 2020: 1). However, Zimbabwe has been slow in the transformation process and higher education has continued to be highly dependent on campus-based teaching and learning (Kujeke, Thomas &Nyaruwata, 2014: 2273).

The Corona Virus Disease 2019 (COVID-19) has disrupted socio and economic activities across the world at a lightning speed (Mukute *et al*, 2019: 1). The outbreak of the pandemic has presented the biggest crisis in the history of education, which has seen many schools, universities and other educational institutions either partially or completely closed in many countries (Karakose, 2021: 1). In Zimbabwe, the out-break of the COVID-19 pandemic disrupted traditional forms of teaching and learning centred on face to face and in-class learning (Maphosa, 2020: 1).

However, internationally, Coman*et al* (2020: 1) note that there was a rapid adaptation by higher education institutions for exclusively online teaching and learning. Karakose (2021: 1) further argues that the crisis actually offered significant opportunities to redesign higher education as well as develop and implement effective teaching and learning strategies. This paper therefore seeks to, through interrogation of the relevant literature; get a deeper understanding of both the positive and negative effects of the COVID-19 pandemic on campus and classroom-based teaching and learning in higher education.

Campus based classroom teaching and learning

Higher education in Zimbabwe began in the 1950s with the establishment of the University College of Rhodesia, now the University of Zimbabwe, on the foundation of traditional ways of imparting knowledge to students (Kurasha, 2015: 1).The traditional forms of delivery utilise teacher-centred methods and techniques in which the transmission of knowledge and information is through lectures or discussions requiring the physical presence of both the lecturer and the student (Belias*et al*, 2013: 75). Traditional teaching is teacher directed, that is, students are taught in a manner conducive to sitting and listening (Gurudeo, 2016: 1).

Alternative forms of teaching and learning

The incorporation of information and communication technologies, including the internet, have opened up new possibilities for everyone, in school and lifelong learning, to easily access information, ideas, curricula and tools that were previously not easily accessible to them (United Nations Educational, Scientific and Cultural Organisation [UNESCO], 2016: 12). Because existing universities were not unable to cope with the demand for higher education, In Zimbabwe, alternative forms of delivery were by the establishment of the Zimbabwe Open University (ZOU), a distance learning and open institution, to provide flexible, relevant, accessible and effective higher education (Dzvimbo, 2015: 188). Parallel to traditional, campus-based

classroom teaching, the other modes of delivery are now common in modern teaching, and discussed as follows:

THE COVID-19 PANDEMIC

In December 2019 in Wuhan, China, the coronavirus disease 2019 (COVID-19) emerged, being caused by a new coronavirus that previously had not been identified in humans (World Health Organisation 2019: 2). The pandemic, which causes Fever or chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, diarrhoea (Centre for Disease Control and Prevention [CDC]. The pandemic rapidly raged around the world, presenting tough choices to national and regional governments, local communities, families, businesses as well as health and school systems, forcing them to make difficult decisions (Committee for the Coordination of Statistical Activities [CCSA], 2020: 3).

Government interventions to control the spread of corona virus

In response to counter the spread of the coronavirus, the government of Zimbabwe implemented a raft of public safety rules and regulations, (Muchanga et al., 2020). The following are some of the measures taken:-

- Wearing of face masks in public and indoor spaces.
- Maintain at least six feet physical distance from one person to the other.
- Restrictions of large gatherings.
- Campaigns to encourage citizens to avoid unnecessary movements as well as enforcement of national lockdowns.
- Vaccination against the coronavirus.

It is noteworthy that the measures implemented impacted the efficiency delivery of education at institutions of higher learning in the country which were largely depended on face to face learning. Institutions of higher learning had to quickly adapt to the prevailing situations against unfavourable economic environment.

CONSEQUENCES OF THE PANDEMIC ON HIGHER EDUCATION IN ZIMBABWE

The closing of schools and banning of public gatherings has shifted student and adult education and learning from the schools and other non-formal education sites to their homes. This has made the home a place for continued education and learning. But not all homes in southern Africa are suitable for student and adult learning. At a very basic level, many families do not have the space for both parents and students to work from home, which leads to competition for the use of limited home space for teaching, learning and work. For example, university lecturers from five South African universities collaborating on a climate change education research project, reported competing with spouses and children who also need space and privacy to do their work.

For students, homeschooling also surfaces educational quality and equity issues, which arise from differential access to digital devices to work and learn online. A parent in Zimbabwe shared how her four children in different classes have to compete for one digital device to support their online learning. Many parents were either unwilling or unable to provide the necessary enabling learning environment and support in the home. Learning from home is done online and through radio and television programmes, which is creating new learning and work challenges. These teaching modalities are not suitable for all students. For example, in Malawi learners with disabilities such as hearing and visual impairments have to depend entirely on family members to help them with home-based learning. Yet, some of these learners live with

family members who do not have basic knowledge of sign language for using with those with hearing impairments, for example (Muchanga et al., 2020). COVID-19 has also pushed face-to-face teaching at educational institutions to migrate to distance and virtual learning. This presents a new challenge to high-quality education as a social experience requiring routine human interaction (Béteille et al., 2020).

The challenge has been particularly intense because educators have had no time to prepare "to adapt to the modalities of virtual and distance teaching, managing virtual spaces and classes, engaging students in new and innovative ways of learning" (ILO, 2020, p. 2). Transforming face-to-face classes to a virtual mode has created a steep learning curve for many educators, undermining the quality of learning in some cases (UNESCO IESALC, 2020).

The situation is worsened by the fact that, for the learners, pedagogical continuity under these circumstances favours the digitally literate, with physical and financial access to virtual learning. In Africa, the proportion of households with internet connectivity is very low, at 20% (UNESCO IESALC, 2020). The proportion of learners with internet access in subSaharan Africa is even lower, at 18%, while those with access to household computers is a mere 11% (UNESCO, 2020b). At the same time, parents, whose technical, technological and academic capacities vary considerably, are also having to play greater roles to support their children to learn through distance and virtual education (ADEA, 2020). These digital divides have prompted student bodies such as the South African Students Congress (SASCO), the University of Malawi Students Union (UMSU) and the Zimbabwe National Students Union (ZINASU) to reject e-learning as the educational solution in Africa (Mukeredzi, Kokutse & Dell, 2020).

In Zimbabwe, COVID-19 has disrupted community based research and learning on the impact of Cyclone Idai in Chimanimani District of Zimbabwe. Travel restrictions made it impossible for researchers from outside Chimanimani District to visit and complete some aspects of their planned research work with the district communities. The participatory action learning oriented research is intended to increase community adaptive capacities and improve community livelihoods. Such delays in the implementation of facilitated community learning have been undermining much-needed development in the southern African region.

In some cases, facilitated community learning has been encountering online learning challenges as highlighted earlier and illustrated by Zimbabwean and Zambia experiences. The challenges include lack of capacity to do online learning, and lack of necessary equipment and infrastructure to support online learning. This has meant that community members who cannot access online learning are being left behind.

In response to the pandemic universities, colleges and schools closed. Government imposed total lockdown. There was panic, confusion and uncertainty among universities and communities. School terms changed and the government had to reorganize school years to minimize the loss of instruction time. Private schools in Zimbabwe were in conflict with the government when they attempted to open schools amid lockdown period. The impact was more on the student who found themselves taking long to finish their degrees and also struggling to reposition themselves to the new normal, that of online and distance learning.

MEASURES TO CONTINUE STUDENT LEARNING DURING SCHOOL CLOSURE

Countries the world over, Zimbabwe included, used a variety of remote learning resources whilst students were unable to come to school, chief among them are the following;

- Radio and television education
- Instructional packages and
- Online instructional resources

Online platform were and are still the most popular tool used during school closures (Schleicher and Reimers 2020). Online learning tolls ranged from educational content which students could explore at their own discretion and formalized learning programmes conducted at their own pace, to real-time lessons led by their teachers using virtual meeting platforms.

Television broadcasts have also been done to reach out to students who do not have adequate resources for online instruction. Broadcasts can be limited to covering only a few subjects due to the short amount of time devoted to these television programmes. Lack of Television accessibility in remote areas where there is no coverage militates against this initiative. Areas like Binga, Muzarabani, some parts of Matabeleland region, Kariba and chirundu there is no television coverage. Students who reside in these areas are automatically left out.

Government reaction in a bid to control the spread of the pandemic

On 20 March 2020, the Zimbabwean government declared a National Lockdown and prohibition of gatherings. According to Statutory Instrument 76 of 2020 of Zimbabwe, the government restricted business for all non-essential service providers. Section 85 of the Zimbabwean Statutory Instrument 2020, saw the introduction of legislation for employers in formal and commercial sector for testing their employees and maintaining lockdown rules at their workstations. The ZIMRA Public Notice numbers 17 and 20 of 2020 effective 01 April 2020 saw risk allowances being paid to front line public sector health personnel involved in fighting Covid 19 and were exempted from income tax. As time went on, the government of Zimbabwe relaxed the National Lockdown rules to level two so that industries could keep on ticking. The public was compelled to wear masks and employee testing to curb the spread of the disease.

Effects of the actions of the government on teaching and learning in higher education institutions

As a response to this global pandemic, both South African and Zimbabwe governments instituted a raft of measures to contain the spread and chief among the steps was lockdown and closure of contact classes. For South Africa, the government declared a national state of disaster for the first month, which had strict enforcement of movement of people serve for essential service workers. On March 16 South Africa's Minister of Higher Education, Blade Nzimande, issued a statement "encouraging that all institutions should immediately suspend all contact lectures, as well as minimise contact among students'. Two days later, on March 18, Universities went on an indefinite recess period. The same was experienced in Zimbabwe a week after South Africa's lockdown was effected in Higher Institutions of learning on March 24 2020. Making the announcement, Zimbabwe's President, Emmerson Mnangagwa said the government had suspended all education where human concentration and contact was high.

The Minister of Education announced that schools would re-open on July 28 sparking immediate challenges from civic groups and teachers' unions[1]. The re-opening of schools was going to see 136, 000 teachers and over five million students returning to schools which might become an instant transmitter of COVID-19 into communities. In higher education, three medical students in Zimbabwe tested positive, which sparked fears of more spread should Universities go ahead with the opening initially scheduled for June 2020. Even though some universities' facilities were still being used as quarantine sites, the government gave the nod to open on July 13. The re-opening was a phased-in approach, just like South Africa that prioritised final year students first followed by those who needed to use laboratories to conduct their studies.

Adaptation techniques adopted by higher learning institutions in order to survive in the new normal situation

Throughout this innovative phase of online learning, the coping abilities of teachers and students were tested. Coping is the ability to manage some specific external pressures which seem to be taxing or greater than the resources possessed by such an individual. This definition is also applicable to a group of

individuals, educational institutions, corporate bodies and governments who are facing difficult situations. Coping can also be referred to the efforts (conscious or unconscious) made towards providing solutions to problems. Coping skills and strategies differ from one individual to another (Berjot et al., 2011). From the perspective of psychology, coping skills and strategies refer to mechanisms that are proactively deployed to overcome distress, despair, discouragement, despondency, discomfort, disillusionment and defeat. The psychologists identified these mechanisms as thoughts, emotions and actions which are also linked to an individual's personality traits (Chowdhury, 2020). Coping issues were felt by particularly those students who are pursuing laboratorybased science courses (including medical and engineering courses) and courses that require field trips. It is premised that a careful deployment of emerging digital technologies could serve as a necessary strategy to cope up with this problem and could also bring significant improvement in the art of teaching and learning in this new era. Such a situation has presented a great opportunity for innovation in the education sector be it primary, secondary, college or university levels (Xing et al., 2017). The need for innovation is now evident in the midst of enormous challenges being faced in the education sector during the ongoing COVID-19 pandemic.

The inevitable, new strategies, which include an increase in the use of distance education, e-learning, on line teaching

Distance learning

Distance learning focuses on teaching methods and technology that aim to deliver teaching on an individual basis to students who are not physically present in the traditional setup of the classroom (Buselic, 2012: 24). Having begun as a way to improve the quality of distance education by providing more and better interaction between instructors and students, online learning has, in recent years, been used increasingly to supplement face to face teaching (Stacey &Wiesenberg, 2007). UNESCO (2016: 12) notes that ICT has strengthened distance learning, bringing higher standards of education to remote and undeserved communities. Several researches have shown that distance learning does not differ from classroom teaching in terms of learning outcomes (Means *et al*, 2013: 1).

Flexible learning

Flexible learning refers to those modes of learning in which the learner decides where, when and how learning occurs (Joan, 2013: 39). In Zimbabwe, the establishment of the Zimbabwe Open University (ZOU) in 1999 promoted a switch to the dual mode of delivery, whereby some students attend lectures in person and some learn online (Dzvimbo, 2015: 187). Flexible leaning can be discussed as follows:

- ***e-learning***

E-learning is the use of multimedia and network technologies and the internet to design, deliver, select, administer and extend education (Bessenyei-Iserg,

- ***online learning***

The main driver for the gradual growth of the use of online teaching is the perception that it is a cost-effective approach to education as teachers and students do not necessarily need to meet in classes, making it more flexible and more convenient for students with family and work responsibilities (Arias, Swinton & Anderson, 2018: 2). Online learning relies heavily on technology guided instruction to substitute, usually in part, for traditional faculty (Bacow *et al*, 2012).

blended learning

According to Szeto (2013:1) Higher education has continued to evolve which has seen a gradual increase in

the use of blended learning, that is the use of both face-to-face and online teaching. However, after the outbreak of the pandemic, learning was made easier and more enjoyable to many students through the use of technology. Many ways were adopted to elevate the educational system such as teaching and learning standards. However more funds need to be channelled on this new baby for academic sustainability.

Following Pantland in Somalia, Zimbabwe is now the second country in Africa to launch the learning Passport, enabling children across the country to access high-quality courses and learning resources in and out of schools which is also a merit that was brought by the covid19 in Zimbabwe. However, it also disadvantaged some people who don't have enough resources such as laptops, smart phones and other ICT gadgets.

CONCLUSION

The study concluded that the most significant effects of COVID-19 on teaching and learning in higher education in Zimbabwe are delayed syllabus coverage by instructors, compromisation of students' right to quality education, lack of sufficient resources for standardised learning of students, level of literacy in the computer technology on both instructors and learners and additional costs in learning such as acquiring e-learning gadgets, WIFI and internet accessibility. However, higher education benefited from the emergence of COVID-19 in advanced use of ICT, globalisation in networking by students in various Institutions through online learning and innovation by students through opening of learning forums such as Google classroom and student mobile libraries.

The study advocates for continued use of E-learning methods in teaching and learning to counter COVID - 19 consequences, adoption of all teaching strategies in Higher and tertiary education and maximum use of ICT in teaching and learning for sustainability. The findings will benefit Ministry of Higher and Tertiary Education, Universities and other institutions of higher learning and research boards in Academic Institutions. Being only based on the review of literature carried out as a snapshot of an ongoing situation, the study recommends an empirical inquiry for further research, to potentially more deeply interrogate the effects of COVID-19 on both students and educators

REFERENCES

1. Arias, J. J., Swinton, J., & Anderson, K. (2018). Online vs face to face: A comparison of student outcomes with random assignment. E-Journal of Business Education and Scholarship of Teaching , 12 (2), 1-23.
2. Bacow, L. S., Bowen, W. G., Guthrie, K. M., Lack, K. A., & Long, M. P. (2012). Barriers to adoption of online learning systems in U.S. higher education. New York: ITHAKA S+r.
3. Belias, D., Koutiva, M., Sdrolias, L., & Koustelios, A. (2013). Traditional teaching methods versus teaching through the application of information and communication technologies in the accounting field: Quo Vadis? European Scientific Journal , 9 (28), 73-101.
4. Berjot, S., & Gillet, N. (2011). Stress and coping with discrimination and stigmatization. Frontiers in Psychology, 2(33). doi:https://doi.org/10.3389/fpsyg.2011.00033
5. Buselic, M. (2012). Distance learning-concepts and contributions. Oeconomica Jadertina , 23-34.
6. CCSA (Committee for the Coordination of Statistical Activities). (2020). How COVID-19 is changing the world: a statistical perspective Volume 2. New York: The Population Division of the United Nations Department of Economic and Social Affairs (UN DESA).
7. Chowdhury, R. M. M. I. (2020). Personal values and consumers' ethical beliefs: The mediating roles of moral identity and machiavellianism. Journal of Macromarketing,
8. Coman, C., Tiru, L. G., Mesesan-Schmitz, S. C., & Bularca, M. C. (2020). Online teaching and learning in higher education during the coronavirus pandemic: Students' perspective. Sustainability , 12 (10367), 1-24.

9. Dzvimbo, K. P. (2015). The African university in the 21st century: The quest for self-financing in the Zimbabwe Open University. Zimbabwe Journalof Educational Research , 27 (2), 187-203.
10. Fry, H., Ketteridge, S., & Marshall, S. (2009). A handbook for teaching and learning in higher education. New York: Routledge.
11. Gurudeo, T. (2016). Traditional versus non-traditional teaching and learning strategies- The case of e-learning. International Conference on Engineering Education and Research (pp. 1-11). Sydney, Australia: University of Western Sydney.
12. Joan, R. (2013). Flexible learning as a new learning design in classroom process to promote quality education. I-manager's Journal on School Education Technology , 9 (1), 37-42.
13. Karakose, T. (2021). The impact of the COVID-19 epidemic on higher education: Opportunities and implications for policy and practice. EDUPIJ , 10 (1), 7-12.
14. Kastner, J. A. (2020). Blended learning: Moving beyond the thread quality of blended learning and instructor experiences. Journal of Educators Online , 17 (2), 110-127.
15. Kujeke, E. C., Thomas, K. A., & Nyaruwata, L. T. (2014). An impact evaluation of ICT utilisation in Zimbabwean universities' ODL administrative and delivery processes. A case of 4 Harare universities (2009-2011). International Journal of Science and Research , 3 (6), 2267-2275.
16. Kurasha, P. (2015). The future of higher education in Zimbabwe: A constantly moving target. Zimbabwe Journal of Educational Research , 27 (2), 204-221.
17. Mahulae, A. V., Lumbanraja, P., & Sihaan, E. (2020). Effects of professionalism and competence of teachers on teacher performance and its impact on student learning outcomes at Harapan Mandiri College. International Journal of Research and Review , 7 (11), 38-46.
18. Maphosa, V. (2021). Teacher's perspectives on remote-based teaching and learning in the COVID-19 era: Rethinking technology availability and suitability in Zimbabwe. European Journal of Interactive Multimedia and Education , 2 (1), 1-11.
19. Means, B., Toyama, Y., Murphy, R., & Baki, M. (2013). The effectiveness of online and blended learning: A meta analysis of the empirical literature. Teachers College Record , 115, 1-47.
20. Mukute, M., Francis, B., & Burt, J. D. (2020). Education in times of COVID-19: Looking for silver linings in Southern Africa's educational responses. Southern Africa Journal of Environmental Education , 36 (1.7).
21. Stacey, E., & Wisenberg, F. (2007). A study of face to face and online teaching philosophies in Canada and Australia. Journal of Distance Education , 22 (1), 19-40.
22. Szeto, E. (2013). A comparison of online/face to face students' and instructor's experiences: Examining blended synchronous learning effects. 5th World Conference on Educational Sciences-WCES 2013 (pp. 4250-4254). Rome: Elsevier Ltd.
23. UNESCO (United Nations Educational, Scientific and Cultural Organisation). (2016). Futures for higher education and ICT: Changes due to the use of open content. Moscow: UNESCO Institute of Information Technologies in Education.
24. WB (World Bank). (2017). Higher education for development: An evaluation of the World Bank Group's support. Washington: The World Bank.
25. Xing, B., & Marwala, T. (2017). Implications of the fourth industrial age for higher education. The_Thinker_Issue_73_Third_Quarter_2017. Retrieved from https://ssrn.com/abstract=3225331