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E-learningUsage in Tertiary Institutions During Covid-19: A Case of Zimbabwe Open University, Chinhoyi Campus

*Alex Sibanda

Zimbabwe Open University, Lecturer Department of Information Science and Records Management, Chinhoyi Public Service Training Centre, P.O Box 285 Chinhoyi, Zimbabwe. Cell +263775122907, email address: lexisa49@gmail.com or sibandaa@zou.ac.zw.

**Remigios V. Mangizvo

Zimbabwe Open University, Lecturer Department of Geography and Information Science, Midlands Regional Campus, Number 16 Victory Road, Gweru, Zimbabwe. Cell +263772810978, email address: mangizvor@zou.ac.zw.

Abstract

The study investigated the e-learning challenges encountered by first year students at Zimbabwe Open University (ZOU) Chinhoyi Campus faculty of Applied Social Sciences. It also examined whether using e-learning during the coronavirus pandemic was helpful to students to the degree anticipated. To achieve the purpose of this study, literature from various scholars was used as the conceptual framework. The research employed a mixed research approach to triangulate the results. The study used a case study research design to solicit information. Data were collected using a WhatsApp questionnaire. The study sample were 100 first year students from faculty of Applied Social Sciences. The random sampling technique was employed. The study findings revealed that ZOU Chinhoyi Campus first year students were faced with challenges such as: digital divide, high cost of internet data, ICT gadgets being expensive to purchase, unreliable power supply, and internet connectivity. This study also discovered that first year students were cognisant of the benefits of e-learning as a learning approach. In addition, the study found out that first year students had mixed feelings towards use of a stand-alone e-learning approach. The study recommends that ZOU must provide practical training to students in the field of e-learning skills; assist students to acquire ICT gadgets and internet data at low costs. Another recommendation for the institution is to offer compulsory e-learning courses in the curricula of all first-year students

to equip them with e-learning skills as well as improve accessibility toe-learning. In addition, students must consider partnering with internet service providers who offer good internet bandwidth.

Keywords: *E-learning challenges, Information Technologies, E-learning benefits, Covid-19, My-vista.*

Introduction

The adoption of a stand-alone e-learning approach in developing and developed countries was triggered by the deadly Covid-19 pandemic as well as invention of new information technologies. Due to Covid-19 face-to-face tutorials and field trips in Zimbabwe's institutions of higher learning and other countries were banned and replaced with e-learning in a bid to curb the spread of Covid-19 which is contact and airborne passed. The virtual learning environment is a flexible mode of learning but can also present problems to the students. According to Clark and Mayer (2011) e-learning refers to any instruction that is delivered through a technological mode with an intend to promote learning. Covid-19 environment forced Zimbabwe Open University which is an open and distance learning institution to abort its face-to-face tutorial approach and replaced it with online through a tailor-made platform known as My-vista. The frequent use of My-vista e-learning at ZOU Chinhoyi Campus seems to be a long-term approach since there is a surge in the number of Covid-19 cases in Zimbabwe and it is not clear when this pandemic will come to an end. The Zimbabwe Open University technology-based method of instruction (My-vista) has been accepted by students with mixed feelings. The ZOU My-vista (e-learning) platform was designed to cater for the following services to students: fees payment, registration, accessing of coursework and examination results, downloading, and uploading coursework feedback files, and inserting learning materials as well as conducting tutorials.

Statement of the problem

In spite of receiving an online orientation on how to access and use My-vista e-learning platform its utilization by students at ZOU Chinhoyi Campus remains below the anticipated degree. The low numbers on online tutorial attendance, participation, assignment submission as well as downloading of learning material were causes of concern for this study.

Objectives

The study intended to:

i. Establish the services offered by My-vista e-learning program.
ii. Find out the challenges faced by students using My-vista e-learning platform.
iii. Determine the extent to which My-vista e-learning platform was beneficial to students.

Research Methodology

The study used a mixed methodology; hence ushering it to take both qualitative and quantitative approach. Tichapondwa (2013) notes that the mixed method approach enables the researcher to acquire an in-depth understanding of respondents' experiences and perceptions. Therefore, by applying the mixed method approach in a single study the researcher aimed at investigating the challenges students face while using (My-vista) e-learning platform as well as examining whether using My-vista platform was of beneficial to studentsat ZOU Chinhoyi Campus during the Covid-19 era. The study adopted a case study research design focusing on first year students from the faculty of Applied Social Sciences. The reason being that it brings out deeper insights and better understanding of the problems faced by the participants. This method entails an empirical inquiry, studying a contemporary phenomenon (E-learning Usage during the Covid-19 Pandemic in Tertiary Institutions) within its real-life context (ZOU Chinhoyi Campus) (Johnson and Onwuegbuzie, 2004; Kothari, 2004; Creswell, 2003). A sample of 100 first year students was randomly selected from the faculty of Applied Social Sciences. Data were gathered from students through a WhatsApp questionnaire. The questionnaire was forwarded on a WhatsApp group where all new students from the Faculty of Applied Social Sciences were active participants. The questionnaire contained 10 multiple questions (yes/no and open-ended questions) that covered the research objectives. The qualitative data acquired were structured and organized using Nvivo software package, with the intention of generating thematic findings, while quantitative data were quantified using Statistical Package for Social Scientists. In such a view result from quantitative data and findings from qualitative data were integrated accordingly.

Literature Review

The intensified use of e-learning especially in developing economies such as Zimbabwe has been driven by the need to address the Covid-19 issues, distance barriers associated with

correspondence educationand progressive pressure to catch up with the developed world regarding for example global competitiveness. Bini, Jayashree and Ranjita (2018) argue that a range of factors including emerging Information Communication Technologies (ICTs), liberalization, privatization, and globalization have also amplified the demand for e-learning in higher education sector. Agrawal (2017) indicates that e-learning as a teaching and learning approach in institutions of higher learning has brought about many benefits but cannot be overemphasized because of its glitches. According to Blinco, Mason, McLeamon, and Wilson, (2004) the success of e-learning's rests upon the essential requirement that teaching staff and learners possess adequate technical skills to use e-learning tools.

a) E-learning in Tertiary Institutions

E-learning can be considered a natural evolution of distance learning which has always taken advantage of the latest tools to emerge in the context of technologies for structuring education (Sangrà et al. 2012). E-learning denotes the use of Information Technologies in distance institutions of learning by lecturers and students. There are a number of established stand-alone e-learning distance learning universities in Africa such as University of South Africa (UNISA), the Zambian Open University, National Open University of Kenya, Open University of Tanzania (OUT) and the National Open University of Nigeria (NOUN) to mention just a few. Both developed and developing countries are adopting stand-alone e-learning to curb the spread of the deadly coronavirus as well as meeting the demands of students in the 21st century. Many higher and tertiary institutions across the globe are shifting from purely a campus centered model of higher education to an e-learning model using information and communication technologies (Howell et al., 2003). The stand-alone e-learning is classified into two broad categories, synchronous and asynchronous (Cantoni 2004). The synchronous learning uses a learning model that initiates a classroom course, lecture or meeting using internet technologies. In addition, synchronous learning provides a live interaction and requires all the participants to be available at the same time (Kuruppuarachchi et al, 2017). While, asynchronous learning is described as a web-based version of computer-based training (CBT), which is typically offered on a CD-ROM or across an institution’s local area network. The learner can access the course at any time and at his or her own pace (Takalani, 2008).

Stephenson (2001) highlights that there was little systematic research into the overall effectiveness of e-learning as a teaching and learning tool despite the great interest in it. He acknowledges that more work needs to be done. Thus, a variety of e-learning programs must

be developed and should demonstrate how e-learning can reach thousands if not millions of students and potentially plant the seed of change in the education sector. The above statement was fulfilled by ZOU in the year 2017 when it officially introduced an e-learning program (My-vista) for teaching and learning. The ZOU e-learning (My-vista) system is an internet-based learning management system that is meant to facilitate the teaching and learning process from anywhere, any time through interactions with lecturers and other students.

The ZOU e-learning (My-vista) program allows course material to be built online, manage learning and collaborative activities between the students and the lecturer online, which was not the case during the period 1990 up to 2016. Zimbabwe Open University became the first university in the country to offer degrees through the Open Distance Learning mode, hence activities between the students and lecturers were done via-mail (hard copy) there was nothing like e-learning during this period (Chimhenga, Mpofu and Mafa 2013). To sufficiently cater for students throughout the country, ZOU has a highly decentralised structure with 10 regional Campuses in all the provinces and one of them being Chinhoyi regional Campus located in the peripheral areas of Chinhoyi town in Zimbabwe.

b) E-learning Use

According to Al-Harbi (2011) learners and teaching staff's attitude toward information technologies is the most important factor that determines their intention to use e-learning. Thus, for instance, learners and teaching staff's decision to use e-learning is determined by their subjective norm, like influence of people around them. In addition, Bendania (2011) claims that the use of e-learning by students or lecturers is also determined by factors such as: experience, positive attitudes, confidence, enjoyment, usefulness, intention to use, motivation and digital divide. Zake (2009) says poverty is one of the barriers to e-learning usage by learners and instructors, especially in Africa than in developed countries because ICT gadgets and data bundles are relatively more expensive. This also tends affect the usage of e-learning by students and teaching staff, since they cannot afford to purchase these ICT gadgets and keep up to date with technology. Moreover, the Covid-19 environment has also played a role in shaping the students and lecturers behavioural intention regarding stand-alone e-learning acceptance and use at ZOU Chinhoyi Campus.

c) E-learning Challenges

Traditional ways of teaching and learning are gradually being replaced by e-learning and yet, the credibility of this type of a learning system is questionable (Agrawal, 2017). Thus, despite

the promises and obvious advantages of e-learning, students and lecturers face problems that need to be resolved. Donnelly and McAvinia (2012) cited that lack of training to students and lecturers as well as little experience in the use of information communication technology as an educational tool has a bearing on e-learning. Literature review has shown that, generally in developing countries there is poor usability of e-learning applications, sometimes due to irrelevant content and inappropriate use of technologies (Bates 2005; Goodfellow & Lea 2007; Ssemugabi & de Villiers 2010). These studies cited the following as contributory factors, poor or insufficient technology infrastructure, lack of access to such infrastructures and lack of skill by the users. Rhema and Miliszewska (2010) associated the usage or acceptance of a stand-alone e-learning program in most developing countries with cultural and linguistic background of students as well as teaching staff. Their awareness or attitudes towards a stand-alone e-learning method such as underdeveloped technological infrastructure, cost of educational technologies, lack of local proficiency in e-learning, and lack of educational management to support e-learning initiatives.

d) E-learning Benefits

Agrawal (2017) mentioned that e-learning has been successful in providing educational opportunities to potential learner populations cutting across age, disadvantaged groups and territorial dispersion ensuring inclusion. Musingafiet.al. (2015) note that the use of information technologies can benefit students in remote and urban areas by having them attend classes as distance learners and motivating them to learn like the “Group Learning Sets” (GLS). The e-learning style also helps lecturers to deliver a lecture anytime and anyplace which provides a platform for learners and instructors to communicate. In concurrence Clarke (2004) asserts that learners have freedom of choice over "place, pace and time". The growth of e-learning programs according to Lockwood and Gooley (2002) is driven by the need for and potential of providing education in less expensive ways, increased access to information, effective learning, and greater flexibility. Furthermore, Berhanu (2010) points out that e-learning provides a potential and comparative ladder for developing countries to leapfrog to the knowledge economy.

Discussion and Findings

The first research objective wanted to establish the services offered by ZOU Chinhoyi Campus through My-vista e-learning program. The study established that My-vista program allows students to do the following activities that is fees payment, registration, submission of coursework, accessing results, access learning materials, accessing e-library resources, and

accessing tutorials. However, this study was limited to e-learning issues such as assignment submission, feedback, access to online tutorials, participation,and access to e-learning materials. Below is Figure 1 which shows the e-learning facilities offered to students through My-vista platform.

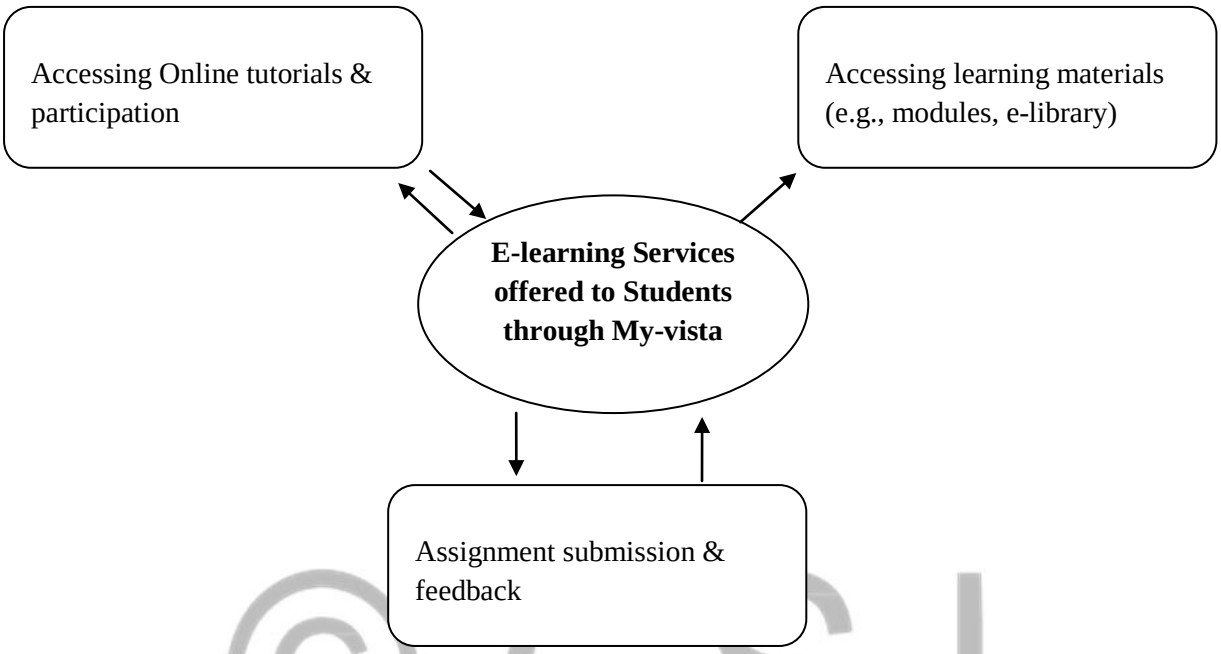

Figure 1: E-learning services offered through My-vista

The second research objective enquired about the challenges faced by students using My-vista e-learning platform to perform their learning activities. The study findings revealed that 54% of students at ZOU Chinhoyi Regional Campus were not able to use all the facilities offered by My-vista e-learning program. These students indicated that there were not able to join the Microsoft online tutorial classes, participate smoothly, submit their assignments, and perform the online in-class quiz examinations. According to study findings the students (54%) who were unable to utilize most of the facilities of My-vista e-learning platform lacked the technical know-how of how to access the internet, how to use a computer or laptop and were unable to download assignments, feedback and reading materials. These students also pointed out that they were not given pragmatic training on how to use my-vista or navigate the system.

The study found out that 45% of the participating students could not attend and participate during online Microsoft tutorials and were also struggling to access reading materials on My-vista. The reasons cited by students for failure to attend and participate during online tutorials

were ascribed to internet access challenges such as poor internet connectivity, poor bandwidth, and cost of data bundles. In addition, these students also cited that the My-vista platform was not user friendly. The following sentiment was expressed by one of the participating students:

> *My-vista system is not user friendly, because sometimes you spend a lot of time trying to login, but to no avail it will just say server 404 is temporarily down.*

The study also established that 45% of student respondents were not able to attend and participate during the Microsoft online tutorials as well as accessing reading materials. The study noted that these respondents mentioned that they neither had access to nor own any ICT gadgets like laptop, desktop, or smartphone to use in doing their learning activities. According to the study findings these students (45%) related their failure to own laptop, desktop, or smartphone to high cost of purchasing the devices.

The study discovered that 1% of participating students were not able to use access and use My-vista platform because they reside in the remote rural areas where there is no electricity. The study also found out that these students (1%) relied on solar system which is an unreliable source of power at times during the winter and rainy season. The Figure 2 below displays the percentage of encounters faced by new students in using the My-vista e-learning platform.

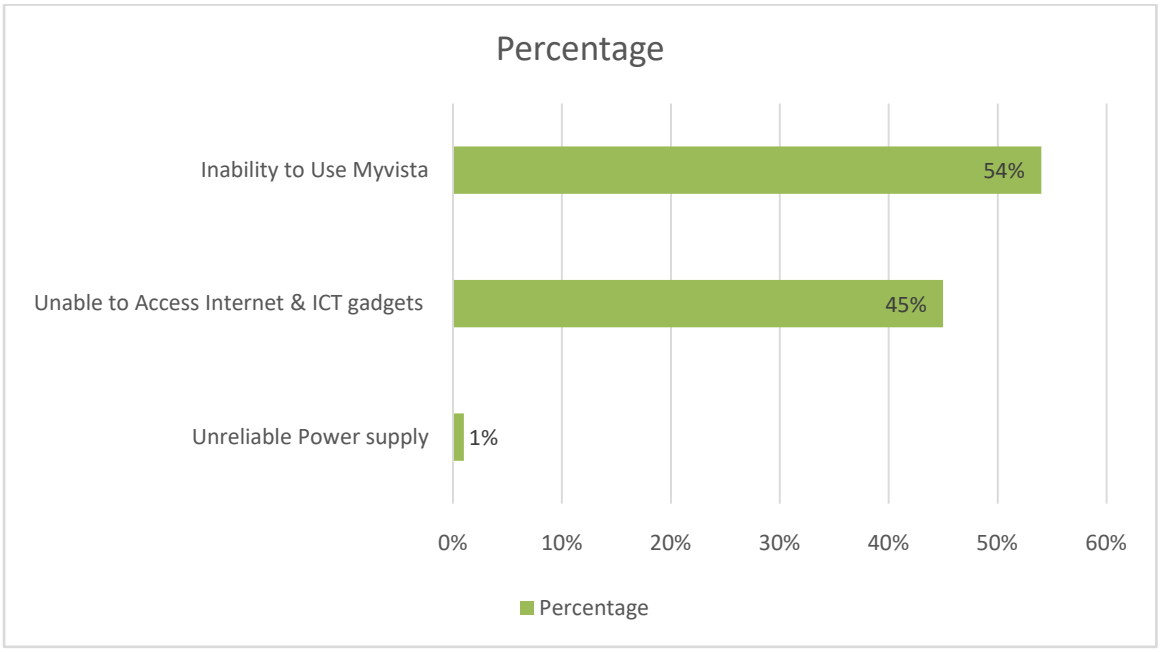

Figure 2. Challenges faced by Students

The third research objective enquired about the extent to which My-vista e-learning platform was of benefit to students during the study period. The study discovered that (54%) of participating students mentioned that My-vista e-learning platform was very useful in their learning activities during Covid-19 outbreak. According to the study findings students (54%) alluded through My-vista e-learning platform they could perform the following activities online at the comfort of their home, workplaces, anywhere and anytime that is assignment downloading, submitting, accessing feedback, accessing reading learning materials, and accessing online tutorial in synchronous or asynchronous way. The study established that (54%) of the students who said that My-vista e-learning platform was very useful to their learning activities had the ability to access and use My-vista without any encounters. These students had a good ICT skill, internet, owned ICT devices such as laptop and had reliable power supply. This study revealed that (45%) percent of the students were not really sure if My-vista e-learning platform was of benefit to them in their learning activities. According to the findings the students (45%) mentioned that they faced challenges in accessing and using My-vista reason being: no internet access, no ICT device to use and digital divide. The study established that 1%of the participating students were of the view that My-vista e-learning platform was not useful to their learning activities. this is summarised in Figure 3 below. One of the participating students said:

> *The My-vista e-learning platform could not allow me to submit assignments.*

The study found out that the (1%) of the student who indicated that My-vista platform was not useful had some technical glitches on their individual portal which required settings adjustment.

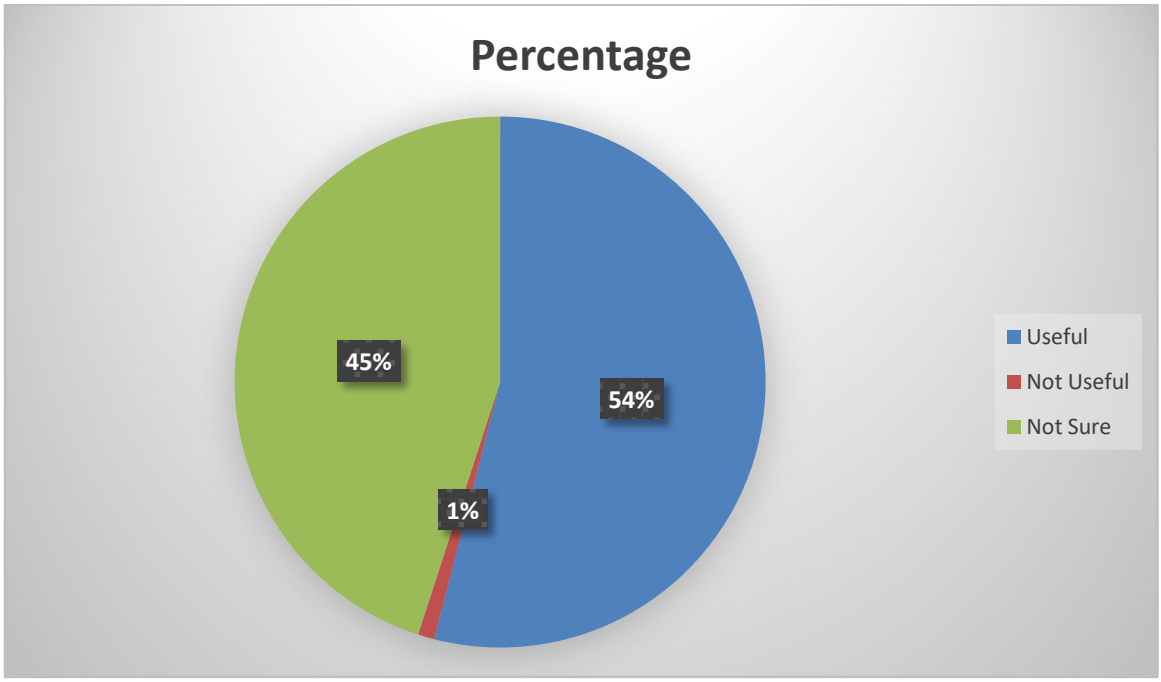

Figure 3. How Useful is My-vista e-learning platform.

Conclusion

The study aims to explore and investigate the e-learning challenges and opportunities encountered by first year students at Zimbabwe Open University (ZOU) Chinhoyi Campus during the coronavirus pandemic from the faculty of Applied Social Sciences. The study found out that students encountered digital divide difficulties in accessing and using My-vista platform. About 54% of students failed to attend online tutorials, downloading learning materials problem and perform the online in-class quiz examinations using My-vista.The study also reveals that the major challenges encountered by ZOU Chinhoyi Campus students in using My-vista e-learning were technical issues such as internet connectivity problems, unable to own and access ICT gadgets,and high costs of data bundles. ZOU Chinhoyi Campus students' satisfaction with My-vista e-learning is high; greater than 50% are satisfied with e-learning, whereas 45% of students were not so sure about My-vista e-learning being useful to their learning activities, and 1% of students were of the view that My-vista e-learning was not fully supporting their learning activities. However, it is recommended that further research should be undertaken to establish the lecturers' views and experiences on the use of My-vista e-learning as a teaching and learning approach during and after the pandemic.

Recommendation

The study recommends that ZOU must provide practical training to students in the field of

e-learning skills; assist students to acquire ICT gadgets and internet data at low costs. Another recommendation for the institution is to offer compulsory e-learning courses in the curricula of all first-year students to equip them with e-learning skills as well as improve accessibility to e-learning. ZOU Chinhoyi Campus needs to identify those who need extra training sessions and also conduct regular revision lessons. In addition, students must consider partnering with internet service providers who offer good internet bandwidth. The ZOU Chinhoyi Campus also needs to increase My-vista utilization awareness campaigns through various forums and means so that students are aware of the full range of benefits.

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