

Analysing Lecturers' Web/Internet Competence at the Zimbabwe Open University

By

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Abstract

This study aimed at assessing the extent to which tutors at the Zimbabwe Open University in Mashonaland East Region were internet/web competent and prepared to handle internet related correspondence through the ZOU-online facility. The lecturers were tested for competence in the use of the web/internet in handling and processing students' assignments as well as researching. A questionnaire, two tests and an interview schedule were used to collect data from respondents. The population for the study consisted of 14 fulltime and 51 part time lecturers from the 4 faculties of ZOU. Out of the sixty-five, a sample of 32 was chosen through stratified random sampling. Findings of the study show that while full time lecturers had access to computers, the majority of the part time tutors had no computer access. Despite the setback, the majority of the respondents in the sample, 58 (89%), was computer literate mostly in document production through word processing. Generally, lecturers at the Zimbabwe Open University lack the basic knowledge on the web/internet. Their poor performance in the tests demonstrates that the lecturers do not have the practical skills to undertake web/internet operations. The study recommended that all initial distance education programmes should include compulsory courses in ICT. Programmes should also be put in place for the capacity building for tutors' in internet/web usage which should be a priority if the ZOU on-line initiative is to be effective. Future employment prerequisites for lecturers, should include high levels of computer literacy from job seekers. Internet courses also need to be carried out. Part time tutors should be included in all initiatives to do with ICTs because they are indispensable to the system.

Key words: Lecturers, Web and Internet Competence, Information Communication Technology, Open and Distance Education, ZOU On-line

Introduction

Distance education is a field that is in a constant state of evolution and hence in need of research which can fill the many unanswered questions prevalent in that field. The historical view of distance education shows a stream of new ideas and technologies balanced against a steady resistance to change by lecturers and students alike, and it often places technology in the light of promising more than it has delivered (Jeffries, 2002). From the perspective of many educational technologists, distance education is "inexorably linked to the technology" (Garrison, 1987). Distance education uses technology to mediate the necessary two-way communication.

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In order to bridge the barriers of time and space, distance education must adopt a variety of ICTs to present the learning material and provide for interaction amongst and between stakeholders. The advent of the World Wide Web has made interaction between learners and tutors easier and more efficient in what UNESCO (2002) referred to as 'third generation distance education'. ICT has made it possible for learners and teachers to communicate and share information in a synchronous way. ICT-based modes of communication are now providing opportunities for communication and interaction between the teacher and learners and access to resources which otherwise would have been difficult to come by.

The ability of ICT-based modes to enhance communication between the teacher and learners fortifies the presence of interaction as one of the attributes between the instructor and learner; instructor and peers; learner and content; and learner and peers (Barker et al., 1993). These interactions, especially the instructor-learner interaction enhances the learning abilities of distance education students. The interaction that transpires between students and faculty is intended to help reinforce student understanding of the material (Thurmond & Wambach, 2004; Moore, 1989). It is, therefore, necessary that larger investments in ICT-based support to distance education students should be undertaken by both governments and the private sector.

However, Open and Distance Education administrators, being a key element in establishment and implementation of ICT systems in ODL institutions are often oblivious of the fact many ODL educators lack skills and training in the use of these ICTs or the equipment to apply and develop their knowledge and skills, once gained (Jeffries, 2002). It is upon the realization and acceptance by the researcher of this present study that ICT plays a significant role in ODL institutions that this study was carried out to establish the level of web/internet competence among the lecturers at the Zimbabwe Open University.

Background to the study

The Zimbabwe Open University (ZOU) is the only state Open and Distance Learning (ODL) institution in Zimbabwe, established on 1st March 1999 through an Act of parliament (Chapter 25:20). Initially the university operated as the Centre for Distance Education at the University of Zimbabwe before its transformation to the University College of Distance Education. After this transformation, ZOU was granted its own charter to operate as a university. With an enrolment currently approximated at 13000 students, ZOU is the largest university in the country and second largest in Southern Africa compared to University of South Africa. Currently, in 2011, ZOU has four faculties; the Faculty of Arts and Education, the Faculty of Science and Technology, the Faculty of Commerce and Law and the Faculty of Applied Social Sciences, offering over 60 diploma and degree programmes. Students are drawn from the country`s ten geo-political provinces as well as the Virtual Region encompassing students outside the country, wherever they may be in the world. It is in light of this background, therefore, that ZOU cannot expect to teach all its students using the traditional face-to-face tutorials and hope to satisfy the diverse student population scattered all over the globe. Aspects of ICTs such as the web/internet therefore, become handy as students` assignments, tests, examinations and research projects can all be processed through on-line processes.

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While it is widely acknowledged that the advantages of ICT to the Zimbabwe Open University lie in its potential for increased interaction with and between learners, speedier delivery and response times to queries and feedback on assignments, greater access to communities of learners and quicker lead-in times for updating course materials, its wide usage in other distance and open learning institutions is being hampered, to a large extent, by staff inability to use the technology incorporated into the system (Agyemang and Dadzie, 2010). Romiszowski (1981) argues that the educational field "has been plagued with more than its fair share of solutions looking for problems" and suggests that developers often reflect a vested interest in technology or make premature decisions to the instructional solution before fully understanding the problem. This argument by Romiszowski (1981) has prompted the researcher to establish the web competence of ZOU lecturers now that the institution has dispensed computers and associated technological gadgets in anticipation of the connection of the ZOU On-line platform, a web based internet system meant to revolutionalise the teaching and learning at ZOU.

Research questions

The analysis of the lecturers` web/internet competence was guided by the following 4 research questions.

1. How accessible are ICTs and internet services lecturers at the ZOU?
2. Are ZOU lecturers competent in understanding the web/internet language?
3. Do ZOU lecturers have the practical hands on skills to undertake web/internet operations?
4. What support has been provided by the ZOU to improve and facilitate the lecturers` web competence?

Statement of the problem

While it is widely accepted and undisputable that internet/web technology has played a large role in enabling interaction between students, tutors and programme providers in distance education, its wide usage, particularly in the Third World nations has been curtailed by a variety of impediments, among which is lack of craft competence to handle and manipulate the electronic gadgets. It is, therefore, the intention of this present research to assess the extent to which the academic staff at the Zimbabwe Open University is internet/web competent to handle student mail, assignments, examinations and general correspondence through the ZOU-online.

Limitations of the study

The validity and reliability of the current study are affected by a number of limitations. The sample size could have been improved but due to economic and time constraints this could not be possible. Also the number of the two test items was small but this was done in order not to labour the respondents with a lot of questions to answer, but it is acknowledged that more items could have tested the depth of the respondents` understanding of the web/internet further. Part 2 of the practical test had to be altered an "alternative to practical" due to electricity outages and computers had no power to sustain a lengthy practical test. Besides the power issue, costs of

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data bundles used in the internet connection were soaring, hence this called for a re-designing of part 2 of the practical test.

Review of Related Literature

Theoretical Framework

A number of theories on the implementation of new technologies in an organisation have been advanced by various proponents. The following model is one such theoretical framework providing for the step by step approach to the introduction of technology in an institution.

The model of introducing new technology in an organisation

There are 7 basic steps to the introduction of new technology in an organisation. These are:

1. Planning or diagnosis of the problem requiring the introduction of new technology.
2. Identification of relevant approaches to address the problem. The process involves application research and the organisation must decide whether or not the problem can be solved by the existing software or hardware or could there be some other alternative to solving the problem.
3. Analysis of the feasibility of pursuing the project in terms of technical resources and hardware and software needs. If there is enough justification in terms of benefits accrued, the project moves to the design phase
4. The design phase entails the specification of the system components and implementation of the technical design. The design is tested to determine whether the system will perform in accordance with the original design.
5. The system is evaluated to assess how well it is satisfying the user needs.
6. Stage 6 entails the training of the users, in this case the Zimbabwe Open University lecturers so that they get acquainted with the technicalities of the system.
7. There is need for constant modification and maintenance of the system. Changes can be made where necessary and appropriate and the cycle can continue where the need arises.

Adapted from ICDL Module 7: Information Network Services and Mazhindu-Shumba (2000): Management Information Systems Module MBAZ507

There is no question as to whether or not the Zimbabwe Open University ICT department carried out their feasibility to determine the need for the use of the ZOU On-line and other web related technologies by both lecturers and students since the Internet is an integral aspect of the Information and Communication Technology (ICT) which is fast becoming an indispensable tool for quality teaching, learning and research in an academic setting. However, what is clear is that ZOU ICT administrators did not make provisions for effective training of the lecturers in the use of the ICTs (Stage 6 of the model above). An attempt though was made to provide the International Computer Driver`s Licence (ICDL) modules which individual lecturers and ancillary staff could read and do some practical applications on their own. Due to the complex nature of some of the modules, the majority of the lecturers failed to complete the programme and no evaluation of the programme was undertaken to determine the level of lecturers` ability to handle the ICTs. Hence ZOU lecturers may not be prepared to handle any such ICT related technology due to not having been trained in the use

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of ICTs. Gambari and Okoli (2007) noted that the lack of and unavailability of adequate training programmes resulted in lack of competence in the use of the web by potential would be users.

Conceptual Framework

The ZOU Online Platform

The ZOU Online is an E-Learning platform established by the Zimbabwe Open University to provide interactive learning materials for both ZOU and non-ZOU students and lecturers. The officially launched new Learning Management System website, ZOU Online, uses the open source eLearning and eWorking platform, Claroline, and like typical Learning Management Systems, it allows lecturers to build online courses and manage learning and collaborative activities on the web. These collaborative activities include receiving, marking and sending students' assignments, handling online examinations, chatting and carrying out research work, among other processes.

As a state university with limited resources, one would understand the university's inclination to "free" open resource applications. Hard copies of resource books have become scarce besides being out dated. ZOU On-line embraces the power of open source tools to add value to solutions in the state's only open and distance learning institution. The new system was launched in partnership with a local ICT company.

The Internet

The Internet is a world-wide broadcasting capability, a mechanism for information dissemination, and a medium for collaboration and interaction between individuals and their computers without regard for geographic location. It is a computer network made up of thousands of computers and networks world-wide. It is an information superhighway that provides unlimited access to a wealth of information on different topics contributed by people throughout the world (Griffith, 2002; Scholastic, 2003; University Libraries, 2003). Every personal computer, cell phone or other device that people use to look at web sites is also a part of the Internet. The Internet also makes possible email, games and other applications unrelated to the World Wide Web. No one knows exactly how many computers are connected to the Internet (Bull, Bull and Sigmon, 1996). However, Bull, Bull and Sigmon (1996) argue that while the Internet is a powerful and expanding educational medium, there are times when another medium may be more educationally appropriate. Even if you have access to the Internet, web materials that have been transferred to a CD-ROM can be useful for the following reasons: high speed delivery of graphics; no online connection charges and materials can be used even when there are no Internet connections.

According to Kangai and Bukaliya (2010), the Internet as a form of computer mediated communication technology, CD-ROM; among other forms of technologies constitute what has been referred to as The Third Generation Technology. Owing to their flexibility, interactivity and being asynchronous (two way) in nature, computer mediated technologies have been widely used in Open and Distance Learning particularly in the developed countries where the availability of such gadgets is within the grasp, even of the low income earners and according to Peters (2003) Using the information and communication technology is a symbol

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of a new period for distance education. In Zimbabwe, like in any Third World country, access to the computer is yet to be realised, even by the most affluent of citizens. The major shortcoming in the use of these technologies is that the majority of citizens do not have access to computers because they are very expensive to acquire. What seems disturbing about the introduction of high technology in African distance education is the fact that high technology is expensive and, therefore, beyond the reach of many would be providers of and learners in distance education programmes. As a central element, rather than a learning aid in distance education programme, computers mediated communication smacks of more problems than solutions (Kangai and Bukaliya, 2010).

Previous Research Studies

Uses of Information Communication Technology among ODL educators

The Internet which is an integral aspect of the Information and Communication Technology (ICT) is becoming an indispensable tool for quality teaching, learning and research in an academic setting. This part of the article unravels the envisaged benefits of ICT to lecturers. Abimbade (1998) argues that ICTs increase the time learners devote to learning, enhance the speed of availability of data and information, provide immediate feedback and assist less qualified teachers and increase teachers efficiency and effectiveness.

Kitschner and Davis (2003) identified the following competencies required by lecturers in ICT application in education. These include: competence to make personal use of ICT, competence to master a range of educational paradigms that make use of ICT, sufficient competence to make use of ICTs as mind tools, competence to make use of ICT as a tool for teaching, competence in mastering a range of assessment paradigms which make use of ICT, competency in understanding the policy dimensions of the use of ICT for teaching and learning.

Other uses of ICTs by educators in ODL include the following identified by Yusuf (2005); the improvement of access to remote resources , communication, collaboration with other lecturers in the faculty as well as in other universities the world over and improve course management for example in distance education. The Association of African Universities (2000) concurs and adds some more applications of the web/internet. According to the association, the web/internet can be used as a source of academic information as well as a medium for sending and receiving academic information for example through the e-mail. The web/internet can also be used for collaborative research with colleagues in other parts of the world.

In the area of research, Yusuf and Onasanya (2004) posit that ICT resources enable communication between scholars as they can post research, assignments, books or journal lists references to on-line materials. Problems and solution can be discussed between researchers and scholars can react to the work of others in an electronic manuscript. The ICTs can facilitate research in any discipline as they provide quicker and easier access to more extensive and current information through digital libraries that provide digitised full-text resources to learners and researchers. ICTs can also be used to perform statistical calculations and analysis of data.

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This current study seeks to establish the competence levels of the ZOU lecturers in the following areas in which the internet and related ICTs are used: receiving and sending documents to and from students and fellow lecturers, carrying out literature searches on the internet as well as having a general understanding of the technical language involved in the use of the internet.

Information Communication Technology competence among ODL educators

Jeffries (2002) acknowledges that educators are a key element in establishing the use of ICT in education and teacher education but many teacher educators themselves lack skills and training in the use of ICT or the equipment to apply and develop their knowledge and skills, once gained. Since students will often need to bear some of the costs, this may affect their access. The interest in utilizing "instructional technologies" to accomplish a variety of educational delivery needs has grown to the point where "preparing teachers to use technologies is assumed to be the main function and primary intellectual interest of the educational technologist" (Heinich, 1982). While Heinich feels that teacher preparation is needed, he points to this as a problem in defining the field of educational technology.

According to Peters (2003) using the information and communication technology is a symbol of a new period for distance education, but how prepared are both lecturers and students to embrace this blessing? Literature explored hereunder reveals some of the problems in the usage of ICTs in ODL institutions, the ZOU included.

Onasanya et al (2010) established that sex and academic qualifications of lecturers do not affect lecturers' attitude towards the use of ICT facilities and equipment. They also found out that the younger lecturers are more amiable to new technological challenges than the old ones and that science lecturers are more interested in the use of ICT facilities than their counterparts in other departments. The same research established that the level of competences and skills acquisition of colleges of education and polytechnics lecturers in the use of ICT facilities and equipment is worrisome. The less experienced lecturers are more disposed and competent than the more experienced lecturers in the use of the web/internet

Agyeman and Dadzie (2010) in their research at the University of Ghana, report that knowledge of ICT was high among the study's respondents since 80.9% of respondents indicated that they knew what ICT was, while only 19.1% indicated that they did not know what ICT was. In terms of ownership of a personal computer the majority of the respondents indicated that they had personal computers. A majority of 80.9% indicated that they used computers. This finding is in conformity with Kwamong (2008) who reported that majority of the respondents in her study knew what ICTs was. Chifwepa (2008) also reported that respondents were aware of ICTs and that most of them were conversant with word processing. However, these findings are in contradiction with the findings by Kangai and Bukaliya (2010) who established that only 5% of Zimbabwe Open University students owned or had a computer at home due to the fact that computers are very expensive with a simple PC costing \$600. 00 while only 34% of the respondents were computer literate. Five percent of the students had access to a computer at their workplace. The majority of students as well as part time ZOU lecturers working in rural areas have no access to a computer. Most rural areas in Zimbabwe are neither electrified nor do they have telephone lines. Results of the Kangai and

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Bukaliya (2010) study show that distance education students in Zimbabwe are experiencing technological challenges. These technological challenges experienced by students and lecturers at the ZOU are the same as those faced by OU, UK ten years ago when only 24% had access to a computer at home with a further 17% having access both at home and at their work place (Taylor; 1991). This predicament answers the question why most distance education programmes in sub-Saharan African countries continue to use the print medium more than online and Web-based methods of learning (Leary & Berg; 2007, World Bank; 2002). The technological findings by Hunte (2010) further sustain the argument that distance students do not possess the computer skills necessary to function effectively in the online teaching/learning environment

On the use of the Internet by students, a study by Agyeman and Dadzie (2010) showed that the majority of the respondents indicated that they used the Internet and a minority stated that they did not use the Internet at all. The same research established that in terms of gender more males used the Internet than females. Boudette in Markwei (2001) concurs that males used the Internet more than females. Markwei (2001), in her own findings, established that male respondents in the case of staff members use the Internet more than their female counterparts. However, her study indicated that female student respondents used the Internet more than their male student respondent counterparts. However, other researches have tended to differ from the findings of Agyeman and Dadzie (2010) and those by Markwei (2001). White in Lazinger et al (1997), on the other hand, established that females used the Internet more than males. According to Agbatogun (2006) younger lecturers are more amiable to new technological challenges than the older teachers but owing to the indispensability of the web/internet in educational institutions, there is need to struggle zealously to be computer literate in order to face the challenges that go with the implementation of the technology. According to Olaofe (2005), in Nigerian tertiary institutions, having access to ICT and using it in the teaching and learning processes is a challenge.

Most researches on the use of ICTs have tended to concentrate on students` ability to use them, there appears to be need to establish lecturer/tutor competence on the use of the same. As ICTs play a large role in enabling interaction between students and tutors (Peters; 2003), both the tutor and the student need hands on practical skills to be able to manipulate the technology, hence the need for this current to establish the web/ internet competence of tutors/ lecturers at the ZOU.

Methodology

The present study employed the case study design in which only lecturers from ZOU`s Mashonaland East were observed for competence in the use of the web/ internet in handling and processing student assignments as well as researching. Three data collection instruments were used on each of the respondents. They were a practical test which included demonstration on internet usage and a written test which involved answering theory questions based on content of the web and internet. The respondents were further interviewed on their preparedness to use the web and internet in the execution of their duties more specifically, in research and handling students` documents assignments and research projects on the internet.

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A questionnaire was used to extract the same data on the lecturers' preparedness. This was done to cross validate the data solicited through the interviews.

Population

The population for the current study consisted of 14 fulltime lecturers and 51 part time lecturers from all the 4 faculties of the Zimbabwe Open University, Mashonaland East Region. A total of sixty-five lecturers were considered for the study and these made it into the sampling frame.

Sample and sampling procedure

Out of a total population of 65 lecturers, both full and part time, a sample of 32 was chosen. This was 49% of the total population, which was deemed representative enough. Being representative of the population, made it possible to make valid inferences of responses to the whole population. The sample was chosen through the stratified random sampling technique. Two strata, one for male and the other for female lecturers, were created and out of these, simple random sampling was carried out, with each stratum contributing 50 % of its total to the sample as respondents.

Presentation of Results and Discussion of Findings

Sample characteristics

The sample for the present study consisted of 20(62.5%) male lecturers as well as 12(37.5) female lecturers all at the Zimbabwe Open University. The age range of the participants was between 26 and 54 years. The majority (76%) of the lecturers were holders of Masters Degrees whilst only 24% were assistant lecturers who held undergraduate degrees. Most of the lecturers (85%) had spent less than 2 years with the ZOU. The majority 51(78%) were part time lecturers whilst only 14(22%) were on full-time employment.

Access to ICT and internet services

Question 1 was stated as: **How accessible are ICTs and internet services to lecturers at the ZOU?**

According to the findings, all the 14 full time lecturers had a computer each at the workplace over and above personal laptops purchased through the initiative of the university. However, the situation was different for the part time lecturers. Only 17 (33%) reported that they had computers at their workplaces with 6 (12%) reporting that they had the computers at their homes. The remainder, 28(55%) had no computer access. However, the majority of the respondents in the sample 58(89%), was computer literate and could use the gadget regularly mostly for document production through the use of Spreadsheets and word processors. Internet connectivity was, however, not available to the majority of the lecturers especially part timers. On the whole, more male lecturers were on the web than female lecturers. This finding concurs with that of Markwei (2001) who established that male respondents in the case of staff members used the Internet more than their female counterparts. However, these results are in contrast with those by White in Lazinger et al (1997 who established otherwise.

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Eighty-three percent of the full time lecturers had 3G internet connectivity and, despite being off line most of the time, all lecturers had access to the library Dialup internet connection. Another interesting finding from the current study was that contrary to the findings by Agbatogun (2006), the young breed of lecturers at the Zimbabwe Open University did not access the web/internet more than their elderly lecturers. It would have been expected that this young generation play a leading role in web/internet usage as is the trend when it comes to playing games on the computer.

However, the availability of the internet gadgets and being connected does not necessarily mean competence and usage, hence this study sought to establish whether the ZOU lecturers were competent to handle web/internet related tasks in light of the impending rollout of the ZOU-online ICT programme.

Three tests were designed to solicit data on the competence of the lecturers on the web usage. The first test was on theory and the other two were on the practical use of the web/internet. These were administered on the respondents despite resentment and resistance at first, from some uncomfortable respondents. After explaining the purpose of the tests, the majority of the respondents felt it necessary to take up the challenge since the recommendations to be made in research, as a needs assessment exercise, would pave way for some form of in-service training for the under performers. Despite the importance of the study having been explained, 3 prospective respondents refused to take part in the study and another 3 had to be drawn from the original population. The results of the tests are presented, analysed and discussed hereunder:

In order to answer research question 2 which was stated as “**Are ZOU lecturers competent in understanding the web/internet language?**” a theory test comprising of 13 items was given to the respondents under standardized test conditions. The test exercises were scored using a standardized marking guide produced with the input of the Regional ICT technician. The statistics presented in table 1 below show, in one column, the numbers of lecturers who got test items correct and in the other, those who got the items incorrectly.

Table 1: Results of the theory test taken by the 32 lecturers
(N= 32)

QUESTION	CORRECT		INCORRECT	
	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE
1. Define the term “internet”	16	50	16	50
2. List any 3 types of internet connectivity available in Zimbabwe	14	44	18	56
3. List any 3 basic uses to which a lecturer would put the internet	29	91	3	9
4. State any 4 services you would get from the internet	29	91	3	9
5. Enumerate the 4 components of a web address	3	9	29	91
6. List any 4 methods that can be used to search information on the internet	4	13	28	87

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7. What do the following internet related abbreviations stand for: URL, www, http, html, FTP, ISP and IRC?	2	6	30	94
8. What is the function of a modem?	10	31	22	69
9. What is a web browser?	11	34	21	66
10. What is a home page?	5	16	27	84
11. List any 4 disadvantages of the internet.	30	94	2	6
12. What is a hyperlink?	2	6	30	94
13. What is an internet server?	6	19	26	81

Results from table 1 show that a lot of web/internet training needs to be undertaken at the Zimbabwe Open University. Pleasing though is the fact that all the lecturers understood what the term “internet” meant despite the majority 18(56%) being unable to state the types of internet connectivity available in Zimbabwe. Questions very poorly done include questions 5, 6, 7, 10, 12 and 13 which had 3(9%), 4(13%), 2(6%), 5(16%), 2(6%) and 6(19%) successful candidates. The disadvantages of using the internet were well elaborated by the majority of lecturers accounting for 30(94%). The results go to show that generally, lecturers at the Zimbabwe Open University lack the basic knowledge on ICTs in general and the internet in particular. These findings are in direct contradiction with those by Agyeman and Dadzie (2010) in their research at the University of Ghana in which they reported high knowledge levels of ICT was high among the study`s respondents. However, the current study replicates the findings by Olaofe (2005), in Nigerian tertiary institutions who established that using ICTs in the teaching and learning processes was a challenge.

Research question 3 was stated as “**Do ZOU lecturers have the practical hands on skills to undertake web/internet operations?**” Two practical tests were given to the lecturers to test their practical competence. Practical test 1 required that the respondents conduct a search using a Web Search Engine on the topic “advantages of distance education”, copy, paste and save the contents to documents in Microsoft word.

The process involved 7 main steps which are:

1. Connecting the 3G equipment
2. Typing in the key words related to the topic onto the webpage
3. Accessing internet sites containing the key words
4. Locating and opening an identified cite or document
5. Coping the identified cite or document
6. Pasting the document
7. Saving the document

Results for practical test 1 are presented in table 2 below.

Table 2: Distribution of respondents by success/failure to sail through the practical test (N=32)

STAGE	RESPONDENTS SAILING THROUGH	RESPONDENTS FAILING TO SAIL THROUGH
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	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE
1.Connecting the 3G equipment	27	84	5	16
2.Typing in the key words related to the topic onto the webpage	26	81	6	19
3.Accessing internet sites containing the key words	20	63	12	37
4.Locating and opening an identified cite or document	18	56	14	44
5.Coping the identified cite or document	16	50	16	50
6.Pasting the document	15	47	17	53
7.Saving the document	27	87	5	13

Results for practical test 1 presented above show that connecting the 3G equipment to the computer was not a serious problem for most lecturers. The majority 27(84%) succeeded in the process while only 5(16%) failed the exercise only to be assisted to the next step. Typing the key words onto the web page was not problem for 26(81%) unlike 6(19%) who failed. Twenty (63%) successfully accessed the internet sites while 18(56%) could locate and open the identified sites/document. Copying of the identified document was done perfectly well by half the staff. Only 15(47%) managed to paste the document and 27(87%) saved the document successfully. In spite of the 27(87%) successfully saving the document, problems were encountered in several stages of the practical test and the struggling lecturers had to seek for assistance. Most of the problems were encountered from stage 3 with both full time and part time lecturers finding difficulties in the operations. The poor performance of the majority of the lecturers is, therefore, in complete contrast to the expectations of ODL planners in terms of envisaged competences of lecturers in ICT application in education, making personal use of ICT, making use of ICT as a tool for teaching and learning (Kitschner and Davis, 2003).

Practical test 2 asked for a step by step narrative of the stages the lecturers would take to open an e-mail account. However, on account of the continued unavailability of connectivity due to line faults on days designated for the test, the activity was theoretically carried out through written work. Further postponements of the exercise were no longer tolerated as some impatient respondents threatened to withdraw from the study. The respondents were asked to give a step by step approach to opening an e-mail account. Out of the sample of 32 respondents, only 14 (44%) managed to sail through the process whereas the majority of 18(56%) were unsuccessful and had to be assisted. However, ODL educators and planners are a key element in establishing the use of ICT in distance education programmes but many the educators and planners themselves lack skills and training in the use of ICT or the equipment (Jeffries, 2002).

Practical test 3 was stated as follows: **Compose an e-mail to a student who has requested that you send him/her a copy of a named course outline. Attach the course outline and send the e-mail to the student. Use the following address: bukaliar@yahoo.com**

A copy of the course outline was made available in "My documents". E-mails were successfully received from only 12 (38%) of the 32(100%) participants. The remaining 20(63%) failed to send their e-mails through to bukaliar@yahoo.com without assistance.

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Nine of these 20 lecturers failed even to key in the recipient address at the initial stages. The test was scored out of 30. Fears of technological failures during the process of composing and transmitting the e-mail as the reason for non success were dispelled by the by the two researchers who kept on checking the availability of the network as well as practically communicate through e-mail when the test was being undertaken. This finding confirms the same results by other researchers that having access to ICT and using it in the teaching and learning processes are a challenge since computer mediated communication smacks of more problems than solutions (Olaofe, 2005; Kangai and Bukaliya, 2010).

Research question 4 was stated as: **What support has been provided by the ZOU to improve and facilitate the lecturers` web competence?**

The majority of the lecturers indicated that they had received quite remarkable ICT support from the university. Twelve (38%) full time lecturers indicated that they had purchased HP620 and Nhava laptops through a hire purchase agreement initiated and fully guaranteed by the university. Part time staff was not included in this hire purchase programme, hence when it came to support in form of ICT gadgets from the university, they had received nothing. All the 14(44%) full time lecturers had the chance to undergo self study in the computer room at the regional centre unlike the part timers who had no access to the facility since it was not open to non-full time employees of the university. However, the full time staff complained that the facility was not being fully utilized because of the complex nature of the material contained in the self study ICT modules. Some skilled mentor was required to assist the lecturers go through the pace as opposed to throwing them into the deep side of the pool and asking them to swim when they were just novices. This lack of and unavailability of adequate training programmes resulted in lack of competence in the use of the web by potential would be users (Gambari and Okoli, 2007). However, the Zimbabwe Open University had also appointed ICT technicians for each of the ten regions to service and update the gadgets.

Conclusions

Results presented above point to a situation where one can conclude that owing to the lack of knowledge as exhibited by the majority of the lecturers at the ZOU, the ZOU on-line project is bound to face a lot of challenges at inception. Theory on the use and importance of the web has been mastered by a sizeable majority. However, the theoretical aspect is of no real relevance when it comes to tutor student interaction via the web or internet.

Other conclusions drawn from the findings point towards the fact that despite having access to computers and the internet, full time lecturers at the ZOU lack competence in the use of modern technology. In a worse off situation, are the majority of part time lecturers who neither have the gadgets nor have the competence in the use of the technology.

From the results of the study, it can also be concluded that ZOU lecturers not competent in understanding the web/internet language as reflected by the results of the tests. ZOU lecturers also do not have the practical hands on skills to undertake web/internet operations and the ZOU On-line facility may face operational challenges when in full throttle due the absence of competent lecturers.

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However, on a positive note, ZOU has been supportive in as far as the institution has provided the lecturers with the technological gadgets in ICT. All these have been provided by the university to improve and facilitate the lecturers' web competence but it is the provision of training that has seriously affected the lecturers' competence in ICTs.

Recommendations

Due to the inefficiencies portrayed in the levels of understanding of the web/internet by the majority of ZOU lecturers, it is recommended that a lot of practical training be undertaken to give the struggling lecturers a hands on approach to the use of the web and associated technological resources.

Despite the strong case made for incorporating technologies to overcome distance in open and distance learning institutions, care needs to be taken to ensure that the need for new technology help to satisfy purpose for which the technology is introduced.

Preliminary research must be carried out before the adoption of a new technology. That research can provide information about the extent to which these technologies can be used for various purposes by the lecturer and the student, as well as determining the levels of receptivity and competence of these would-be users.

Policies which require all initial distance education programmes to include compulsory courses in ICT should be put in place. The facilities and equipment for such programmes should be made available and those in charge of the programmes have to make sure that practical lessons on ICT are held.

Programmes should be put in place for the building of distance education tutors' capacity in ICT and using ICT through the designing and teaching practical ICT programmes not only for appreciation but for practical use when it comes to communicating with students.

University wide policies, strategies and plans need to be integrated into the all faculty programmes for initial ICT training, priority being given to the funding for ICT continuing professional development for incumbent lecturers, in line with trends in technological development.

Future employment prerequisites for lecturers both part time and full time, should include high levels of computer literacy form prospective job seekers.

There is also serious need to carry out a needs assessment to ascertain the web/internet needs in terms of competence and gadgets requirements on the part of the lecturers. New and refresher courses need to be carried out to update the lecturers should the need arise.

Serious consideration should also be made to involve the part time tutors in all programmes that have to do with ICTs and related matters. The part time tutors are the heart of the main functions of the delivery system at the Zimbabwe Open University, hence they are indispensable to the system.

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