Challenges faced by Zimbabwe Open University Students in accessing and using ICT materials: a case study of the Midlands Regional Campus

Silvanos Chirume and Rosemary Ngara
Zimbabwe Open University

Abstract

In its 2017 Strategic Plan, Zimbabwe Open University (ZOU) proposed that every Masters student should prepare and submit assignments online. Every student is also encouraged to access learning materials online and to use the MyVista platform. It appeared that the authorities envisioned this idea without having adequate information on the sufficiency, accessibility, and ability to use the ICT materials by the students. It also appeared that use of ICT materials by ZOU students was minimal. A study was then carried out to investigate the challenges faced by ZOU students of the Midlands Regional Campus in accessing and using ICT materials for learning, research and producing assignments. Using convenience sampling, 15 students who visited the ICT laboratory during the first semester of 2017 were selected and interviewed. Data were analysed using hermeneutical analysis techniques. Findings were that students had challenges in being involved in collaborative learning with other students and lecturers due to limited resources and skills in using ICT materials, getting positive influence from lecturers since lecturers did not integrate ICT’s in tutorials and absence of ICT’s at students’ work places in the remote areas of the Midlands province of Zimbabwe. The study recommends that ZOU needs to put in place adequate ICT machines for the students, make them accessible at all times, and train all students and staff in the proper use of the facilities, inter alia. Further studies can also be carried out in other regional campuses of ZOU.

Keywords: ICT materials, accessibility, effective use, MyVista, ODL, challenges

Introduction

In its 2017 Strategic Plan, Zimbabwe Open University (ZOU) proposed that every Masters student should prepare and submit assignments online. Every student was also encouraged to access learning materials online and to use the MyVista platform. According to http://www.myvista.zou.ac.zw/portal/ MyVista is an internet-based learning management system that is meant to facilitate the teaching and learning process from wherever you maybe and at whatever time you feel the craving for a wholesome learning experience with enhanced interactions with lecturers, tutors and other students.

The administrators of MyVista also informed all students enrolled in courses where
assignments had been provided electronically that they were able and encouraged to make their assignment submissions electronically through the platform (http://www.myvista.zou.ac.zw/portal/mod/forum/discuss.php?d=112).

Would all the students be able to freely access and effectively use the available information and communication technology (ICT) materials? This and other related questions motivated the researchers to carry out this study.

**Theoretical framework**

This study is based on the theory that, according to Brookfield (cited in Commonwealth of Learning and Asian Development Bank (COL and ADB), 1999, p. 19), “A comfortable, supportive environment is a key to successful learning.” Providing learner support enhances student learning and confidence (McGillivray, 2008). The educational philosophy of open learning emphasises giving learners the kind or type of support that they need (COL and ADB, 1999). Students’ learning can be supported in various ways such giving tutorial support, counseling support, administrative support and media support (COL and ADB, 1999). Media support includes print materials and ICT’s such as radio, audio cassettes, telephone, television, video, computers and other multimedia gadgets. Research results have shown that the application of ICT’s, especially in learning mathematics, generates higher-level thinking and problem-solving skills and increases achievement among students (Zakaria and Khalid, 2016).

**Statement of the problem**

It appeared that the ZOU authorities envisioned the idea, and made a policy of students preparing and submitting assignments online without having adequate information on the types and levels of support given to students, especially on the sufficiency, accessibility, and ability to use the ICT materials by the students. This would cause a lot of inconveniences, anxiety and panic in the students resulting in them losing confidence with ZOU.

**Research questions**

The study was guided by the following questions:
- In which ways are ZOU students benefitting from using ICT facilities in their studies?
- What challenges hinder students from accessing and benefitting from using ICT facilities at ZOU?
- What are the causes of challenges leading to students to fail to benefit fully from ICT at ZOU?
- How can challenges that prevent students from benefitting fully from ICT at ZOU be alleviated?

**Review of related literature**

This review of related literature focuses on the link between ICT and education, the need of ICT in ODL, challenges of accessing ICT materials in ODL environments and the challenges of using ICT materials in ODL environments.

**The need of ICT in education**

In this 21st Century teaching and learning cannot be divorced from the use of ICT facilities. For instance, in its National ICT Policy (2015, p. 28), the Zimbabwe Ministry of Information Communication Technology, Postal and Courier Services intended to “Facilitate the deployment and exploitation of ICTs in the educational system from primary
school upwards, and...work with the relevant Ministries to include ICT training and education in schools, colleges and universities.” This is so because ICT’s are considered as major pillars of the country’s socio-economic development. The use of ICT’s in teaching and learning have also been shown to create interaction, encourage cooperation and promote knowledge and information sharing among students (Zakaria and Khalid, 2016). Fagbamiye (2015) points out that in East African countries the use of ICT in teaching and learning could be fully realised in the future and not now because of current ICT challenges, the major one being high cost of internet connectivity.

The need of ICT in ODL

According to Bandalaria (2007) ICT has a major impact on ODL in the Philippines. Apart from aiding teaching and learning in ODL setup, use of ICT’s can also lead to development of new cultures, concepts, and understanding. ICT integration into ODL has resulted in new models of learning such as m-learning, e-learning and u-learning (Bandalaria, 2007). Ghosh (2015) says that ICT’s are nowadays playing the role of “enabler and catalyst” to fuel the growth of ODL and to meet the requirements and expectations of students. Ghosh (2015, p. 68) has highlighted six roles or unique features of ICT’s in ODL and these are:

(a) Individualization of learning – ICT allows each learner to relate to the content as an individual and not as a homogenous group.

(b) Interactivity – A learner has the freedom to start at the point depending on the previous knowledge instead of always in a sequential way.

(c) Low cost – Use of ICT always reduces the cost of imparting education remarkably.

(d) Distance and climate insensitivity – ICT has enormous potentialities to communicate with the distant learners and brings education at their doorstep overcoming all geographical barriers.

(e) High speed delivery – ICT makes it possible to deliver contents instantly.

(f) Uniform quality – A good quality content can be delivered to urban and rural learners uniformly which is not always possible by the conventional system for the non-availability of the good faculties.

Burns (2011) holds similar ideas by alluding that online learning (using web-based ICT’s) is cost effective when few learners are situated in a particular geographical location. Onuka (2015, p. 58) also says that:

To ignore ICT’s use in promoting the ideals of ODL is to do so at the peril of its growth and development and, by extension, stunting the expansion of access to higher education and consequently stagnating national growth and development, since development is by man and man is developed through education.

Therefore, the need of ICT’s in ODL cannot be overemphasized.

Although it has been shown that ICT’s and ODL go hand in hand, students sometimes face challenges in accessing and using ICT facilities.

Challenges of accessing ICT materials in ODL environments

ICT’s have been reported to have the potential of increasing access to and improving relevance and quality of education (Nyandara, 2012; Situma, 2015). However, at the Open University of Tanzania access to ICT’s was reported to be very minimal (Nyandara, 2012). Also access to internet in developing countries is expensive while access to some foreign websites may be blocked (Lee, 2004; Guo and Cai, 2006 cited in Nyandara, 2012). Idowu and Esere (2013) have highlighted the challenges of accessing ICT materials in Nigeria, including in higher education institutions, some of which were that:
1. The development of ICT related facilities such as the internet and procurement of computers is rather slow due to negative attitude or resistance to change of management in and outside some institutions.

2. Inadequate ICT infrastructure including computer hardware and software and bandwidth/access.

3. Lack of qualified personnel who can facilitate access to ICT. For instance, most institutions lack computer literate teachers and ICT experts that would support and manage the internet connectivity and/or application of computing in the teaching-learning process.

4. The high cost of equipment has a negative bearing on the accessibility of ICT materials.

Similar challenges of access to ICT materials have been reported elsewhere. For example, Salehi and Salehi (2012) report that insufficient technical support at schools and little access to ICT and internet were the major barriers preventing teachers from integrating ICT into the curriculum.

Fagbamiye (2015) has also reported inadequacy of ICT infrastructure and the high cost of equipment as challenges to ICT access.

Challenges of using ICT materials in ODL environments

Even if students are able to access ICT materials, challenges of how to effectively use them may be faced. In the Phillipines, lack of knowledge and skills to use ICT’s were reported as barriers of ICT’s in ODL environments, and such use being also affected by access and cost (Bandalaria, 2007). Tutors who lack competence in the proper use of the materials can lead to students having negative attitude to the ICT’s. Thus, institutions should offer sufficient training to the user groups be they students, teachers or administrators (Bandalaria, 2007).

In India (Rao, 2009 and Ghosh, 2015) have listed some challenges of using ICT materials in ODL, which are scalability issues (i.e., to maintain scalable resources in terms of memory space, handle number of users and their transactions), lack of data compatibility, lack of dynamic allocation of internet bandwidth, lack of dedicated network connectivity among various operational nodes, lack of provision of maximum security of the materials, lack of updated manpower inline with change in technology, and lack of regular ICT policy updates. Siruma (2015) holds similar views but goes on to give other challenges such as uncoordinated players, insufficient integration of ICT in education and limited digital content, no ICT curriculum existing at the school level as a teaching and learning tool.

High cost of internet connectivity, lack of proper training for teachers and lecturers and inadequacy of communications infrastructure (Fagbamiye, 2015) were also cited as factors affecting use effective use of ICT facilities. Research has also shown that students experience anxiety relative to online testing events (Brooks, 2015).

In the case of ODL in Zimbabwe, challenges of use and access of ICT’s have been documented. For example, at the Masvingo Regional Campus of ZOU, Musingafi, Mapuranga, Chiwanza, and Zebron (2015) found out that about 75% of the students did not own or have access to computers and about 55% had difficulties in using them. The researchers of this study became interested to investigate the ICT challenges that the students at the Midlands Regional Campus were facing.

Methodology

This study employed a qualitative survey approach whereby a questaview (open ended questionnaire) was used as an instrument to gather and generate data. Using convenience sampling, 15 students who visited the ICT
laboratory during the first semester of 2017 were selected and interviewed. The ICT Technician at the Midlands Regional Campus was purposively sampled and asked to provide written evidence pertaining to challenges faced by students in accessing and using ICT materials at the campus. Data were analysed using hermeneutical analysis techniques. According to Schleiermacher (1768 –1834) cited in Rennie (2012)’hermeneutics’ involves interpretation of texts of all kinds. In other words it is making sense of a written text. When using hermeneutical analysis, the researcher ‘brackets’ self out in analysis and tells the story of the respondents or participants using their words. When analyzing the data the researcher uses different layers of interpretation of text and constructs meaning of text (from background and current situation), uses influence of others (symbolic interactionism), and uses context (time and place of writing) to understand the cultural and historical situation. The researcher would also find themes and relate them to the dialectical (spoken or written) context (Strauss, n.d.). Researchers in this study followed this procedure but also triangulated the data by observing the prevailing situation at the campus and reviewing relevant literature and documents.

Findings and discussion

Q1: In which ways are you benefitting from using ICT in your studies at ZOU?

Six out the 15 participants gave the opinion that they benefitted by registering online and eight times it was indicated that participants benefitted from using ICT in their studies at ZOU by researching material required for answering assignments and preparing for exams and among these eight five also gave the view that they made use of the internet service at ZOU to prepare for assignments. In support of these views, some of the participants made the following contributions:

S2: We are able to research information relevant to answering assignment question as well as accessing information relevant for exam preps through internet.

S7: I access e-books and journals.

Two participants opined that they were able to access their examination results using the ICT facility at ZOU. One contributor had the following to say:

S3: I work here in Gwern, for the last two semesters I have been coming to the centre to view my results.

Three out of the 15 participants gave the mind that they used ZOU ICT facility to communicate with lecturers and fellow students. In support of this view, one participator had the following to say:

S3: I communicate with colleagues, i.e. exchange ideas on content of modules.

The ways by which participants benefited from using ICT at ZOU as individuals and as groups corroborate Ghosh (2015) and Bandalaria (2007) who say ICT allows each learner to relate to the content as an individual and not as a homogenous group and ICT has enormous potentialities to communicate with the distant learners and brings education at their doorstep overcoming all geographical barriers.

While some partakers in this study expressed the view that they enjoyed some benefits from using ICT facilities at ZOU midlands centre, four times it was viewed that participants did not in any way benefit from the ICT facilities at ZOU. The following statements buttressed this opinion:

S11: I never use the ICT facilities at the centre; distance from my work place is the issue.

S15: I do not use the ICT facilities at ZOU—no adequate computer skills—too old—

Q2: What challenges hinder students from accessing and benefitting from using ICT facilities at ZOU?

Nine times it was stated that lack of adequate student ICT skills presented itself as a difficult in the efforts by ZOU to have students benefitting from ICT facilities at the Midlands.
ZOU centre. The following statements were made in support of this view:

S2: Many students lack requisite skills necessary for them to use ICT facilities even if the facilities may be easily accessible.

Three participants gave the view that internet failures were a hindrance in trying to benefit from the ZOU ICT facilities. Among these three two participants were of the mind that power failure was also a challenge. The following were some of the contributions:

S3: Sometimes the internet fails, sometimes it slows down, hence this affects downloads.
S2: Sometimes net is down or is very slow.
S7: Electricity can be a challenge; it becomes worse without a working generator.

Staying or living far away from the ZOU centre was perceived by eight participants as one factor making it difficult for students to benefit from ICT facilities at ZOU midlands centre. The following statements were made in support of this view:

S12: Working or living in remote areas is itself preventive.
S10: Working outside Gweru makes it a dream for some students to enjoy the benefits of using ZOU ICT facilities.

Inadequacy of resources necessary for ICT use was perceived by nine of the participants as one of the variables making it difficult for students to benefit from ICT facilities at ZOU. The following statements were made in support of this view:

S1: There are few computers for many students.
S2: Library has only 3 computers.
S9: Some desktops aren’t working.
S11: Many students cannot afford laptops to use at ZOU centre.

The problem of tradition on the part of some students and lecturers was opined by four participants as another challenge which prevented students from benefitting from ICT at the ZOU midlands campus. The following statements were testimony of this opinion:

S2: Some lecturers do not even want to e-mark project work of students.
S13: Some students lived in the 20th century, they fear to use ICT at ZOU.

Findings made in this study on challenges hindering students from accessing and benefitting from using ICT facilities at ZOU, which include lack of adequate student ICT skills, inadequacy of computers and laptops and tradition of not using ICT, power failures are in support of Musingafi, et al, (2015), Fagbamiye (2015) and Idowu and Esere (2013), who made similar findings in Zimbabwe and Nigeria.

Q3: What are the causes of challenges leading to students to fail to benefit fully from ICT at ZOU?

The opinion that centralisation in the provision of ICT in the ZOU Midlands region was recorded seven times as one variable contributing to little or no benefit by students in the use of ICT. Some participants had the following to contribute:

S2: Centralisation is the key cause.
S7: There are no computers and wifi at district centres.
S9: No ICT labs at district centres.

The view that students did not fully benefit from ICT at ZOU was attributed to the technological system which was not up to scratch by five participants. In support of this opinion, some of the participants made the following contributions:

S4: The network or wifi is at times not efficient.
S2: At times there is poor signal strength.
S7: MYZOU software is not user friendly and is probably not properly linked to ZOU accounts.

Some four participants attributed the failure by students to benefit from the ICT at ZOU midlands region to the economic meltdown the country was experiencing. Some participants had the following contributions to make:
S3: Without money for ICT, ZOU can’t do much.

S11: Students can’t purchase laptops which they could use at ZOU centre, in the absence of ZOU computers.

Findings made on causes of challenges leading to students to fail to benefit fully from ICT at ZOU are in support of findings made by Nyandara (2012), Idowu & Esere (2013), Rao (2009) and Ghosh (2015) who are of the view that lack of dedicated network connectivity, problems of finance to support ICT at individual and institutional levels and lack of updated manpower inline with change in technology are factors leading to learners failing to benefit fully from ICT use. Nonetheless, the finding made in this study that centralisation in the provision of ICT in the ZOU Midlands region was a variable contributing to little or no benefit by students in the use of ICT was not in support of any findings made in the reviewed literature.

Q4: How can challenges that prevent students from benefitting fully from ICT at ZOU be alleviated?

In this study the researchers also observed that at the ZOU Midlands Regional Campus students with physical disability and those with visual impairment did not have adequate and appropriate ICT facilities to use for learning, researching and for preparing and submitting assignments. Even if such facilities could be made available, it appeared such students had not undergone training on the proper and efficient use of such facilities as computers, and electronic braille machines. In line with this observation Mokiwa and Pasha (2013, p. 139) point out that, “These students experience different challenges in moving around in a disability unfriendly environment, reading and writing and following visual signs. They also experience difficulty moving around in the cyberspace and using graphic-based navigation system that most electronic platforms use.”

The important themes emerging from this study could be grouped into, inter-alia, insufficient ICT materials, incompatible ICT materials, slow connectivity of internet, lack of adequate and proper training of students and staff members, and lack of ZOU user-friendly ICT policy and support systems. These themes led to the following conclusions and recommendations.

Conclusions and recommendations

Some students especially those living or working near the ZOU Midlands Regional Campus enjoy benefits from accessing the ZOU ICT facilities by registering online, researching for assignments and exams, exchanging academic notes with fellows and...
accessing results. Nonetheless students living or working in remote areas did not fully benefit from ICT’s at ZOU Midlands Regional Campus. Challenges preventing students from benefitting from ICT at ZOU were; long distances from the centre, the tradition of not using modern technology, incompatible ICT materials for the physically handicapped and visually impaired students, lack of proper training in the use of ICT’s, ICT systems not being efficient enough, and inadequate resources necessary in the use of modern technology.

The researchers recommend the following:

• Provision of adequate and appropriate ICT equipment by ZOU to cater for diverse categories of students and to boost effective use of ICT at ZOU Midlands Regional Campus.

• Provision of equipped ICT laboratories by ZOU at district centres in the Midlands Province.

• Computer knowledge and application to be first module to be offered by all students.

• ZOU must introduce regular ICT training of lecturers, students and administratos to ensure that they keep pace.

• There is need for further research on the use and access of ICT materials by different categories of students at ZOU regional campuses.

References


