Constraints and Prospects of Online Platforms in Higher Learning Institutions: The Case of Selected Private Universities in Lusaka District, Zambia

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ABSTRACT

The aim of the paper to establish the constraints and prospects of online teaching and learning platforms among lecturers and students in private Universities in Lusaka district. Multiple studies have demonstrated that COVID-19 has brought a rapid growth and paradigm shift in so many sectors of development inclusive of education worldwide. So much has been documented about COVID-19 and its impact on education mainly in public institutions. However, it has not been pronounced much in private institutions. Therefore, we sought to establish the constraints and prospects of online teaching and learning platforms among Lecturers and Students in private Universities in Lusaka District, Zambia. The study adopted a qualitative approach and utilised a descriptive design. 15 Lecturers and 30 Students were purposively sampled from three selected higher learning institutions and completed the face-face in-depth interviews and focus group discussion. This was done for a period of one month in order to better understand the constraints and prospects of online teaching and learning platforms. Constraints of online teaching and learning platform included lack of training and support, lack of technical equipment, lack of access to quality technological and digital infrastructure, Poor ICT skills, lack of reliable and stable internet connectivity, lack of computer gadgets, power outrage and non-availability of electricity and webcams in university settings. Prospects and support of online teaching and learning platform included promotion of e-learning libraries, low-cost strategies of internet facilities, mandatory ICT training, shaping of career aspirations and provision of opportunities to cater for a large number of students as opposed to the physical arrangement. Our study shows that COVID-19 pandemic is real and persistent with its negative consequences. Prospects such as low-cost strategies to internet and electricity facilities as well as ICT-supportive infrastructures and equipment across the globe are desirable.

Keywords: Online platform, COVID-19, Pandemic, Constraints and Prospects.

INTRODUCTION

Multiple studies have demonstrated that COVID-19 is a worldwide phenomenon that has brought a rapid growth and paradigm shift especially in the education sector (MoE, 2019). The magnitude of this change is likely to be more pronounced in limited resource countries such as Zambia that have barely integrated technology in the delivery and management of education. In December 2019, a viral outbreak of pneumonia of unknown origin occurred in Wuhan, China which was later officially reported by the World Health Organisation (WHO) as a novel Corona virus, SARS-Cov2, a new virus, pathogen responsible for the infectious respiratory disease called COVID-19 (WHO COVID-19 Update Report, March 11 2020).Since then, it had become a global crisis so far with 647,972,911 confirmed cases and 6,642,832 deaths (WHO, December, 2022).

While the use of digital technology as an enabler for teaching and learning became increasingly visible during the COVID-19 pandemic, education systems all across the world, including Zambia, were forced to

switch to remote teaching based on online platforms overnight to curb the spread of the pandemic (Mtebe, Fulgence, and Gallagher, 2021; Mpungose, 2020;United Nations, 2020 and Wu, 2021). While the pandemic has caused a dramatic shift from traditional classroom learning methods to digital learning methods, it has not spared some of the most sensitive sectors such educational institutions both in private and public colleges, and Universities (Ali, 2020; Dhawan, 2020; Rapanta, Botturi, Goodyear, and Guardia, 2020).

The current times in higher learning institutions dictates that with or without COVID-19, online teaching and learning platforms have become part and parcel in the management of education (Besa, 2022; Zalat., Hamed, and Bolbol, 2021). This is because the 21st century modernism has called for an integration of technology in education which has created a new teaching and learning possibilities. Therefore, gone are the days when traditional methods of teaching and learning were depended upon, online platforms are now a necessity for education development due to high demand for basic technological knowledge and skills in most careers and in order for higher learning institutions to be competitively functional in the Zambian society (African Population and Health Research Centre, 2021). However, the quality of education during online teaching and learning is very much dependent on some factors which include; the home environment, computing equipment, access to electricity and internet which are related to financial strength of individual households (World Vision, 2020).

Studies done in Nigeria, Egypt, and South Africa (Olugbenga, 2020; Ja'ashan, 2020 and Bekele, 2021), have demonstrated that prospects of online entails that flexible learning expands choice on what, when, where and how people learn. It supports different styles of learning, including online-teaching and learning. Prospect means anticipating, and responding to, the ever-changing needs and expectations of VET clients – enterprises students and communities. Online-learning is the unifying term to describe the fields of online learning, web-based training and technology-delivered instruction or as self –paced online internet learning in relation to the end user (Moustakas and Robrade, 2022; Putro, Pratama, Prasetyo and Doewes, 2020). Nothing is changing as fast as all the terms related to online-learning. Though we recognize that there are highly contested debates around the exact definitions and scope of online teaching and leraning (Sangra, Vlachopoulos and Cabrera, 2012). For the purpose of our study, we understand online teaching and learning as having a broad scope focusing specifically on technological systems of delivery. To be more precisely, we adopted a definition which entails that online teaching and learning platforms are websites and technological applications that enable users to create and share contents or participate in social networking through interacting with the global world. Online-learning environments enables students to interact with learning materials, their instructors and other students from various locations and often at various times using network technologies. Online-learning is flexible learning using ITC resources, tools and applications, and focusing on interactions among lecturers, students, teachers, learners and online environment. Online-learning usually refers to structured and managed learning experiences, and may involve the use of Internet, CD-ROMs, software, other media and telecommunications.

Further, Blezu and Popa (2008) put it that the prospect of online instruction, are the conditions that support the successful integration of technologies in teaching and learning. There is ample evidence that supports that African universities are more likely to significantly embrace digital technologies in the future than ever before and inform successful technology integration, a generic conceptual model that explains success indicators and success factors in technology-supported learning environments in higher education the main advantage can be used anywhere, anytime, and the online-learning system can adapt to the aims of improving communication and enriching students' learning experiences. Despite the fact that there is overwhelming evidence on the ramifications of the COVID-19 on education sector particularly with much emphasis on public schools, colleges and Universities (Besa. 2022; Sarkar, Pranta Das, Rahman, and Zobaer, 2021; Mwila, Mudenda, Kampamba, Mufwambi, Lufungulo, Phiri, and Hikaambo, 2021; Mweenda, 2021; Mukwena and Sinkala, 2020). However, there is little data regarding constraints and prospects as well as support of online teaching and learning platforms in private Universities hence, the

current undertaking. We therefore, sought to establish the constraints and prospects of online teaching and learning platforms in private Universities in Lusaka District, Zambia.

METHODS AND MATERIALS

Study Design and setting: We conducted a qualitative study by utilising a descriptive design in Lusaka District, Zambia

Participants: Eligible participants were Lecturers and Students who were purposively recruited from convenient sampled private Universities in Lusaka District.

Inclusion/Exclusion criteria: Only Lecturers and Students from private Universities in Lusaka district were included in the study.

Procedure: Participants were subjected to in-depth interviews and focus group discussion. Supervision was done by the researchers themselves through a participant observation and physical visits. The interviews were conducted by the researchers for a period of one month

Sample size: A total sample size of 45 participants (n=15 Lecturers; n=30 Students) were recruited form three selected private Universities in Lusaka District.

Data analysis: Data were analysed thematically with the help of Nvivo version 12 software.

Ethical Statement: The study followed the ethics regulations and guidelines through obtaining of Verbal and written informed consents from the participants and a letter of authority from management of the selected private Universities.

RESULTS

Sample characteristics: A total of 45 participants (n=15 Lecturers and n=30 Students were interviewed and focused in a group discussion, completed and analysed in the study.

In this study, we present results from face-to-face in-depth interviews and the presentation is categorised into two main themes as follows; 'constraints driven by a sudden shift', and prospects of online teaching and learning platform'.

Constraints of online teaching and learning platforms driven by a Sudden Shift

The first theme was related to the constraints driven by a sudden shift from traditional teaching to online teaching platform. The constraints as a result of a sudden shift were, due to the unpreparedness and unanticipated outbreak of the COVID-19 pandemic, which compelled many higher learning institutions to switch to complete online teaching and learning platforms. For many lectures and students, this sudden shift coerced them to look for other teaching and learning alternatives such as online platforms with limited preparation and competency, essentially putting them into an awkward position teaching and learning-by-doing type of situation. Though some lectures and students reported having some form of competencies, experience, knowledge, skills or support within their institutions, most felt that "there was limited time for them to prepare for what COVID-19 pandemic and its negative consequences have brought into the education system", which led to a ''notion of try and error kind of experimenting teaching and learning" (Interview, Lecturer 1). This implies that "lots of mistakes were incurred in the process, something that compromised on the quality delivery of education" (Interview, Lecturer 13). Additionally, another lecturer stated that, ''through try and error mode of teaching, one may fail to understand certain electronic icons that

through pressing, one may end up shutting the entire electronic system'' (Interview, Lecturer 7). To stress more on this point, one lecturer gave out a narration that:

Sometimes, as lecturers and students, we log-into online sessions while attending other meetings and activities which compromise the quality of education delivery. As a result, one may sound strange in giving responses. For instance, a response that was meant for the meeting is given students who are attending online learning and vice versa thereby confusing attendees (Interview, Lecturer 6).

Constraints encountered in conducting online teaching and learning were not merely due to the sudden shift to online learning platform triggered by the COVID-19 pandemic but other factors embedded in operational and performance qualities. Nonetheless, as we note in our preamble of the introduction, literature and empirical sources surrounding online teaching and learning is not a new phenomenon, yet many institutions particularly the private institutions were not prepared to deal with the circumstances of the scenario. As one student interviewee noted that, it seemed like "everything must come from a knowledgeable source as no one appeared to possess the necessary knowledge and skills around online teaching and learning platforms" (Interview, Lecturer 4).

These identified knowledge gaps revealed themselves both in terms of lack of resources and overall training and support. For many lecturers, the lack of adequate technical equipment was a recurring constraint. This ranged from lack of access to quality technological and digital infrastructures, Poor ICT skills, reliable and stable internet connectivity, computer gadgets, and webcams, up to the availability of a unique and sufficiently equipped workstation at home or in the university setting. For instance, one lecturer reported constraints with their Moodle platform, that "when there were many students simultaneously in Moodle, the platform could not support it due to high demand as a result of number of students" (Interview, Lecturer 15). Similarly, another lecturer noted that they needed to adjust by using more "low bandwidth" activities that could accommodate participants with lower quality internet connections. To substantiate this argument, one lecturer contended that:

In as much as it is difficult to handle Moodle platform due to high numbers of students, it is most likely that some students do not attend our sessions online but just log-in to show that they are present but without giving any feedback. This lack of control of student attendance has proved futile in most cases, especially when one administers a test.

Additionally, the study unearthed that lack of computer equipment, massive power outage due to load shedding which became more pronounced in 2016, increased theft of computers and lack of computer laboratories and funding mechanism. For instance, one lecturer supported this finding by noting that:

In our department, there is no designated computer laboratory and what we have is just a classroom that has been modified and used as a computer laboratory which is not even in a good state to accommodate and support the online teaching and learning platforms because even the computer facilities are not enough posing a challenge both on us as lecturers and students (Interview, Lecturer 8).

Further, another lecturer reported that:

I had problems recording quality videos later on uploading them online because most of them were very big and also the internet was sometimes erratic. The lessons also tended to be non-student-centred as a result students were disadvantaged (Interview, Lecturer 11).

Students experienced similar struggles and constraints as they mostly participated in the online learning platforms using their technological gadgets such as laptops, phones and other electronic devices with integrated webcams and microphones. In view of this forgoing, one student reported that "it has to be

noticed that not everyone has the same access to online learning. Some people do not have the best hard- or software to attend online classes" (Interview, Student 1). The study also demonstrated how students predominantly work from informal spaces not clearly conceived for learning, such as their student accommodations, dorms and home environments. These learning situations and circumstances led many students to express the wish for proper and conducive work environments provided by the university in order to complete their online learning necessities in a safe, conducive, and technological suitable and internet stable environment. Further, one student stressed a point on limited technological knowledge and intermittent internet stated that:

Generally, we have a challenge with technological knowledge as you know that issues of computers or other electronic gadgets require extra knowledge which most of us do not possess. This lack of technological knowledge extends even to our lecturers because sometimes we do not finish sessions when learning via online due to try and error kind of arrange that our lecturers are still experiencing in their online teaching skills. So, this affects our learning moods because you find that in the middle of the a session an intermittent of internet occurs, most lecturers fail to reconnect and get back to online teaching due to lack of technological know-how. So, because of this, I would safely say that we are still experimenting with online teaching and learning platforms at our University (Interview, Student 30).

Beyond these resource hurdles, the absence of training regarding the delivery of online teaching and learning was also noted and highlighted. As such, one student echoed this by highlighting the need for "permanent staff and mandatory student training in ICT" (Interview, Student 28) offers to refresh and update both lecturers and students' knowledge and skills for online teaching and learning platforms. Certainly, as time passed, some Universities developed resources banks and learning offers suitable for online opportunities. Yet, the uptake of these offers also appeared to be dependent on the time and technological know-how as well as motivation of human resource available. This is so because it did not seem that these offers were purposefully integrated into lecturers' existing workload and schedules at planning level. This was further amplified when one student reported that:

Online learning can sometimes be very lonely when one does not have the required knowledge through training especially when you can't see your fellow students practicing. It feels like you are lost or speaking to yourself or the wall and eventually, makes one leave the online platform and later only to be told that there was a session after one had missed or logged-out (Interview, Student 15).

Prospects of online teaching and learning platforms

As the world over is anticipating for the 4th wave of COVID-19 and future pandemics, there is need to avoid 'one size fit all' mitigation and recovery approaches which may inadvertently widen education access inequality between advantaged and disadvantaged students and learners in school and tertiary education. .

As part of prospects, the study found and suggested that Governments especially the Government of the Republic of Zambia through the Ministry of Education and its partners should continue to fight and mitigate the impact of COVID-19 especially in the education sector. One lecturer stated that to actualize this, ''the Government has since implemented the Education Contingency Plan (EPC) to respond and mitigate the impact of the pandemic on students and learners'' (Interview, Lecturer 9). Through the plan, ''Government implored various methods to keep students learning through printed learning packages, radio, television and online learning using computers, phones and the internet'' (Interview, Lecturer 12).

The study found and recommended that lecturers and students in higher learning institutions should undergo a mandatory ICT training in order to equip them with the necessary technological advances. This was so because one lecturer stated that ''current times have called for an integration of education with technological know-how due to the fact that ICTs create new learning and teaching possibilities to meet the needs of this

modern world''(Interview, Lecturer 14).

The other prospect of online teaching and learning platform is that the Government should target to lower the cost of internet facilities in order to make ICT accessible to all citizens. One Lecturer reported that ''internet facility an engine that can propel the process of teaching and learning. So, there is need to widen its scope in order to improve and meet the daily demand'' (Interview, Lecturer 13). If this was achieved, then the e-learning libraries would be promoted in the country for the benefit lecturers and students who are in schools and Universities.

Students also submitted similar prospects as they stated that online teaching and learning platforms should endeavour to create an enabling and interactive atmosphere that would enhance communication skills between lecturers and themselves. This point was stressed upon by one Student who reported that ''online teaching and learning platform is good if not abused because some students may not be very serious with learning as they cannot work without supervision'' (Interview, Student 30).

Students in their submission were of the view that online learning was seen as a catalyst for technological advances as it shaped their future career aspiration and made them productive in life. This was the case because as students stated that online learning forced them to practice all the time as they endeavoured to perfect their technological skills. To some extent, ''the online learning has contributed to some of us getting opportunities for employment and business ventures'' (Interview, Student 29). Further, another student authenticated this point by stating that some students have established some businesses inform of internet cafés to serve and help other people who may be lagging behind in terms of ICT-knowledge and skills'' (Interview, Student 5).

Another prospect of online teaching and learning platform is that a lecturer can attend to so many student at once which may not be possible with a physical teaching as doing so, would require a big lecture theatre. Additionally, one student reported that, "in our class, we are so many that most lecture theatres are too small to accommodate us. So, with the promotion of online teaching and learning platform, the problem of space is no longer an issue'' (Interview, Student 7).

DISCUSSION

The discussion part of the paper was supported by other relevant sources of information and literature through the process of contextualisation with our results. Based on a qualitative descriptive and open-ended follow-up interviews, the constraints and prospects of online teaching and learning platform can be divided into two major themes;

Constrains of online teaching and learning driven by a sudden shift

Constraints driven by a Sudden Shift and prospects and support which answers the two major questions in the study. To establish the constraints and prospects of online teaching and learning platforms among lecturers and students in private Universities in Lusaka District, Face-face in-depth interview were conducted among lecturers and students. The results of the study on the constraints of online platforms were not limited to; lack training and support, lack of technical equipment, lack of access to quality technological and digital infrastructures, Poor ICT skills, lack of reliable and stable internet connectivity, lack of computer gadgets, power outrage and non-availability of electricity and webcams in university settings. Similarly, our findings affirm and reinforce the conclusions of many previous studies, both pre- and post-pandemic. For instance, the lack of resources and training, poor ICT skills, Poor internet connectivity, poor technological infrastructure and power outrage for delivering online courses was already highlighted before (Besa, 2022; Moustakas and Robrade, 2022; Bekele, 2021; Mweemba, 2021; Mukwena and Sinkala, 2020; Ja'ashan, 2020; Olugbenga, 2020 and Blezu and Popa, 2008). Nonetheless, the aforementioned studies reported these

results in tandem with public institutions, but it is evident now that even in private institutions to some extent the constraints of online teaching and learning platform are similar. This is so because the principle of online teaching and learning platforms are universal across the globe despite some few administration disparities. This number of constraints compromising online teaching and learning platforms should not be entertained without doubling efforts to mitigate them in order to promote a smooth and supported online teaching and learning platforms that would endeavour to meet the technological and globalized world's demand both at home and learning institutions.

Prospects of online teaching and learning platforms

As part of prospects, the study found and suggested that Governments especially the Government of the Republic of Zambia through the Ministry of Education and its cooperating partners should continue to fight and mitigate the impact of COVID-19 especially in the education sector. This result is a reflective of previous studies that highlighted similar results suggesting concerted efforts from the arms of the Government and other private partners to work together in the quest to minimize the consequences of COVID-19 pandemic especially in the education sector (African Population and Health Research Centre, 2021; World Vision, 2020 and Zambia Information and Communications Technology Authority, 2018). To actualize and authenticate this vision, ''the Government has since implemented the Education Contingency Plan (EPC) to respond and mitigate the impact of the pandemic on students and learners'' (Interview, Lecturer 9). Through the plan, Government implored various methods to keep students learning through various sources of information such as printed learning packages, radio, television and online learning using computers, phones and the internet. This multifaceted approach adopted by the Government in dealing with sensitive issues like the COVID-19 pandemic that affected all sectors of development and claimed more lives with a death toll standing at 6,642,832 (WHO, December, 2022), is a step in the right direction as it works to maximize the available resources together in a collective fashion that benefits everybody in the community. This approach of partnership is supported and well-grounded on the Sustainable Development Goal number 17 (SDG) which reads in parts "focusing on strengthening the means of implementation and revitalizing global partnership for sustainable development technology.

The study found and recommended that lecturers and students in higher learning institutions should undergo a mandatory ICT training with low-cost internet facility strategies in order to equip them with the necessary technological advances. These results echo the position of African Population and Health Research Centre (2021) that encourages the mandatory ICT training and making internet facilities accessible. This strategy would enable Government to target and capture a good number of ICT training recipients and internet subscribers. This was so as one participant stated that 'current times have called for an integration of education with technological know-how due to the fact that ICTs create new learning and teaching possibilities to meet the needs of this modern world''(Interview, Lecturer 14). Lowering of the cost of internet facilities was also substantiated that if it was made possible and a reality to people, it was going to be accessible to all citizens thereby realising the landmark of the Sustainable Development Goal number 17 (SDG) which reads in parts "focusing on strengthening the means of implementation and revitalizing global partnership for sustainable development technology. The emphasis on ICT and internet availability was so strong because without these technological ingredients that act as an engine that propel the process of teaching and learning, the desire and expectations of a 21st century lecturer and student would be in vain. Therefore, there is need to widen the internet scope and promote ICT knowledge and skills in order to improve and meet the daily demand and employment opportunities in globalized and competitive world.

The study also found that online teaching and learning platforms should endeavour to create an enabling and interactive atmosphere that would enhance communication skills between lecturers and students. It is worth re-emphasizing that prospects regarding interactive atmosphere coupled with favourable communication skills as a tool for teaching and learning in universities has been identified in previous studies (Bekele,

2021; Olugbenga, 2020; Ja'ashan, 2020; Blezu and Popa, 2008). This is true for online learning as it was seen as a catalyst for technological advances as it shaped their future career aspiration and made them productive in life. For instance, online teaching and learning platform enables lecturer to absorb many students at once which may not be possible with a physical teaching as doing so, would require a big lecture theatre. So, with the promotion of online teaching and learning platform, ''the problem of space is no longer an issue'' (Interview, Student 7). This is so because online learning forced them to practice all the time as they endeavoured to perfect their technological skills. To some extent, ''the online learning has contributed to them getting opportunities for employment and business ventures'' as most students have established some businesses inform of internet cafés to serve and help other people who may be lagging behind in terms of ICT-knowledge and skills.

CONCLUSION

The study has established the constraints and prospects of online teaching and learning platform. Among the constraints as established by the study were lack training and support, lack of technical equipment, lack of access to quality technological and digital infrastructures, Poor ICT skills, lack of reliable and stable internet connectivity, lack of computer gadgets, power outrage and non-availability of electricity and webcams. On the other hand, the study also established prospects of online teaching and learning as follows; the Government of the Republic of Zambia through the Ministry of Education and its cooperating partners should continue to fight and mitigate the impact of COVID-19 especially in the education sector, lecturers and students in higher learning institutions should undergo a mandatory ICT training with low-cost internet facility strategies in order to equip them with the necessary technological advances, online teaching and learning platforms should endeavour to create an enabling and interactive atmosphere that would enhance communication skills between lecturers and students, shaped future career aspiration and made them productive in life and 'the online learning contributed to opportunities for employment and business.

LIMITATIONS AND FUTURE DIRECTIONS

There were limitations to the present study. The use of convenience sampling and the fact that a qualitative studies have limitations that may prevent broader generalization. Thus, though our sample size, we cannot necessarily detect differences or unique features within how specific Universities conducted and integrated online teaching and learning. Likewise, the geographic focus of this study was predominantly centred on Lusaka, Zambia, and there is certainly knowledge gap for future studies to further explore how online teaching and learning platforms is conducted and provided across various geographic, cultural, social and economic contexts. Nevertheless, the results have highlighted some constraints and prospects of online teaching and learning in private universities.
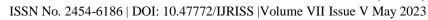
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