Opportunities and Challenges of Exclusive E-Learning during Covid-19: A Case of the Fourth Year Records and Archives Management Students of the University of Zambia

Thabiso M. Mwiinga
thabiso.mwiinga@unza.zm
Felesia Mulauzi
mzulu@unza.zm
Kaoma Lamba Daka
kayldaka@gmail.com
Chitundu Chisunka-Mwila
chitunduchisunkamwila@gmail.com

The University of Zambia, Department of Library and Information Science, Lusaka

ABSTRACT

The study's main aim was to investigate the challenges and opportunities of exclusive eLearning during the COVID-19 pandemic among students at the University of Zambia. Fourth-year students pursuing a degree in Records and Archives Management (RAM) were studied. It specifically investigated students' ICTs skills in the use of eLearning technologies, benefits and challenges of eLearning during the COVID-19 pandemic. Twenty respondents were sampled out of a total population of twenty-six. The research was qualitative and interviews were used to collect data which was analysed using thematic analysis. The study findings indicate that the learners were not ready for exclusive eLearning due to lack of requisite skills, poor internet connectivity, lack of study spaces at home, low student motivation among others. Despite the many challenges, the study established that eLearning provided students with an opportunity to learn during the crisis brought by the COVID-19 pandemic. Given the findings, it was recommended that the University of Zambia should market the training initiatives on eLearning technologies.

KEYWORDS: ELearning; Online learning; COVID-19; eLearning

1.0 INTRODUCTION AND CONTEXT

Calamities cause a change in our lifestyles and the calamity of the Corona Virus (COVID-19) pandemic certainly brought about huge changes. Responding to the need to stay home as much as possible and avoiding crowds among other changes meant adapting to the "New Normal" by finding new ways of doing things. For the education sector, this meant leaving the traditional system of teaching and learning, for various eLearning alternatives.

Many institutions around the world adopted exclusive eLearning following the COVID-19 pandemic. COVID-19, a viral infection caused by SARS-CoV-2 was declared a pandemic on 11 March 2020 (World Health Organization, 2020). Many African countries did not register COVID-19 cases in 2019; they started reporting

cases in the first quarter of 2020. Zambia, for instance, recorded the first case on 15th March 2020 (Simulundu et.al, 2021). As a part of its preparedness activities, Zambia closed all schools, colleges, and universities on 17th March 2020. To this end, several higher learning institutions introduced exclusive eLearning to continue offering their services while adhering to COVID-19 preventive measures. According to (Coman et. al, 2020), while in general, eLearning is considered an option or alternative to traditional face-to-face learning, during the Coronavirus pandemic it became the only way of maintaining the activity of schools and universities.

Although researches have been done on eLearning during the COVID-19 pandemic, not much is known about the Zambian context, as there are only a few studies currently available. (Chewe & Chitumbo, 2012) conducted a study at the University of Zambia whose main objective was to investigate the likely potentials and challenges of adopting Moodle e-learning software at UNZA. Their study established that the majority of the UNZA community was not aware of Moodle's existence and thus did not use it. Akakandelwa & M'kulama (2017) also did a study at the University of Zambia whose main aim was to investigate Students' Acceptance, Experiences, and Satisfaction of Online Learning. Their study established that the perceptions of students regarding the adoption of e-learning platforms in the university teaching process were very positive. These studies were done before the COVID-19 pandemic and at the time of the study, the use of Moodle was not mandatory at the University of Zambia. This study, therefore, looks at the use of eLearning during COVID-19 at the University of Zambia students. The current study is important as it brings out the experiences of the learners on the exclusive use of eLearning during the COVID-19 pandemic.

1.1 Statement of the Problem

COVID-19 has had a huge impact on not only the health sector but also other sectors including education. As indicated in the introduction, many learning institutions especially, universities have had to introduce eLearning to continue offering their services while combating the spread of the coronavirus. The University of Zambia like other universities embarked on the exclusive use of eLearning during the periods when physical learning was disrupted. Although several studies have been done on the use of eLearning, a review of the literature showed that not much research has been done in Zambia during COVID-19. The available research on the use of eLearning (Chewe & Chitumbo, 2012; Akakandelwa & M'kulama, 2017), investigated the likely potentials and challenges

of adopting Moodle e-learning software at UNZA; and Students' Acceptance, Experiences and Satisfaction of Online Learning at UNZA, respectively. These studies, however, did not specifically investigate exclusive eLearning as experienced by learners during the COVID-19 pandemic. The current research is, thus, required to bridge this gap.

1.2 Objectives of the study

The study sought to:

(i) establish students' Information and Communication Technologies (ICTs) skills in the use of eLearning systems;

(ii) establish students' perceived benefits of using eLearning during the COVID-19 pandemic;

(iii) identify possible challenges students faced in eLearning during the COVID-19 pandemic.

2.0 LITERATURE REVIEW

Literature was reviewed about skills needed, benefits, and challenges concerning eLearning in university teaching and learning. The literature review revealed that in Zambia, studies in this area are overall limited. According to Dube (2020), eLearning is education that takes place over the Internet and is also referred to as online Learning. (Arkorful & Abaidoo, 2014: 397) writes that "eLearning encompasses the use of the Internet and other important technologies to produce learning materials, teach learners, and also regulate courses in an organization." eLearning can, thus, be viewed as learning that takes place through the use of the Internet via associated technologies.

Fordham University (2021) writes that eLearning can be divided into three basic approaches, consisting of asynchronous, synchronous, and blended or hybrid learning. In asynchronous eLearning, course offerings do not take place in real-time. Interaction typically takes place through discussion boards, blogs, and wikis. As a result, there is no class meeting time. Synchronous learning requires the instructor and the learners to interact online simultaneously in real-time. Synchronous learning enables students to participate in a course from a distance in real-time. Synchronous learning entails that learning takes place in real-time, but not in person. Examples of synchronous learning include educational video conferences, interactive webinars, chat-based online discussions, and lectures that are broadcast at the same time they are being delivered. Hybrid or blended learning

allows for both in-person and online interaction. Generally, hybrid learning entails meeting in person several times and also provides for computer-based communication in between those face-to-face sessions.

To be effective, eLearning requires that participants (both learners & instructors/institutions) have access to affordable & stable internet connectivity, technological infrastructure, (Dube, 2021; Lestari, Astuti & Bhakti, 2020). Learners and instructors also need requisite Information and Communication Technology (ICT) skills, policy guidance, and locally-devised learning content. Studies undertaken before the COVID-19 pandemic on the use of eLearning in developing countries revealed serious challenges in these three key aspects of eLearning (Nhando, 2015; Tarus, Gichoya, Muumbo, 2015; Kantumoya, 2015; Tchey & Dlamini, 2019;). The challenges were only exacerbated by the Pandemic, widening the existing digital divide (Omanga, 2021; Adarkwah, 2021; Nakweya, 2021).

Literature shows that students must have a set of ICT skills for eLearning to be effective. These include basic computer skills, sending/receiving email including attachments, finding resources through search engines, downloading and installing software, familiarity with using browser plug-ins (e.g. PDF reader, video, audio), using a word processing, presentation software, creating PDF files and submit them, the ability to be self-directed in learning new technology skills, among others (Grand Valley State University, 2021).

Oguguo (2020) adds that the skill to use computers is not the only ICT skill required to make valuable use of eLearning. Students must be competent in the use of e-library, discussion forums, and blogging. Students should also have skills in the use of a Learning Management System (LMS). LMS serves as a central hub for all courses that organize assignments, presentations, and discussions into a series of modules, often by week. Learners should be able to post discussion responses and reply to other student's posts, upload assignment submissions, download course documents, such as a syllabus, send and receive an email with a school account and view recorded presentations (Open Education Database, 2021).

There are several advantages of eLearning. As argued by the U.S. Department of Education (2012), eLearning has the potential to provide more flexible access to content and instruction. Additionally, eLearning allows the learning process to take place anywhere and anytime (Aboderin, 2015) (Lestari, Astuti, & Bhakti, 2020). It is

also able to reach students from afar and remote places and enables them to participate effectively via various online tools (Li & Lalani, 2020).

While the list of advantages of eLearning is endless, some factors can influence students' participation in eLearning. These include but are not limited to availability and quality of infrastructure of the organisation, and students' access to the institutional infrastructure; provision of technical support to students by the institution; knowledge and skill, motivation, socio-economic and cultural background, personal discipline, and learning styles (Makafane & Chere-Masopha, 2021). These same factors influence how students take part in eLearning and, thus, can ultimately result in challenges of using eLearning.

Other challenges as cited by Makafane & Chere-Masopha, 2021; Adedoyin & Soykan, 2020; Dube 2021) are lack of personal digital resource facilities; lack of dedicated learning spaces in homes; time constraints as they were expected to do household chores; little to no technical support from the university; little accessibility of learning materials due to little to no internet accessibility; individual learning which meant little to no peer support; home distractions; economic conditions which made it hard for them to buy internet bundles; and lack of access to university facilities such as the university library resources.

3.0 METHODOLOGY

The research was conducted at the University of Zambia in Lusaka. A sample of twenty (20) out of twenty-six (26) fourth-year students pursuing a Bachelor of Records and Archives Management (BARAM) programme was drawn. The study was purely qualitative and interviews were used as research instruments. Thematic analysis was used to analyse the data.

4.0 PRESENTATION AND DISCUSSION OF RESULTS

4.1 ICT Skill of Learners

Knowledge and skill in the use of technology are important as it determines the efficiency and effectiveness of use. The current study sought to establish the ICTs skill levels of the students in the use of MLS and associated technologies. It was established that many students had low knowledge and skill levels at the commencement of exclusive eLearning. Most of the students felt that they only had basic skills to navigate through the different learning platforms. They were not familiar with Moodle. These results are similar to the findings of the study by

Makafane & Chere-Masopha (2021) on the challenges of eLearning at a university in Lesotho.

The results also indicate that students were not ready for exclusive eLearning because they lacked knowledge and skill in the use of eLearning platforms. As one respondent stated: *"We had to acquire skills while the learning was taking place, it was a stressful time."* Another respondent explained that "*because of my poor knowledge in the use of Moodle, I felt less motivated to learn online."* These results indicate that exclusive eLearning was done in a hurry due to COVID-19 disruptions. Students had to learn to navigate through different platforms while lectures were running. This caused a lot of stress and anxiety among learners. Poor knowledge and skill also had an impact on the learners' attitudes and motivation to use eLearning. Mwiinga and Hamooya (2016) in their study on the use of Web 2.0 for educational purposes among undergraduate students at the University of Zambia, reported similar findings by stating that skill possessed in the use of technology affected students' perception of the use of that technology. The findings of the current study, therefore, point to the fact that due to poor knowledge and skills some students felt less motivated to use eLearning platforms.

It was further established that many students had not received prior training on the use of eLearning platforms by the University of Zambia. The respondents' limitations in the use of eLearning technologies could not have had a positive effect on their learning. The reasons behind their lack of requisite skills point to negligence on the respondents' part as well as the ineffectiveness of the university's marketing of such training initiatives.

4.2 Benefits of eLearning during COVID-19 Pandemic

It was revealed that eLearning allowed students to continue learning during the pandemic. The respondents were generally happy that despite the COVID-19 pandemic their learning continued online. In addition, some of the respondents felt that learning from home was an opportunity to learn in their comfortable spaces while preventing themselves from contracting COVID-19. One respondent explained this as follows:

"I can have class in my bedroom and I do not have to worry about getting infected with the coronavirus."

These results are in line with (Allo, 2020) whose research on learners' perception of online learning amid COVID-19 pandemic in UKI Toraja; established that students

had a positive attitude towards eLearning and considered it helpful and useful in the time of the crisis created by the COVID-19 pandemic.

To further understand the benefits of eLearning, students were asked which platforms were used by their lecturers. It was established that although Moodle was used as a Learning Management System (LMS), most of the classes were done using video conference meetings such as Zoom and Google Meet. Most of the lecturers recorded the sessions and then uploaded links to the lectures on Moodle. Students indicated that they had access to the recorded lectures anytime. They could play the videos whenever they needed to. These findings suggest that eLearning allows learners to be in control of their learning at their own pace. Another finding of the study was that students considered exclusive eLearning to be cost-beneficial because they did not spend as much money on internet bundles as they do on food, accommodation, and groceries when they are learning face to face.

Despite the benefits discussed above, the current research established that face-to-face lessons were more preferable to exclusive eLearning. The respondents felt that eLearning should be used for complementing face-to-face learning. Coman et.al (2020) also observed that students considered that the most appropriate way to carry out the teaching-learning process is the traditional way, face to face.

4.3 Challenges of eLearning during COVID-19

The main challenge established was poor internet connectivity. One respondent explained this challenge as follows: *"the Internet connectivity in our area is very slow because we have a poor mobile network. Sometimes I lose connectivity in the middle of a class or even when writing a test...."* Another challenge tied to internet connectivity was that some students were not able to access learning materials that were posted on Moodle due to poor internet services in remote areas. Internet accessibility is a significant finding because the quality of internet connection brings about access disparity that disadvantages or favours different groups or individual learners (Kamur, 2015; Kumar Basak ; Wotto & Belanger , 2018). This finding suggests that access disparity is one of the unfortunate by-products of ICTs where a digital divide has been created between those who have access to technologies and those who do not have. This entails that although digital technologies provided exciting new opportunities for students to continue learning amidst the COVID-19 pandemic, some students in remote areas with limited or no internet services fell further behind their peers who had good internet access.

The study also revealed that there was poor institutional support for technical challenges. It was established that most of the students consulted their colleagues if any problems were encountered on Moodle. If not resolved, they contacted their lecturers. This finding points to the fact that the institution needed to put more effort into sensitising the students about available technical support. Coman et.al (2020) in their study reported similar findings which indicated that the Universities surveyed did not have the technical capacity to provide optimal conditions for eLearning. These results show that universities were to a large extent not ready to adopt exclusive eLearning. However, as argued by Makafane and Chere-Masopha, (2021), even if many universities decided to migrate courses online because of COVID-19, this decision was long overdue given the advances in ICTs. eLearning has now become the mode of choice for curriculum decisions. This is because if used correctly with appropriate conditions, eLearning promises many benefits as highlighted in the literature review.

The study also established that learners did not have conducive study spaces at home. The respondents lamented that it was not entirely possible to have a conducive learning environment as they were surrounded by a lot of distractions. Students indicated that family members and friends interrupted them and that they were expected to undertake household duties. One respondent described this as follows: "*….. There is a bar just behind our house, it's always noisy."* Another respondent added that *"as long as I am home, my family thinks that I am on vacation and I have to do chores. On busy days I will be attending class while doing chores."* These findings show that for most students a home environment cannot be turned into a school environment. The respondents stated that a school environment is the most conducive for learning and studying. These results are similar to those of a study done on challenges of eLearning during COVID-19 done by Adedoyin and Soykan (2020) who found that human distractions were a challenge for students.

In addition, students felt that eLearning did not provide them with learning motivation similar to face-to-face learning. They suggested that with eLearning, they felt more isolated with limited opportunities to have group discussions with their peers. This study demonstrates that students' performance can have been affected by exclusive eLearning because most of the respondents reported having had poor learning motivation due to isolation. Motivation plays a significant role in

teaching and learning. Because eLearning removes the motivation that comes from learners' physical interaction with instructors and peers, there is a need for instructors to intentionally motivate learners. This can be done by engaging learners during live online classes; by encouraging peer-to-peer interaction through collaborative activities or one-on-one virtual interactions between instructors and learners. By engaging the learners directly, they become part of the discussion and they hold the information or lesson they are taught much better (Kabombwe & Machila, 2020). These findings are consistent with (Filgona, Sakiyo, Gwany, & Okoronka, 2020) who argue that students' motivation is a critical part of success in education. Teachers should create an active learning environment that enhances students' perceived autonomy and competence. Virtual collaborative activities and one-on-one interaction can, thus, be used for motivating students when using eLearning.

Additionally, the respondents were of the view that eLearning was mentally exhausting because they spent a lot of time on a computer/smartphone. One respondent elaborated this challenge as follows: *"I use my phone for everything and it is so exhausting."* Mental fatigue could in part lead to students' poor motivation to learn, as reported by respondents. This is often seen in disengagement and/or absconding of classes by students, resulting in underperformance in assessments. These findings are consistent with (Sohail, 2013) whose study on the relationship of stress and academic performance in first-year medical students; established that a higher level of stress is associated with poor academic performance. (Kentucky Counseling Center, 2021) adds that during an online class, there's information overload plus facing the screen for prolonged periods is mentally draining. Virtual fatigue is real and if not well managed can lead to anxiety and stress; which can lead to poor academic performance.

5.0 CONCLUSION AND RECOMMENDATIONS

The study concludes that during the COVID-19 pandemic, eLearning became the only way of teaching and learning at the University of Zambia. eLearning provided the learners with an opportunity to learn remotely while curbing the spread of the coronavirus. Other benefits were that eLearning was cost-effective and allowed the learners to be in control of their learning at their own pace. However, the study established that eLearning during the COVID-19 pandemic faced several challenges which include poor internet connectivity, inadequate requisite skills, poor learning

motivation, and poor institutional support to learners. In light of the findings, the study recommends that:

i. The University of Zambia's training initiatives be marketed and all the necessary technical help should be publicised to better the eLearning experience of the learners.
ii. The lecturers should concentrate on learner-centered learning styles that promote engagement of all learners
iii. There is a need for a similar study that focuses on the perspectives of lecturers on eLearning during the COVID-19 pandemic

REFERENCES

Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: the challenges and opportunities. *Interactive Learning Environment*. doi:https://www.tandfonline.com/doi/full/10.1080/10494820.2020.1813180

Akakandelwa, A., & M'kulama, A. (2017). *International Journal of Scientific Research and Innovative Technology, 4*(12). Retrieved from https://www.ijsrit.com/uploaded_all_files/3173494536_d4.pdf

Allo, M. (2020). Is the online learning good during the Covid-19 Pandemic? The case of EFL learners. *J. Sinestesia, 10*(1), 1-10.

Arkorful, V., & Abaidoo, N. (2020, December). The role of e-learning, the advantages and disadvantages of its adoption in Higher Education. *International Journal of Education and Research, 2*(12). Retrieved August 13, 2021, from https://www.ijern.com/journal/2014/December-2014/34.pdf

Chewe, P., & Chitumbo, E. M. (2012). Moodle Adoption at the University of Zambia: Opportunities and Challenges. *Science Journal of Sociology & Anthropology*. doi:https://www.sjpub.org/sjsa/sjsa-289.pdf

Coman, C., & al, e. (2020). Online Teaching and Learning in Higher Education during the Coronavirus Pandemic: Students' Perspective. *Sustainability*. doi:https://www.mdpi.com/2071-1050/12/24/10367

Dube, M. C. (2020, December). Online learning challenges postgraduate certificate in education History students faced during COVID-19 at the University of Zululand. *Yesterday&Today*(24), 136-157. doi:http://dx.doi.org/10.17159/2223-0386/2020/n24a7

Filgona, J., Sakiyo, J., Gwany, D., & Okoronka, A. (2020). Motivation in Learning. *Asian Journal of Education and Social Studies, 10*(4), 16-37. doi:10.9734/AJESS/2020/v10i430273

Fordham University. (2021). Types of online learning. Retrieved from https://www.fordham.edu/info/24884/online_learning/7897/types_of_online_learning

Grand Valley State University. (2021). *Grand Valley State University*. Retrieved December 17, 2021, from Technology Requirements for Online/Hybrid Courses: https://www.gvsu.edu/online/technology-requirements-for-onlinehybrid-courses-8.htm

Kabombwe, Y. M., & Machila, N. (2020, October 1). Implementing a History Competency-Based Curriculum: Teaching and Learning Activities for a

Zambian School History Classroom. *Multidisciplinary Journal of Language and Social Sciences Education*, 18-50.

Kamur, S. (2015). Common Problems Faced by Students in eLearning and How to Overcome Them. Retrieved from https://elearningindustry.com/5-common-problems-faced-by-students-in.elearning-overcome

Kentucky Counseling Center. (2021). *Mental Health Effects of Online Learning*. Retrieved December 17, 2021, from https://kentuckycounselingcenter.com/mental-health-effects-of-online-learning/

Kumar Basak , S., Wotto , M., & Belanger , P. (2018). E-learning, M-learning, and Learning: conceptual definition and comparative analysis. *ELearning and digital media, 15*(4), 191-216.

Lestari, R., Astuti, B., & Bhakti, C. P. (2020). A comprehensive teacher strategy for the successful online learning process. *International Journal on Education Insight, 1*(1), 1-12. doi:10.12928/ijei.v1i1.2064

Li, C., & Lalani, F. (2020). The COVID-19 pandemic has changed education forever. This is how. *World Economic Forum*. Retrieved from https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/

Makafane, T. D., & Chere-Masopha, J. (2021). COVID-19 Crisis: Challenges of Online Learning in One University in Lesotho. *African Perspectives of Research in Teaching & Learning, 5*(1). Retrieved from https://www.ul.ac.za/aportal/application/downloads/Article_5_6_2021.pdf

Oguguo, B. C. (2020, June). Assessment of ICT Skills Relevant for Effective Learning Possessed by Undergraduate Students at the University of Nigeria. *International Journal of Higher Education, 9*(4), 206-215. doi:10.5430/ijhe.v9n4p206

Open Education Database. (2021). Retrieved December 17, 2021, from Essential Computer and Technology Skills of Online Learners: https://oedb.org/advice/essential-computer-and-technology-skills-of-online-learners/

Simulundu, E. et. al (2021). First COVID-19 case in Zambia — Comparative phylogenomic. *International Journal of Infectious Diseases, 102*, 455-459. doi:https://doi.org/10.1016/j.ijid.2020.09.1480

Sohail, N. (2013). Stress and Academic Performance Among Medical Students. *Journal of the College of Physicians and Surgeons Pakistan, 23*(1), 67-71. Retrieved from https://jcpsp.pk/archive/2013/Jan2013/15.pdf

U.S. Department of Education, Office of Educational technology. (2012, January). *Understanding the Implications of Online Learning for Educational Productivity*. Washington D.C. Retrieved from http://www.ed.gov/technology

World Health Organization. (2020). *Coronavirus disease (COVID-19) advice for the public*. Retrieved from https://www.who.int/emergencies/dis