

The use of Zimbabwe Open University's MyVista platform in e-communication, accessing and uploading learning materials, and assessing students' work

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ABSTRACT

Zimbabwe Open University (ZOU) has come up with the technology platform known as MyVista which can be used to fulfil teaching and learning activities online. However, it appeared that when the MyVista platform became fully operational from 2017, both students and staff members faced a lot of challenges. To investigate these challenges, this study employed a qualitative survey with 30 students and 14 staff members of the Midlands Regional Campus, both groups conveniently chosen and asked to respond to a questaview. Findings showed that students had challenges in using the MyVista platform to register, to e-communicate with other students and lecturers due to limited resources, due to poor network and due to lecturers not responding to their messages. They also said they needed a lot of constant training, among other things. Lecturers said students often sent wrong assignments, some without links and some which could not open. They also said they needed training on marking and grading assignments, and needed fast and reliable computers with anti-glare screens. The study recommends that ZOU needs to put in place adequate e-learning policies and procedures, adequate computers for the students and make them fast and accessible at all times. ZOU should be innovative by upgrading the ICT materials and the MyVista platform and train all students and staff in the proper use of the ICT facilities, inter alia. There is need to also carry out a similar study in other regional campuses of ZOU.

Keywords: STEM innovation, MyVista platform, e-communication, accessing learning materials, uploading materials, assessing students' work.

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INTRODUCTION

In this Science, Technology, Engineering and Mathematics (STEM) age, every university aspiring to become world-class strives to make its students and lecturers computer literate. They wish that students should be able to communicate online, to download and upload learning materials and to prepare and submit assignments online. Every lecturer is also supposed to upload learning materials, to mark and grade assignments online, among other things. In this regard Zimbabwe Open University (ZOU) has come up with the technology tool known as MyVista which can be used to fulfil teaching and learning activities online. MyVista can be accessed from <http://www.myvista.zou.ac.zw>. An

initial evaluation of the implementation of the MyVista in 2015 by Tafangombe and Kaputa (2015) when only the Masters programmes were involved revealed that the students faced challenges when accessing the platform and that students, lecturers and even most Information Technology personnel did not have the capacity to use the MyVista internet based programmes. A study by Chiome (2012) on access and success in e-learning in the ZOU also revealed that while the majority of the students used computer related gargets they did not have access to computers and to e-learning. It also appeared that when the MyVista platform became fully operational as from the year 2017, both students and staff members

faced a lot of challenges as reflected by informal discussions with the lecturers and the students.

Purpose of the study and Research questions

The researchers often observed that students and even some lecturers gave a cold shoulder when the MyVista e-learning platform was introduced. Some training was given to both students and lecturers but it would appear that a lot of challenges were faced. This study therefore sought to investigate whether students and lecturers still faced challenges on the use of ZOU's MyVista platform in e-communication, accessing and uploading learning materials, and assessing students' work. The main research question was "What challenges are faced by both students and lecturers regarding undertaking tasks related to MyVista and how can these challenges be resolved?"

The research questions were as follows:

1. What are the challenges faced by students regarding registration, accessing assignments and modules, communicating with tutors or lecturers, uploading written assignments, and accessing results on MyVista?
2. How can the challenges faced by students be resolved?
3. What amount of support can the students receive regarding resolution of their challenges?
4. What are the challenges faced by lecturers regarding communicating with students, uploading assignments, and sending and grading marked assignments on MyVista?
5. How can the challenges faced by the lecturers be resolved?
6. What amount of support can the lecturers get regarding resolution of their challenges?

REVIEW OF RELATED LITERATURE

The review of related literature covers a conceptual framework of the concept e-learning, a theoretical framework guiding the study and a review of empirical literature.

Conceptual framework

e-Learning

Pangeni (2016) views e-learning as one of the several approaches to electronic learning that includes the use of all electronic means for learning. It is specific to Internet or Intranet mediated learning opportunities. Pangeni (2016) goes on to cite Bejjar and Boujelbene (2014:15) defining e-learning as the "use of ICT, online media and

web technologies for learning". The web technologies are referred to as web-based learning, computer-based learning, virtual classrooms and digital collaboration. It includes the delivery of content via Internet, Intranet/Extranet, audio and video tape, satellite broadcast, interactive television or CD-Rom.

The Organisation for Economic Co-operation and Development (2005) views e-learning as the use of Information and Communication Technology (ICT) to enhance and/or support learning.

Mason and Rennie (2006) postulates that e-learning is the use of network technologies to create, foster, deliver and facilitate learning. Mason and Rennie (2006) identified the following features of e-learning and their examples; communication between tutors and students, virtual chat facilities supporting various types of communication synchronous and asynchronous, one to one, one to many, many to many, self-assessment and summative assessment exemplified by Multi-Choice assessments with automated marking and immediate feedback; delivering of resources and materials through the provision of learning and teaching materials, video clips, links to other web resources, shared work group areas and shared files as well as communicating with each other; support for students which can take the form of communication with tutors or other students, provision of supporting materials such as course information; students' tools which imply individual student web pages, drop boxes, electronic diaries and calendars. Tafangombe and Kaputa (2015) cite Naidu (2006) defining e-learning as the use of linked information, communication and technologies (ICTS) in teaching and learning.

Addah et al. (2018) view e-learning as electronic delivery of education for students who are separated from their teachers both in time and space and as communication technology. e-learning strives on information and communication technology. Advancement in technology gives direction to e-learning.

Chiome (2012) views e-learning as the use of network technology to deliver, select, administer and extend learning while Almarabeh (2014) describes e-learning as the use of information and communication technology, for example, internet, computer, mobile phone, learning management system (LMS), televisions, radios and others to enhance teaching and learning activities. It is viewed as a unifying term used to describe the field of online learning, web-based training and technology delivered instructions.

All the definitions of e-learning above attest to the view that it is learning electronically delivered through a variety of network technology for the purposes of delivering, selecting, administering and extending learning.

e-Learning has been used for purposes of creating, sharing, communicating and collaborating and makes it easy for people to create confidential documents and open interaction even if they are at a far distance

(Pangeni, 2016).

e-Learning has also brought significant changes in higher education institutions by reforming their student support system and the process of educational delivery (Pangeni, 2016). This is the case with MyVista for the Zimbabwe Open University (ZOU).

Some institutions of higher learning have adopted learning management systems (LMS) software developed for administration and teaching in tertiary education (Panclabakesen, 2011). The software enables them to treat enrolment data electronically, offer electronic access of course materials and carry out assessments, offering online interaction between faculty and students. The MyVista platform of ZOU offers the above facilities to students.

e-Learning makes use of other learning resources freely accessible via the internet such as You-Tube and Open Courseware (Chen, 2013). These resources are free, rich and popular. The ZOU's MyVista platform also encourages lecturers to use these free resources in their teaching. The above platform allows lecturers to freely obtain downloadable audio and visual contents through Apples or Tunes store which could be made accessible to students for the purposes of their learning.

e-Learning can also offer cloud computing resources (Almajalid, 2018). Cloud computing services include calendars, e-mails, document storage, contact lists, website creation services and document storage, contact lists, website creation services that do not require purchase of new equipment or require maintenance of hardware, upgrading or updating of existing software or obtaining of licenses for software or date synchronisation because cloud services include all of them (Almajalid, 2018). Cloud services can be accessed from anywhere, anytime and from any device. Cloud computing has about five advantages as pointed out by Almajalid (2018), namely that it provides convenience and improved accessibility, it is cost saving, there is reduced expenditure on Information Technology (IT) infrastructure because upfront expending on IT infrastructure is minimised but easy access to information is ensured, and it requires minimal training of personnel. This is so because fewer people are required to perform more tasks on cloud. The level of skill regarding software and hardware issues is minimal and it has super-computing power for several computers are brought together to constitute a super server in cloud providing computing capacity (Almajalid, 2018).

Cloud computing enables lecturers and students at ZOU to surf the internet through google or yahoo and download valuable information which is later posted on MyVista for students' consumption. Lecturers can receive research projects, mark them and send them back to students. It should be noted however, that this is not done through MyVista which is the focus of this study. This is, however, part of e-learning. Handouts made by lecturers could be attached to e-mails of the classes and

the students access them. Lectures can also exchange downloaded material or their published researches which could later be posted to MyVista for the consumption of students. Students can also access the downloaded materials and lecturers' published articles, can access examination results and their courses, and can relay their assignments online through their mobile devices. Lecturers in ZOU can relay tests, manage students' coursework and evaluate some work and assignments and can also communicate with one another through cloud computing and MyVista. Through MyVista students can access their individual data using the ZOU web browser from a computer or mobile phone at school, home, library or from any other place. This ensures efficient collaboration, communication and exchange of shared documents, notes, as well as contacts among other data.

Theoretical framework of the study

The study is premised on connectivist and constructivist pedagogical theories of learning. Connectivism is a pedagogical and epistemological theory of learning that was initiated by Siemens (2005) to explain in detail the mechanical dynamic of learning in the digital environment online. The connectivist learning theory is really analogous to pure network theory where the connecting lines are replaced by the virtual knowledge connection lines. The connectivist theory of learning seeks to answer the unanswered questions from the past foundational theories of learning at a distance.

The constructivist learning theory postulates that knowledge is developed internally, rather than simply transmitted by an instructor to a passive student. Learning occurs most effectively when the mind filters incoming information and connects that information to past knowledge and current relevance. Learners must construct their own schemas and solutions to problems by actively revising, restructuring into their existing cognitive structures. Effective learning is based on reflection, personal insight and permanent change in behaviour (Signer-Littles and Chalon, 1999:204). The theory is learner focused. The learner interacts with content and events thereby understanding ideas and events. The learner finds solutions to problems by actively participating in discussions with others and getting instant feedback. It boosts independence and self-reliance to learners thus building learners' confidence and skills. The construct-based models frequently using online environments are situated learning, problem-based learning, communities of practice and simulations (Mason and Rennie, 2016).

The study is also hinged on the Technology Acceptance Model (TAM) developed by Davis (1989). This theory was built based on the Theory of Reasoned Action (TRA). This theory posits that beliefs could

influence attitudes that is, feelings of using technology, which leads to intention to use and finally actual usage behaviour. TAM describes that a person's behavioural intention to use e-learning is determined by perceived usefulness and perceived ease of use. This can lead to adoption of IT use. Some challenges to students related to MyVista use emanate from attitudes. If attitudes to IT are negative, they can act as a challenge.

Empirical review of related literature

The use of MyVista online platform started in 2015 at the ZOU. Training for lecturers started in 2015 and real use of the platform began in 2016 with only Masters Programmes. In 2017 the MyVista platform was then used in other programmes in the entire university after further training of the lecturers and students. The ZOU's MyVista User Manual for Instructors (undated, p.12) points out that the MyVista components constitute material on (a) adding files which constitutes how to link to a website, how to display a folder of files, images, videos, embedding videos from other sites and pages, (b) adding activities that include using the chat activity which constitutes how to create a chat room, participating in a chat room; creating assignments in one's course composing advanced uploading of files, on-line text, uploading a single file, offline activity; creating quizzes in the course constituting how to create a quiz, how to add questions to the question bank and how to add a question to the quiz. The above issues now have additions on student registration, uploading of assignments, returning of marked assignments and information on payments of fees. The ZOU's MyVista e-learning platform can therefore be considered as a noble technological innovation in line with Zimbabwe's STEM initiative.

Pangeni (2016) undertook a study on emerging practices of using technology in education that have been promoting online learning as a form of distance learning apart from the use of the traditional face to face tutoring. The study got data from authors' personal reflections, literature review and insights on learning theories. It adopted a qualitative approach. The study recommended the adaptation of acculturation of online learning by respecting the need of the new generation of learners at the age of Internet culture.

The study had found out that Nepalese higher education universities had not institutionalised technology integrated practices as their educating culture besides that the researchers had established that e-learning tools had brought significant changes in higher education institutions by reforming their student support system and the process of educational delivery.

Arinto (2012) carried out a study to explore the impact of shift of open and distance learning from print-based mode of delivery to open and distance e-learning (ODEL)

on the course design practices. The findings were; need for faculty training programmes in ODEL competences, faculty in charge to be encouraged to integrate on-line discussion forums and freely use open source web tools such as blog sites, media sharing sites and web-based conferencing applications to enhance course delivery. Data collection was done through semi-structured interviews and regarding the impact-established changes in four areas because of e-learning namely; changes in content development, changes in teaching strategies, changes in learning activities and changes in assessment. These changes could pose as challenges. Islam et al. (2015) also cited the above challenges from a review of literature. This study focused on challenges met by both students and lecturers in the ZOU when using the MyVista platform.

Chen (2013) carried out a study of growth of Massive Open Online Courses (MOOCS). The study analysed the origin of MOOCS as well as trends in education initiated by these courses and compared them with open course ware like OCW, YouTube Edu and iTunes U.

The study centred on opportunities and challenges presented by MOOCS from the perspective of Asian countries with reference to economics, culture, language, and instruction. Findings reflected a massive use of MOOCS. MOOCS are freely accessible via the Internet. MOOCS platforms are followed by global counterparts. MOOCS feature the interaction in the form of teacher – student and peer to peer discussions and question and answer activities. In Asia there are three MOOCS platforms used namely udacity, Coursera and edx. Some challenges include accessibility because of limited bandwidth and problem of cultures and different languages.

Anderson and Gronlund (2009) presented a paper on challenges for e-learning focusing on developing countries. The study was a comprehensive literature review including sixty (60) papers on e-learning in developing countries. These studies were aimed at establishing challenges for developing countries and what differences there were between them and those challenges were grouped into four categories. These categories were: courses, individuals, technology and context. These challenges were the same for developing and developed countries. The challenges related to the course were the need to develop a new curricula designed for an e-learning different from the traditional classroom based teaching, a pedagogical model that shifts from a more instructor-centred approach to a learner oriented approach where students take ownership of their learning, subject content that is interesting, relevant, accurate, up to date and in line with needs of future employers, and teaching and learning activities linked to encouraging student self-learning.

The studies also show that students in distant education mode miss social engagement and the student is left to self – studies, feeling alienated and isolated.

Another challenge was on delivery mode of the course which needs flexibility and personalisation. Students learn at different paces and some might want to take examinations when they want or be allowed to choose the medium of content delivery. The other challenge is that there is need for content to consider religious beliefs, use of local languages, have relevance for local setting and match with local needs. The images and symbols need to be appropriate for local culture so that there are not offensive or simply confusing. It was also discovered that furthermore, e-learning is very different from traditional classroom teaching where support is given and questions answered face-to-face. Institutions should provide support for students and support for teachers and staff delivering the course. Support could be in the form of technical support, training and assistance or just showing commitment by institutional leaders.

Regarding individuals' characteristics, the following issues were discussed; (1) Student motivation plays a major role. Highly motivated students perform well whereas non-motivated students tend to drop out, (2) Conflicting priorities of students also play a major role. The amount of time students have and want to devote to the course is of paramount importance. Having enough time for learning is an important predictor of the students' learning and retention. Those who study more hours are generally more successful. Students may also feel more stressed because of conflicting priorities with work and family commitments.

Another challenge is the student's economy and economic prerequisite for studying such as financial difficulties and lack of student's funding.

A further challenge related to individuals' characteristics is the student's academic confidence. This is related to student's previous academic experience and qualification and student's self-efficacy. This implies the students' confidence in his/her ability to study and successfully complete the course. Technological confidence that is necessary computer skills and feeling confident in using computers is necessary. Lack of experience with computers is a major hindrance particularly those who are entirely new to computers.

Another challenge could be student's age and gender. Under these are issues like a supportive study environment. These include time and help students get from family and friends. Family attitude on learning and parental support are paramount. Working students need support from employers.

Other challenges relate to features of teachers or lecturers delivering the course. The technological confidence of the lectures is important. The confidence of lecturers in using computers and other technologies is also important. The lecturer's motivation and commitment mostly affects the lecturer's teaching at a distance and the giving of feedback to students promptly. The teachers/lecturers' qualifications and competence in general and in online teaching in particular and time

availability for developing and taking part in e-learning course matters are also pertinent.

There are challenges related to the technology. These include choices of technologies for example, radio, computer, audio cassettes and different learning management systems. There are challenges regarding costs of using technologies, how they are accessed and in what language they are available. Access implies availability of telecentres, internet cafes and the reliability of the connection and bandwidth. Cost is also important for there is need for affordable and low cost ICT alternatives like televisions, radios and telephones and low user charges.

The other challenge is the software and interface design. The software and interface design chosen should support the chosen learning model and pedagogy. The software and technology should be adapted to fit local cultures and language. Cultural and religious values and aesthetics should be embedded into the design of the technology and software.

The other challenges relate to contextual factors. These include the context of the delivering organisation. This implies the university setting as well as the context of the society in which e-learning takes place, including culture, traditions, rules and regulations. There is need for a knowledge repository built on research and evaluations. Learners and lecturers should share experiences as well as e-learning units. e-learning programmes also need economic support and funding for their activities. Lecturers, staff and students have to be trained. The training is to include issues of culture, traditions, rules and regulations. The issue of power distance between lecturers and students is also very important.

e-learning requires a move away from the instructor – led learning style. This is unsettling for most students. Attitudes on e-learning provide other challenges. The beliefs and attitudes of decision makers in a political system affect the growth of both technology and e-learning in a country. Political support ensures appropriate policies are made and encourage schools to adopt e-learning. Rules and regulations affecting e-learning tend to be government regulations and rules that act as barriers to the introduction of ICT. There are some rules and regulations dealing with intellectual property, copyright, filtering and censorship that might not encourage e-learning. The challenges discussed above may also be common in the implementation of MyVista platform in the ZOU.

Almegren and Yassin (2009) carried out a study in Saudi Arabia on learning object repositories (LOR). The study investigated the challenges of using LOR among learners in Saudi Arabia. The study adopted a qualitative methodological approach. It reviewed published and unpublished materials. It established that there are four types of LORs namely a) a general content repository – This can be educational and non-educational such as

YouTube and screen Toaster, b) an online textbook repository - This provides textbooks for all levels and various courses, c) a module repository which gives pedagogical help by providing modules and d) a media-focused repository which has an abundance of audio-visual items that are useful for study purposes and stimulations that allow a glimpse of real-life training. These LORs can provide information in the case of ZOU that can be uploaded onto the MyVista for the purposes of student learning.

Almegren and Yassin (2009) enumerate the following advantages of LORs; a) reusable, accessible and adaptable. b) easy to blend with other resources, whether digital or traditional c) suitable and adaptable to meet the demands of local curricula d) designed for use on a range of platforms and e) cost effective and can contain small chunks of learning matter that can be easily adapted. Almegren and Yassin (2009) establish the following challenges of implementing an LOR in Saudi Arabia: censorship and government hesitation to allow internet access, religion affecting internet adoption, non provision of LOR platforms for learners in rural areas, government and non-governmental organisations involved in e-learning policy making dictating the future development of the country's learning, challenge of the presence of policy surrounding implementation - that is should e-learning quality standards be uniform throughout the country and technological challenges of support - that is accessibility, reliability, security and sustainability, low degree of public awareness, language and communication and religious and traditional norms. The above challenges of on-line learning seem to agree with the general challenges already discussed. The study centres on challenges of MyVista for ZOU students as well as lecturers.

Tafangombe and Kaputa (2015) carried out a preliminary study of the challenges students encountered on the e-learning platform at the ZOU who were initially involved in its use. The study used a qualitative approach using a case study design. Structured interviews and document analysis were carried out. The sample was purposively obtained and consisted of students, lecturers and information communication technology technicians. The sample consisted of 7 lecturers, 1 technician and 8 students.

The study found out that ZOU students using MyVista faced challenges when accessing the platform and that students, lecturers and even most ICT personnel did not have the capacity to use the MyVista internet based programmes. Training on the use of the MyVista e-platform for all students, lecturers and key ICT personnel was recommended as a priority. Putting in place a policy on how e-tutoring could be conducted and improving student's computer literacy skills were also recommended.

Tafangombe and Kaputa (2015) documents the following advantages of e-learning. These are: ability to access materials whilst students are outside the

university, first level benefits of significant reduction in costs, that is printing and distribution, tutor and classroom costs, promoting blended learning, second level benefits that include effectiveness in terms of knowledge retention and improvement in learning, self-placed learning, collaboration, peer evaluation and ICT skills improvement. e-learning is also said to result in an equal or higher quality of learning. Everyone gets the same content presented in the same way providing for consistency in learning especially for an open distance learning university like ZOU. There are also third level benefits which entail promotions of organisational transformation, that is connecting people to people, organisations, self-directed learning which is of importance for today's employees.

Tafangombe and Kaputa (2015) found out the following challenges students face in e-learning platform: lack of or slow connectivity, lack of adequate computers and confidence, adult users who were not exposed to computer education suffering from computer phobia, both tutors and students having inadequate technology proficiency, both tutors and students having limited access to higher end tools, limited access to enough bandwidth, both tutors and students lacking time management skills and self-motivation and lack of time required to develop and maintain an e-learning course. These challenges agree with some challenges in e-learning pointed out in previous sections.

Almarabeh (2014) undertook a study on students' perception of e-learning at the University of Jordan based on the Technological Acceptance Model (TAM). The findings of the study were that students were highly qualified and accepting the e-learning system with desire to use it in a more advanced manner. Perceived usefulness and perceived ease of use factors directly affect students' attitudes towards using the e-learning system. Almarabeh (2014) point out that success in e-learning depends on two factors, namely, the technological factor that is software and hardware that can be used to build e-learning system and the human factor that is students and instructors.

Masrom (2014) also carried out a study focused on individual user's acceptance for e-learning in universities as an effective learning tool in Malaysia. Masrom developed a technology usage model for e-learning. There was a threefold purpose of the study namely identifying whether learners or users would like to accept e-learning, determining what factors were significant in explaining the intention towards e-learning and the first use of the technology acceptance model in the context of e-learning. The findings were that perceived ease of use and perceived usefulness had been found to have a significant effect on intention to use the learning tool. Attitude towards use did not have a significant effect so perceived usefulness is more important in determination of intention to use than attitude and the model seemed to have a relatively weaker utility for explaining students'

attitude formation and intention development.

Almed et al. (2017) undertook a study on massive open online courses (MOOCS) in Pakistan. The data were collected through interviews and focus group discussions. The study found out that MOOCS are inspiring great numbers of learners in Pakistan despite factors impeding the surge of e-learning and that MOOCS in regional languages with better electricity and internet connectivity could be very useful for that rural area's people but requires extra ordinary interest from government and academics.

They found out the following challenges of MOOCS: MOOCS attract large numbers of students which becomes a challenge on the lecturer who cannot answer queries from, for example, hundred thousand students, real time interactions are curtailed by numbers of social interaction with fellow students and the lecturer. The social interactions refine their interpersonal and communication skills, MOOCS make evaluation of student performance to be harder, power failures particularly in rural areas might affect MOOCS and employers do not consider MOOCS on account that they are online courses. Since some areas of MyVista are MOOCS the challenges associated with MOOCS become challenges associated with the implementation of the ZOU's MyVista.

The MyVista platform implementation like any innovation requires monitoring. The monitoring could be done at Regional Campus Centres. The monitoring could follow the Concern Based Adoption Model (CBAM) (Loucks, 1983). The CBAM describes how individuals undergo the change process. The CBAM has five assumptions about change namely:

- Change is a process not an event
- Change is accomplished by individuals not institutions
- Understanding the change process in organisations requires an understanding of what happens to individuals as they are involved in change.
- Change involves development growth in terms of feelings and skill in using the innovation and that facilitating change requires focusing on individuals, innovations and the context (Roberts, 2015). The diagnostic components of the CBAM is described in terms of three dimensions namely Stage of Concern (the feelings of individuals involved in change). The Levels of Use (how individuals interact with a new programme) and Innovation Configurations (how the programme itself is adopted).

METHODOLOGY

Research paradigm

The study employed the qualitative paradigm. This approach is sometimes referred to as the subjective

approach (Cohen and Manion, 1994). Neuman (1997) refers to it as the interpretive paradigm. The approach posits that social reality is obtained from people's beings as active subjects with feelings, view human meanings and intentions and an awareness of being (Wamahui and Karugu, 1995).

Research design

The Case Study design was adopted because the study was an intensive study of the conception and views of lecturers and students on how they understood the phenomenon under study. Yin (1994:23) defines a Case Study as an empirical inquiry that investigates contemporary phenomenon and within its real life context when the boundaries and context are not clearly evident and in which multiple sources of evidence are used. The study was an intrinsic case study where no attempt was made to generate beyond the single case study or build theories (Silverman, 2010).

Research instruments

The researchers investigated the issue through open ended questionnaires (Questaviews) and literature studies. The instruments were pilot run to ascertain whether informants would be clear on what was required so helping to refine the questions.

The open ended questionnaire had two parts. The first part elicited the biographical data of the informants while the second part elicited information on views on the use of MyVista at ZOU. This information was composed of informants' computer literacy, the training obtained, challenges regarding registration, challenges regarding accessing assignments and modules, challenges regarding communicating with lecturers, challenges regarding uploading written assignments, challenges in accessing results, and any other challenges. Pertaining to each challenge, the ways the challenges were resolved were elicited. This section also investigated information on the support the students wished to receive regarding the use of MyVista.

Population, sampling and the sample

The total population of students at the ZOU Midlands Regional Campus was 525 excluding new students and full time lecturers were 14. Data were collected from all 14 lecturers. This study also considered the views of the two researchers for they were programme co-ordinators and the reflections on their experiences of challenges were found to be of absolute necessity. The students constituted those who visited the Regional Campus for one reason or the other. There were 30 in number.

Data collection procedures

First, permission was sought from the university. The open-ended questionnaires were delivered to both lecturers and students personally by the researchers and were collected after informants had filled them. Second, literature studies of ZOU's MyVista were undertaken.

Data analysis procedures

Data were analysed question by question whereby major conclusions were drawn from the informants' views and supported by their quoted voices. Similar findings that were cited were gleaned from the review of related literature and were corroborated by findings in this study.

FINDINGS AND DISCUSSION

Both students' and lecturers' questaviews comprised Section A asking for informants' biographical data and Section B asking for views on the use of MyVista at ZOU. The findings were as follows:

Lecturers' questaview

Section A: Biographical data (Questions 1 to 6)

Six male and three female lecturers out of a population of 14 staff members voluntarily completed the questaview making a 64.3% response rate. The degree programmes of Geography and Environmental Studies, English and Communication, Development Studies, Marketing, Agriculture Management, Software Engineering, Diploma in Education and Records Management which they were responsible for meant that all the six faculties of ZOU were represented. The informants' ages ranged from 31 to 60 years while their experiences as programme coordinators ranged from 1 to 14 years. Considering academic qualifications, one informant had a first degree, six had a masters' degree and two had a doctorate degree. Their professional qualifications were assistant tutor (1), lecturer (5), senior lecturer (1), and associate professor (2). Considering ages, experiences, academic as well as professional qualifications of the informants, one is likely to conclude that we got reliable information from them.

Section B: Views on the use of MyVista (Questions 7 to 18)

Q7: Have you been trained on the use of MyVista?

Seven informants (50%) pointed out that they had been trained on the use of MyVista while two (14.3%) said they

had not been trained. Five (35.7%) did not indicate whether they had been trained or not. The training duration for those who had been trained ranged from 4 hours to 3 days. One informant said they had been trained for one year but it was not clear whether the training was rigorous or was continuous or in short sessions. If lecturers or educators are adequately trained in the use of the e-learning platform and ICTS's, their challenges as well as those of their students are likely to be minimal (Arinto, 2012; Zakaria and Khalid, 2016).

Q8: How do you rate the training?

Seven of the 9 informants indicated the effectiveness of the training with 3 (33.3%) pointing out that the training was effective, 3 (33.3%) saying it was satisfactory and 1 (11.1%) saying it was not effective. The other 2 (22.3%) did not indicate.

Q9: Are you computer literate?

All the informants (100%) confirmed that they were computer literate. Despite the assertions that the training was satisfactory and effective, and that all the informants were computer literate, the researchers were baffled by the fact that those informants were still facing some challenges in the use on MyVista as evidenced by their responses to Q10 to Q18.

Q10: What are your challenges regarding communicating with students on MyVista?

Some of the challenges pointed out by the informants were that they were not linked yet, the students did not use the platform for learning and that sometimes the internet was down. In support of these views, some of the informants made the following contributions: [L1 to L9 are pseudo-names for the lecturers].

L2: *Students do not reply messages sent to them.*

L9: *The students and I are not proficient.*

Q11: How have the challenges in Q10 above been resolved?

Four out of nine informants (44.4%) said they had tried to resolve the challenges by sending their students to the ICT department for training and trying on their own to get linked to MyVista. For instance, one informant said:

L7: *I have tried to communicate to my students by sending messages via their phones and not using MyVista.*

Five of the nine informants (55.6%) said the challenges had not yet been resolved. This scenario has worried the researchers because without effective e-communication, effective e-learning cannot take place.

Q12: What are your challenges regarding uploading assignments on MyVista?

Lack of training and too many assignments for one programme were cited as some of the challenges faced when uploading students' assignments on MyVista. Some of the contributors had the following to say:

L6: *My challenge is that some assignments being uploaded would have been marked already.*

L4: *Some assignments do not have working links and I am not able to download and upload them.*

Q13: How have you resolved the challenges in Q12 above?

The informants pointed out that they resolved the challenges by asking for assistance from competent colleagues, reporting to National Centre and also to the administrators. At the Regional Campus level, it is the duty of the ICT technician to assist lectures on how to use the MyVista platform. It is disheartening to note that three (33.3%) of the informants (including L4 and L6) pointed out that their challenges had not yet been resolved.

Q14: What are the challenges you face regarding sending and grading marked assignments on MyVista?

While five out of nine informants (55.6%) seemed to have no challenges, four of them (44.4%) had this to say:

L1: *I lack knowledge to do it.*

L5: *I still do not know how to grade and send marked assignments online.*

L7: *Some documents do not open.*

L8: *Students submit assignments late when I have already marked and graded some. I then face challenges of marking plagiarised work.*

The researchers noted that if no clear and firm 'MyVista policies' are put in place students will continue to submit plagiarised and substandard work and the quality of the distance education students' work will be compromised.

Q15: How have you resolved the challenges in Q14?

In response to Question 15 some informants mentioned that they continued to mark the assignments as instructed by the Department Chairperson, some were guided by a colleague while some said they requested students to resubmit.

Q16: Do you face any other challenges on the use of MyVista?

The informants pointed out the following challenges: system not user friendly, students failing to submit assignments properly, students sending files which do not open. In particular, L5 and L7 pointed out that:

L5: *Closing dates for assignments are not stringent.*

Basing on their experiences, the researchers realised that this was the case.

L7: *The system (MyVista) is not user friendly.*

The researchers were concerned that the MyVista e-learning platform should be user-friendly to both staff members and students. MyVista platform is a good technological innovation in line with the country's STEM initiative and therefore it should be continuously updated to meet the needs of all its stakeholders.

Q17: What amount of support do you wish to receive regarding resolution of your challenges?

The following were suggested as amount of support needed to resolve the challenges mentioned in the questions above: overall MyVista training to students and staff members by competent people and more training on the teaching and learning aspect. In particular L3, L6 and L9 had this to say:

L3: *As lecturers we need anti-glare screens to be fixed on our computers so that our eyes are not negatively affected.*

L6: *There should be support in terms of equitable distribution of work so that we do not suffer from computer stress, fatigue and burn-out.*

L9: *ZOU should provide policies and procedures on the use of MyVista.*

Q18: Mention any other useful comments on online teaching and learning using MyVista?

The informants mentioned both positive as well as negative comments. The positive comment was that the use of MyVista is applauded as it is in line with global educational trends while the negative comments were that the system should have been introduced gradually, students are not benefitting in e-teaching and e-learning since no such materials apart from assignments are uploaded to date, and that the MyVista process is completely mixed up.

The researchers note that e-learning support and effective ICT policies are necessary for students and lecturers to carry out their work efficiently. In a previous study, Chirume and Ngara (2017) have echoed similar sentiments.

Students' questaview

Section A: Biographical data (Questions 1 to 4)

Twenty-two students out of the thirty conveniently selected students completed the questaview making a 73.3% response rate. There were 10 male and 12 female students. They belonged to the following programmes: Post Graduate Diploma in Education, Master of Education, Bachelor of Science in Geography and Environmental Studies, Bachelor of Science in Maths and Statistics, Bachelor of Science in Agriculture Management, Bachelor of Information Technology and

Hardware and Bachelor of Science in Psychology. Students from all academic years (year 1 to year 4) were represented and their ages ranged from 20 years to 61 years with most of them being in the age ranges 20-30 years and 31-40 years. The researchers could therefore infer that they would get reliable and varied information from the different groups of student-informants.

Section B: Views on the use of MyVista (Questions 5 to 20)

The students who responded to the questaview were given pseudo-names S1 to S22

Q5: Are you computer literate?

Fifteen (68.2%) of the 22 students said they were computer literate while 7(31.8%) said they were not.

Q6: Have you been trained on the use of MyVista?

Sixteen (72.7%) said they had been trained while 6(27.3%) said they were not. Of those who had been trained, the durations of training were 30 minutes, 40 minutes, 1 day, 2 days and 1 year. It could however not be ascertained whether for those who received training for one year, the training was continuous, regular or rigorous enough. It is the researchers' view that the amount and quality of training on the use of ICT's (MyVista included) has a bearing on the amount and extent of the challenges that the students are likely to face or a bearing on their performance. Similar sentiments were also echoed by Bandalaria (2007) who investigated the impact of ICT's on open and distance learning in a developing country setting.

Q7: How do you rate the training?

Of the 22 informants, 8(36.4%) said the training was effective, 7(31.8%) said it was satisfactory, 4(18.2%) said they could not tell while 3(13.6%) said it was not effective.

Q8: What are your challenges regarding registration on MyVista?

Nine (40.9%) out of the 22 students mentioned that they faced no challenges. Those who had challenges (59.1%) mentioned the following, among others: system taking a lot of time to respond and failure to follow procedures due to network problems, For instance, two contributors had this to say:

S3: *The Myvista system is not friendly.* [This informant did not elaborate and it could not be envisioned what he/she meant].

S7: *Network is very slow and the MyVista sometimes does not respond.*

Q9: How have you attended to these registration challenges?

Eight (36.4%) of the informants said their challenges had

still not been addressed. Others (63.6%) said their challenges had been addressed by being helped by the ICT Technician and some competent ZOU staff members, by registering manually at the campus, by accessing MyVista after midnight when network was not congested and by moving to the town where there is electricity and network.

Q10: What are the challenges you face regarding accessing assignments and modules on MyVista?

Nine (40.9%) of the informants said they had not faced any challenges. Those (59.1%) who had faced some challenges mentioned the following: network problems, assignments not available on time, assignments taking days to access and failure to access them. In support of these views some informants made the following statements:

S1: *Modules in pdf format cannot be viewed using MS word.*

S13: *I have never accessed them on MyVista.*

S15: *Some assignments and modules cannot be found on MyVista.*

Q11: How have you resolved the challenges in Q10 above?

Seven (31.8%) of the informants pointed out that their challenges had not yet been resolved. Some (68.2%) of those whose challenges had been resolved mentioned the following strategies: using hardcopies, sharing assignments and modules with colleagues, helped by course coordinator, asking the technician and waiting for the assignments and writing them at short notice.

Q12: What are your challenges regarding communicating with tutors or lecturers on MyVista?

Four (18.2%) of the 22 informants commented that they did not have any challenges in this regard. Those (81.8%) who faced challenges had the following points: late replies from the lecturers, no communication from lecturers, insufficient or late feedback from the tutors (more than a week). The following statements were made in support of these views:

S8: *Sometimes it is difficult to access messages due to network problems.*

S11: *Sometimes the tutors do not check messages and do not reply them.*

In this study the researchers were concerned by this and noted that it was the duty of the ICT technician to solve the network problem. The management team was supposed to ensure that all lecturers check and reply messages, and if they were not doing this, it could have been due to negative attitude towards MyVista or resistance to ICT change as pointed out by Idowu and Esere (2013) and Balanskat et al (2006) as cited in Salehi and Salehi (2012).

Q13: How have the challenges in Q12 been resolved?

Four (18.2%) of the informants indicated that this

question was not applicable to them while six (27.3%) mentioned that their challenges had still not been resolved. To the remaining twelve (54.5%) informants, the following were cited as ways they had used to resolve the challenges they had faced: making phone calls and using other social media instead of using MyVista, meeting tutors personally, looking for sufficient network from other areas, and seeking assistance from ICT technician.

Q14: What are your challenges regarding uploading written assignments on MyVista?

Twelve (54.5%) out of the 22 informants commented that they had no challenges in uploading written assignments onto the platform. The ten informants (45.5%) who faced some challenges pointed out the following: difficult to type assignments requiring mathematical and statistical symbols on MS word and then to upload them, making errors and omissions on scanned assignments, not getting feedback from tutors except marks only and failure to meet deadlines due to network problems. The following statements buttressed these opinions:

S20: *I find it very difficult to type my assignments because they have a lot of mathematical and statistical notations. The symbols cannot be easily accessed on MS word.*

S13: *I hand-write my assignments, scan and then when I try to upload, hey... I find some pages missing and others upside down.*

The researchers were concerned by the statement of S13 and noted that perhaps the student was not versed with the skill of uploading assignments and needed training or maybe the existing software had faults and needed upgrading or updating as alluded to by Almajalid (2018). This needed to be investigated further.

Q15: How have you resolved the challenges in Q14?

Ten informants who agreed that they faced some challenges (Q14) pointed out that they had resolved them by communicating with and getting help from the ICT department, and visiting the internet cafe. One participant who seemed to have lost any hope aired the following statement:

S12: *My challenges were not resolved at all. I have gone for exams without corrections.*

The researchers have noted that if students' challenges on the use of MyVista are not resolved, they may develop negative attitude towards e-learning and this may impact negatively on their overall performance. Davis (1989) and Masrom (2014) have also alluded to the student's attitude as a factor affecting intention to use and actual usage of the e-learning technologies.

Q16: What are your challenges regarding accessing

results on MyVista?

Thirteen (59.1%) out of 22 informants believed that they had no challenges in accessing their results on MyVista. The remaining 9 students (40.9%) who felt that they had challenges gave the following points: results are suppressed while I am paid up, forgetting password to open MyVista, results not uploaded on time and poor network.

Q17: How have you resolved the challenges in Q16?

The nine students who had challenges (Q16) said they had resolved them by coming to the campus for help, by communicating with the programme coordinator, by visiting the internet café and by waiting till the results could be accessed.

Q18: What are other challenges that you face on the use of MyVista?

Six (27.3%) of the informants did not answer this question. Of the 16(72.7%) who answered it, some of them had this to say:

S2: *MyVista does not have regional news and uploads on developments.*

S6: *There are no comments on marked assignments, just marks.*

S10: *Sometimes the system is down.*

S18: *Fees take time to reflect through PAYNOW.*

S19: *MyVista is not easy to access in the rural areas.*

S21: *Lecturers do not provide marking guides.*

The researchers noted that the head of department or dean should ensure that all lecturers have provided constructive comments to students. The ICT technician should always maintain the system so that it is always functional and if possible, marking guides should be provided to the students when their works have been marked. Giving marking guides is another way of providing prompt feedback (Anderson and Gronlund, 2009) to the students. However, due to pressure of work some lecturer might neglect passing comments on marked work.

Q19: What amount of support do you wish to receive regarding resolution of your challenges?

Each of the 22 informants had one or more things to say as an answer to this question, thus the total responses could be more than 100%. The responses with high frequencies were prompt feedback from tutors (15; 68.25%), modules to be available and downloadable or else give hardcopies (19; 86.4%), our payments to be reflected on time (14; 63.6%), and need further training (11; 50%). Learner support in ODL in general, and for e-learning platforms, in particular, is important and similar views on student support were given by Commonwealth of Learning and Asian Development Bank (1999), Mason and Rennie (2006) and Pangen (2016).

Q20: Do you have any other useful comments on online learning using MyVista?

Only two informants (9.1%) did not have additional comments to make. Those who had (20; 90.1%) made the following remarks: news updates or information should be uploaded on MyVista, challenges should be resolved to make life easier, effective awareness should always be brought to the end user. In particular, the following statements were made in support of these views:

S4: *Instructions on MyVista must be clear.*

S5: *Online learning is not suitable in rural areas. People there have no access to electricity.*

S16: *MyVista is a great way of learning. Authorities should keep on upgrading the system.*

S22: *They should link data to other central offices and place more learning materials on the system.*

The challenge of not having electricity and therefore online platforms in the rural areas was also mentioned by Almegren and Yassin (2009) who pointed out the challenge of non provision of LOR platforms for learners in rural areas. In Zimbabwe the authorities responsible for the rural electrification programme are tasked to provide the electricity but in the meantime the students could access MyVista using their mobile phones.

CONCLUSIONS

This study found out that both ZOU students and lecturers faced some challenges regarding the MyVista e-learning platform despite both groups having initially received some training on its use. One is bound to conclude that this training was not sufficient and effective. Students, on one hand, had challenges in using the MyVista platform to register, to e-communicate with other students and lecturers due to limited resources, due to poor network and due to lecturers not responding to their messages. They also said they needed a lot of constant training. On the other hand, lecturers said students often sent wrong assignments, some without links and some which could not open. They also said they needed training on marking and grading assignments (both word and pdf documents), and needed fast and reliable computers with anti-glare screens. Suggestions on how to resolve the challenges and the support needed by both students and lectures were put forward. Thus all the research questions (1 to 6) were answered.

RECOMMENDATIONS

The study recommends that ZOU needs to put in place adequate e-learning policies and procedures, adequate computers for the students and make them fast and

accessible at all times. ZOU should be innovative by upgrading the ICT materials and the MyVista platform and train all students and staff in the proper use of the ICT facilities. ZOU should have specific deadlines for handing in assignments to avoid the issue of additional assignments after those that have submitted in time have had their assignments marked. There is also need to carry out a similar study in other regional campuses of ZOU.

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