

**JIPE**  
**Journal of Issues and Practice in Education**  
**Volume 4 No. 1, June 2012 ISSN 1821 5548**



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### *Editorial*

The Open University of Tanzania is celebrating its 20<sup>th</sup> anniversary this year. Being the first public Open University in Eastern Africa it has unveiled the best educational preference to many people in the region. The best learning process transcends the efficiency and ethics of a workforce. Through research and hard work, the university has been stirring social transformation evidently in the elevation of dependable approach in solving social problems consistently with the needs of the 21<sup>st</sup> century. Although the OUT doesn't brag for its learning output, its mission and vision attract many to share the reputation of belonging to such learning institution. The importance of this occasion inspires all university stakeholders to re-evaluate the contribution of the open and distance learning to the nation. The growth in delivering and expanding access to many students in Eastern Africa has been marked with increased knowledgeable workforce in the society.

Adult learning contributes in attainment of achievers of social reform and development. For 20 years, East African nations have absorbed graduates capable of transforming society dreams to reality. Learners' response in e-learning has proved that acquisition of knowledge and skills can be done in a non-tradition classroom setting. Deviating from conventional mode of delivery, learning becomes the source of interest and excitement to both students and scholars. The uniqueness of the Open University of Tanzania is realized in its attainable goals, and taking risks while embracing internal and external challenges. The opportunity to extend access and knowledge coincides with emphasis on andragogical learning methodologies. Mobilization of educational resources and guidance in the acquisition of new knowledge empower learners' confidence and sense of belonging to the institution. Inclusion of learners' background and experience has moderated the pace of learning whereby students are in control of what and when to take courses. An online learning method has encouraged students' inclination and motivation to engage in the 21<sup>st</sup> century technology. The OUT has adhered to students' quest for new knowledge through face to face sessions, virtual and physical libraries.

Open and Distance Learning (ODL) has liberated many individuals from stagnation to active participant through e-learning. Learners appreciate their recognition and inclusion of their experience in the learning process. ODL acts as the remedy of many shortfalls of traditional system of education. ODL is also mentioned by Mushi in her article to create free critical and relatively independent thinkers capable of interrogating, interpreting and innovating. East African governments have welcomed the OUT move to create challengers of actions, goals, social structures, traditions and thinking. Higher quality of learning and achievable goals override society status quo. Although liberation is refined by social transformation, the OUT is still challenging its staff and students to be more conversant with emerging technologies.

Human capital has been a pillar of OUT for realization of its goals. Outsourcing innovators and those proven to excel the norm, has made the institution firm to the

present. Mbwette and Ngirwa emphasized the importance of human resource managers to increase diversity of employees. Inclusion of individual's contributions enables the institution to achieve multiple goals. Differences offer higher chance of growth but is also mentioned by Mbwette and Ngirwa to elevate chances of creating specific challenges. The institution is current in its delivering superior knowledge through qualified individuals and its initiative in sponsoring its workforce in acquisition of new knowledge and skills. The stability of the institution to its core values is affirmed in its unitary vision of all stakeholders.

Dr. John Soka  
The Editor

## **E-learning System Success: Challenges of Mainstreaming E-learning in Zimbabwe**

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***Abstract:** As the e-learning system promises a new way of delivering education, the need to ensure e-learning system success becomes imperative. However, after 65% of the students failed to voluntarily register for an e-learning blended programme, in three universities, this research set out to find the challenges of mainstreaming e-learning in the Zimbabwean context. This was a survey of a purposive sample of 60 students and 54 university lecturers from three universities who are part-time tutors of the Zimbabwe Open University. The study found out that the divisive vectors of race and inequality appear to re-emerge via technology which is at best stagnating and at worst putting minorities at the margins owing to the dilapidated infrastructure, the digital divide that characterize students in the universities under study, lack of teacher competencies, and challenges of accessing electronic materials. In such instance, e-learning was seen as the monster under the bed and technology adoption acceptance is grossly affected. In this study, historical, technological, social, political and economic challenges appeared to be inextricably linked. Thus the research recommend the need to enable the technological possibility for students to be masters of their own destiny by changing the way they live, work, organise, communicate and interact.*

### **Introduction**

According to Doiron and Asselin (2011), the cumulative advances and innovations in digital technologies, coupled with the evidence that learners entering tertiary education today have changed fundamentally in their learning needs/styles have awakened us to the realities of new learning landscapes which are emerging around us. This means that, digital scholarship which Mutula (2011) posits being perceived as a networked, scholarly or academic environment with pervasive integration of digital technologies in everyday learning and research, the necessary physical infrastructure both on and outside campus for access, integration of university information systems such as institutional repositories, online public access catalogues and content management systems, that allow seamless access to content needed for research, publication and scholarly communication, is here to stay. Youngman (2007) concurs and points out that digital scholarship is the most important thing in contemporary scholarship. However, these sources of readily available information can be of importance to universities if there is e-learning system success especially in Open and Distance Learning institutions. Sadly this is not the case since these institutions face a plethora of contemporary challenges owing to hyper-turbulence in the environment (Chiome, 2011). This culminated in 65% of students enrolled in an e-learning blended programme failing to voluntarily register – hence prompting this study.

There are some opportunities offered to e-learners by the wave of digitalization facing the world today. Leading much of this transformation has been the exploding innovations within academic library communities (Henning, as cited in Chiome, 2011)

where it is no longer the *status quo* model of “if you build it they will come”, but rather new challenges for librarians to create dynamic and integrated systems of delivery and service provisioning (Casey & Savastinuk, 2007). Web 2.0 (Chiome & Kurasha, 2011) which refers to second generation internet-based services such as social networking sites, wikis, communication tools and folksonomies that emphasise online collaboration and sharing among users (O'Really, 2005) are also transforming the learning landscape further widening the gap between those with access to these services and those without who are left while other users not only consume content but create it as well (Pienaar, 2008). As educators, we need to take seriously Koren -cited in Mutula's (2011) stance that the right to information is a fundamental human right, which is crucial to human development and important for every human being.

These transformed learning landscapes are arising in direct response to how contemporary youth are transitioning from the secondary to post-secondary system (Tong, 2010). According to Chiome and Kurasha (2011), there is need for a re-thinking of e-learning scholarship practices. A new pedagogical approach that puts the student's needs at the root of the e-learning quality process is what ODL institutions should strive for. What this means is that e-learning need to incorporate aspects of enjoyment in its operations in order to attract users. Enjoyment is a major factor that drives users to use a new technology (Bruner & Kumar, 2005). Perceived enjoyment or the extent to which the activity of using the technology is perceived to provide reinforcement on its own right, apart from any performance consequences that may be anticipated (Davis, Bagozzi, & Warshaw, 1989). According to Tong (2010), this characterization of technology adoption is consistent with research on retail shopping behaviour. Carr, Peck and Carson (cited by Tong, 2010) asserted that while some consumers may be shopping primarily for instrumental purposes, others may be primarily enjoying these interactive media. Sadly, in developing countries the situation may be different at a time when ODL is making attempts to mainstream e-learning in its operations. The authors argue that literature informing educational change, based on understanding today's learners, can strengthen developments towards twenty-first century only if other inequalities in society are addressed concurrently.

Technology adoption researchers (Asare, Alejandro, & Granot 2011) propose a set of principles for building new learning landscapes which capitalize on changes in students' expectations for their learning and creates a vision for socio-technological learning contexts which change the dynamics of ODL through attributes that have been well researched and proven time and time again to have a strong relationship with the decision by an individual to adopt an innovation (Asare et al., 2011). In comparison, the usage and integration of the internet and other digital technologies into the daily lives of students in the developed world show dramatically escalating trends (Rye & Zubaidah, 2008). It has been pointed out that the behavioural intentions of technology user are an important measure of technological acceptance. This stance is also taken by Lee (2006) who maintains that the behavioral intention to use is a measure of the likelihood a person will employ the application. A question remains: that how then are

those who do not have food on the table expected to benefit from this digital revolution. Is it possible to mainstream e-learning and at the same time equalise educational opportunities? Or that there is now a widening gap between rural usage of digital technologies by ODL students and the paucity of usage opportunities in urban settings and well to do communities, an idea that is shared by Aboelmaged (2010). Zimbabwe Open University introduced e-learning through zouonline.

The overall goal of the study was to identify implications of this e-learning programme on learners' predominant usage of, and preference for, digital technologies and how these might impact the teaching and learning environments in an ODL context where some students live in remote areas lacking electricity. Specifically, the team selected rural based students and their tutors in order to explore questions of how e-learning match the profile commonly described of Net Generation youth; how they use digital technologies for learning and socializing; and how well faculty succeed in matching their traditional goals for higher education with this generation's "digital mindset" (Doiron & Asselin, 2011). In other words, the question is: is it possible to mainstream e-learning under the circumstances?

### **Some Challenges Related to Mainstreaming of E-Learning**

In a comparative study of online Chinese and American shoppers, Tong's (2010) findings revealed that only 51 percent of the Chinese respondents had online shopping experience. On the other hand, Kim and Stoel (2004) posit that if consumers' online purchase experiences are positive, then they will foster positive attitude toward online shopping and be willing to shop online in the future. The Graphic, Visualization, and Usability (GVU) Center at the Georgia Institute of Technology has conducted Web user surveys every 6 months since 1994 (Pitkow & Kehoe, 1996). The results from the most recent survey identified some key ease of use problems. Most frequently cited was the slow speed of downloading or viewing Web pages. Other problems included being unable to perform such tasks as finding a page that users knew existed, organizing the pages and information they gathered, finding a page once visited, and visualizing where they had been and could go to find information. If students under study are meeting the same problems, then they will not be very willing to part with their money and register for an online course. Asselin and Doiron (2008) found out that many students are disengaged with their school work and are more interested in what is happening outside of school. In such a case students in poverty stricken areas will not enjoy the benefits of e-learning considering that Chiome and Kurasha (2011) pointed out that there is still progress to be made, in particular as regards student involvement in e-learning in ODL. To this end, one may as well point out that: "Their backyards are the world, not just the local neighbourhood" (Asselin & Doiron, 2008, p. 6).

Closer to Zimbabwe, Brown and Czerniewicz (2008) on trends in student use of ICTs in higher education in South Africa revealed that despite the rise of Web 2.0 tools for sharing information, 25 per cent of students do not share resources using these tools, about half does not upload resources using these tools and 67 per cent does not use

these resources to publish content. A total 75 percent does not use blogs as part of their studies, 67 per cent does not exploit the option of working collaboratively with other students online. In most cases, we are quick to blame the students yet they may not be getting the instructional support they need to be critical consumers of information from the internet (Latham & Gross, 2009). Asare et al. (2011) also maintain that among the few papers that focus on B2B technology adoption, several approaches with numerous overlapping and divergent constructs and models have been used. Research about young people's internet literacy reveals a critical need for instruction in these higher level aspects of new literacy (Asselin, 2007). Additional research is therefore needed to provide further understanding of the issues that organizations have to consider when making the decision to equalize educational opportunities through e-learning. Doiron and Asselin (2011) point out that educators must continue and even step up their efforts to embrace digital technologies, find ways to integrate them meaningfully into their classrooms and, in some ways, relinquish some of the power and control over learning to students. It is likely to be true that the "best way for students to learn about the world they live in, is to have a hand in creating it" (McHugh, 2005, p. 7).

### **Statement of the Problem**

Mainstreaming e-learning will enhance digital scholarship which is now the thing of the moment in ODL institutions. However, an alarming number of students are not benefiting from this wave gripping the global village owing to a number of challenges that this research set forth to unearth. The subject of challenges of mainstreaming e-learning in Zimbabwe has hardly been researched in a digital scholarship environment. Consequently, there is limited Zimbabwean literature on the subject, hence this study.

### **Research Question**

This research sought to answer the question: What are the challenges of mainstreaming e-learning in Zimbabwe?

### **Significance of the Research**

Empirical research is needed to address issues of mainstreaming e-learning in developing countries in a digital learning and research environment in order to leverage the proliferation of technology to optimise benefits for scholarly endeavours. Institutions of higher learning, especially universities, must strive to integrate into their learning and research strategies challenges of mainstreaming e-learning and other aspects of digital scholarship to ensure that information and communication technologies that are implemented meet acceptable scholarly standards with regard to access, usability, productivity and more. Issues of mainstreaming e-learning have been of immense importance owing to the evolving knowledge economy and the perversity of information and communication technology in society emanating from increased rollout of e-government infrastructures throughout the world by governments.



## **Methodology**

This research uses a qualitative approach to enable the authors to develop an in-depth understanding of issues around challenges of mainstreaming e-learning in an ODL institution in a developing country. By using a qualitative approach, the authors were able to explore and discover new and important themes, relationships, and perspectives that have not been previously covered in mainstreaming e-learning in a developing country literature. Since the purpose of this research is not to test a hypothesis or verify a theory but rather to develop new ideas and inform our understanding of mainstreaming e-learning, a qualitative approach is appropriate for achieving those goals (Strauss & Corbin, 1990). A case study approach was used and methods outlined by Rossman and Rallis (2003), Seidman (1998) and Strauss and Corbin (1990) were emphasized. This was a survey of a purposive sample of 60 students and 54 university lecturers from three universities who are part-time tutors of the Zimbabwe Open University. The goal of this research was to develop an in-depth understanding of the issues that students consider and experience when institutions decide to make e-learning the in thing in their learning. This research uses a qualitative approach to collect and analyze data, and in-depth interviews were conducted to help generate new themes, and ideas about the challenges of mainstreaming e-learning (Rossman & Rallis, 2003).

A semi-structured interview guide was utilized in conjunction with an open-ended questionnaire technique. This enabled the researchers to cover the main topics and categories while remaining flexible and open enough to pursue topics that the participants bring up while being interviewed (Rossman & Rallis, 2003). Participants were provided with informed consent forms to explain what the study was about, their level of participation and also to guarantee them confidentiality. As an incentive to participate in the study, participants were offered a copy of the completed study. In all, ten in-depth interviews were held with tutors. All ten interviews were tape-recorded and fully transcribed. The remaining 44 tutors and 60 students answered an open-ended questionnaire.

## **Data Analysis**

The researchers analyzed the collected data using a thematic approach. Researchers who use this method allow patterns and thematic connections to emerge out of the data and do not address the material with a pre-determined theory or hypothesis in mind (Seidman, 1998). The authors used an elaborate multi-stage process to code, analyze, and interpret the data generated from the interviews. The main coding process used was Strauss and Corbin's (1990) three stage coding process in combination with methods outlined by Rossman and Rallis (2003) and Granot (2006). The first step in the process was the open coding stage. This stage involved the labeling and reduction of data into conceptually similar ideas and categories (Pandit, 1996). The next stage was the axial coding stage where the categories identified in the open coding stage were further searched and reduced into multiple patterns, clusters and themes (Strauss & Corbin, 1990). The final stage was the selective coding stage where the patterns and themes

identified in the previous stage were integrated into a central and core theme (Pandit, 1996). The main themes that came out were presented in tables and then discussed in themes.

**Results**

While the debate regarding the mainstreaming of e-learning rages on, new thinking emerged that questioned the role and efficacy of mainstreaming e-learning in a third world country. One even said it is (in his/her words) *atrophying*. It is the gap between the respondents in this study and what is happening elsewhere that is worrying. While the respondents in this study claim e-learning is stagnating and putting minorities at the margins, 79% (Table 1); elsewhere it is noted that the application of third generation (3G) mobile communication technologies has triggered the rapid development of mobile commerce (Zhou, 2011). On the other hand, according to a report issued by China Internet Network Information Center (CNNIC), the number of mobile internet users has reached 277 million, accounting for 66 percent of the internet population (CNNIC, 2010). A variety of mobile services such as short message services, mobile instant messaging, mobile search and mobile games have become popular among users. Sadly, this was not the case in this study in which technology was said yet to be atrophying in developed countries, students can access mobile internet to acquire information and services at anytime from anywhere (Zhou, 2011).

Table1

*Challenges to mainstreaming e-learning in Zimbabwe. N=114 and F=Frequency*

E-learning issue raised	Agree		Not sure		Disagree	
	F	%	F	%	F	%
E-learning is putting minorities such as women blacks and physically challenged at the margins	90	79	3	3	21	18
The divisive vectors of inequality are evident in e-learning	100	88	2	2	12	10
Dilapidated infrastructure is a challenge for mainstreaming e-learning in Zimbabwe	85	75	2	2	27	23
A very wide digital divide characterise students in higher education in Zimbabwe	81	71	1	1	32	28
I do not own a computer	110	96	2	2	2	2
Leaner support service did not change to accommodated online support services	76	67	0	0	38	33
Online learning is greatly affected by the availability of internet services.	70	61	3	3	41	36
Tutors are not competent enough to provide adequate e-learning services.	98	86	1	1	15	13

Institutions intending to mainstream e-learning should embrace Sharma’s (2011) suggestions pointing out that several advantages make distance learning become popular and important. Convenience and flexibility are some of the main reasons. With

the growing number of Internet users, Web-based distance learning programmes enable lifelong education anytime at any location. Scalability of participants is another advantage. With a proper support of network infrastructures and computer systems, a large number of students will embrace e-learning and mainstreaming e-learning will be mere formality.

### **Emergence of the Divisive Vectors of Race and Inequality**

The study found out that the divisive vectors of race and inequality appear to re-emerge via technology 88%. Widmer (2011) posits that while working against the danger of creating further exclusion, e-democracy clearly is an enormous opportunity for the society. With today's tools it gets simple to create school democracy, spreading information and involving students in decision making processes in their schools. This is a great opportunity to take ownership of their learning, giving the space for innovation and creativity by putting the learner into the centre. Like in the citizenship education also in the use of the Internet as new type of society, the development and learning process from the passive consumption or observation to the active and critical participation has to be facilitated and learned consciously. Lamentably for the students and teachers in this study, it was deplorably saddening to note that this was not the case in this study in which e-democracy is turning into e-exclusion.

### **Double Edged Role of ICT**

It was the contention of the respondents in this study that ITC is a double-edged sword. They pointed to the double-edged role of Information and Communication Technology. They claimed that ICT can be a facilitator of equal educational opportunities and at the same time a potential risk to equality in education owing to the dilapidated infrastructure 75% and the digital divide 71% that characterize students in the university. Some supporting arguments were as follows:

*“The dilapidated ITC infrastructure in ZOU means lecturers and support staff will be frustrated in their efforts to re-generate the university. It is inappropriate to shuffle something as important as access to educational opportunities to the periphery because of technology.”*

*“There are promising initiatives in the form of ZOUONLINE that can be utilized to re-generate the university. However, the digital divide that exists among the students in various situations risks increasing the gap between the rural based students and the affluent ones if efforts are not made to bridge it. As it stands right now, mainstreaming of e-learning is not possible right now when technology is atrophying these chances”.*

What the respondents in this study appear to show is that owing to dilapidated infrastructure, mainstreaming e-learning is a challenge, yet Hume (2008), suggests that perceived value is the most important indicator of repurchase intention. This means that digital scholarship is under threat. According to Mutula, (2011), digital scholarship may be perceived as a networked, scholarly or academic environment with pervasive

integration of digital technologies in everyday learning and research, the necessary physical infrastructure both on and outside campus for access, integration of university information systems such as institutional repositories, online public access catalogues and content management systems, that allow seamless access to content needed for research, publication and scholarly communication. On the other hand, e-research appears to be in jeopardy owing to the dilapidated infrastructure, yet it is closely related to the concept of digital scholarship. O'Brien (2005) says e-research is perceived to mean large-scale, distributed, national or global collaboration in research. Such kind of research typically entails harnessing the capacity of information and communication technology (ICT) systems, particularly the power of high-capacity distributed computing. It is also hailed, according to O'Brien (2005) as an aid to that is used to study complex problems across the research landscape. This valuable aspect of e-learning is still a pipe dream in some rural areas of Zimbabwe with dilapidated infrastructure.

On the social plank, one of the major arguments for ODL has been its ability to increase access to education together with facilitating equity in an area which has all along been a preserve for the elite (Neely & Tucker, 2010). On the other end, with the changing social, political and economic environment all over the world, as the changing needs and expectations of learners highlighted the arrival of the *new learner* questioning the relevance of many a traditional course. ODL cannot escape the arrival of the new learner who expects programmes that are socially relevant and meet his/her needs and expectations. According to Mutula (2011), the new learner can be absorbed in a digital scholarship environment when the online systems facilitate a variety of tasks related to supporting different scholarly scenarios such as: collaboration, virtual project teams, communication, administration, etc. This is still far from reality considering that the majority (110) 96% do not own a computer and if responses in this study are anything to go by. It is the wish of the respondents in this study that associated information are effortlessly accessible to the new learners.

### **Use of Traditional Support Services**

It was the contention of the respondents in this study that in spite of the proliferation of online learning, support services are failing to move with the tide. Universities still offer traditional learner support services 76 (67%). An extract from the responses pointed out that:

A learner's distance learning know-how is often fashioned by the quality of the services that support the educational process. Online learners have an advantage from learner support services exclusively designed to meet the learners' needs but sadly this is not the case as universities stick to their traditional learner support services.

The concerns with support services by the respondents in this study were further echoed by Sharma (2011) who lamented that support service systems that are easily

accessible to on-campus learners frequently are deficient in distance education programs, directing to further remoteness of distance learners. Even the most extremely motivated and independent distance education learners can find their experience lonely, difficult, and occasionally intimidating (Sharma, 2011). A shortage of ample learner support services can be disappointing and lead to failure. Chiome (2011) also made comments related to this issue by pointing out that with the growth in number of institutions offering distance education and the growth in learner numbers, tele-learning is introduced in the third generation. Print materials are still used, but a shift to the focus on learner support is made. Henning, cited by Chiome, (2011) also pointed out that UNISA embarked on a series of workshops for senior management with an expert in online teaching to teach them to assess technologies available to facilitate Open Distance Learning in the University. Now, open and distance teaching staff can decide if they should communicate by using Blogger, Wikispaces, or Twitter to support students.

### **Challenges in Accessing the Internet**

The respondents in this study pointed out that because they were rural based, they faced challenges of accessing the internet (70) 61%. Some who lived in towns also said they face the same challenge since their work places did not have the internet. “We do not have access to the internet. We have to travel to the very few providers to queue for our turn the whole day. Sometimes the network is not available and the net is so slow that one will not download a single document”.

When students get experience with the internet, they adjust their perception of it as a learning medium in a positive direction (Monsuwe, Dellaert & Ruyter 2004). Concerning access to new technology, Kirkwood in (Rye & Zubaidah, 2008) problematised the social repercussions of making computer use obligatory for Open University, UK students. They considered this a potential threat against the liberal principles of an open university. Later they also adopted a global perspective on the same issue (Kirkwood, in Rye & Zubaidah, 2008). Others, such as Aboelmaged, (2010), also warn against a situation where new technology might raise the quality of ODE, but also exclude groups of students that were initially a target for such universities. They both pay special attention to students in developing countries as this is where the access to new technology is most limited. Their fears were confirmed in this study, but in sharp contrast to Mutula (2011)’s observations that, digital information resources are being relied upon as primary or complementary information sources of scholarship and scientific journals that were, a few years ago, produced largely in print format, are now rolled out first as e-versions. Libraries are also transforming their print collections through digitisation or subscription to e-journals, with or without print alternatives to make them more accessible and to enhance resource sharing. Through digital scholarship information is delivered to users 24/7 via intranets, the internet and other fast and emerging networks (Mutula, 2011).

While the requirements of educational institutions such as universities and E-Learning content providers are vital, the requirements of end users (i.e., the learners) must be taken into bearing in the design and advancements of the technology. To such an end, Vaughan and MacVicar (2004) maintains that E-Learning, as with any learning, is destined to fail when it fails to successfully focus on learners and their unique individual needs as was the case in this study. For instance, developers require taking into bearing access to E-Learning infrastructure. High Internet access charges often deter students from accessing E-Learning curriculum outside classroom. When this is the case, arrangements must be made for learners to access the Internet at workplace or campus websites.

### **Challenges in Accessing Electronic Resources**

The respondents in this study were concerned with the availability of electronic resources that could help them in their e-learning. This statement sheds light on this issue: "I have challenges in accessing electronic resources. Even the university library is failing to provide us with electronic resources". Challenges with electronic resources appear a to slow down mainstreaming e-learning in ODL. In fact Park and Jun (2003) confirmed this development in which they indicated that the more experienced and satisfied technology users are with the technology, the more likely they are to make repeat purchases. This is further supported by Chiome (2011) who posits that modern ODL institutions have to establish systems for the distributed facilitation of learning after registration; this includes provision of tutors, equipped learning centers, libraries, information, and communication technologies. Henning (cited by Chiome, 2011) further point out that every learner, lecturer, research or any other staff members of the institution is entitled to have access to the library and information services of the institution despite their geographical location. This will include direct communication with the library staff in an appropriate medium of communication and regardless of the location of the library staff members and the client.

ODL libraries should therefore manage and plan its services in such a way that they meet the information and resource needs of clients wherever they are located. This appears to further confirm that the concerns of respondents in this study were real. Sharma (2011) also adds his voice on this issue and posits that learning through distance education using computer-mediated environment has become not only an accepted norm, but also a necessity in the field of retraining working professionals. ODL should have realized that the quick flow of information and the ensuing rapid change in all disciplines have made it essential for incessant improvement of all professionals. With the learners engaged in work-related commitments, distance learning utilizing computers has improved the learning environment whereby the learners have access to improvement of programs without having to physically go for the courses and yet being in steady contact with the resource persons as well as the other learners.

### **Teacher Competencies**

E-learning teacher competencies were cited as a challenge to mainstreaming e-learning (98) 86%. To this end, some put it this way: “Mainstreaming yes but do we have tutors with capacity to deliver on line. If not do we have funds to train teachers to do this?” All these questions raised by the respondents in this study appear to point to the fact that mainstreaming e-learning is still an uphill climb to the bottom. At the same time the students who are disadvantaged have had their right to information violated. UNESCO (2008) is explicit about commitment to the free flow of information and access to knowledge sources . . . for “the wide diffusion of culture and the education of humanity for justice . . . liberty and peace . . .” Yet in this study, respondents point out that tutors lack competencies to guide students to prosperity. In this regard, UNESCO (2008) further posits that access to information for all . . . is a fundamental right which should be upheld with greater efficiency and imagination in a spirit of equity, justice and mutual respect. UNESCO further states that promoting ethical aspects and principles that espouse creative multilingual content, universal access to information and communication, best practices and voluntary, self-regulatory, professional and ethical guidelines should be encouraged among media professionals, information producers, users and service providers with due respect to freedom of expression for equitable presence in, and access to, cyberspace. When these values/rights are upheld consistently, they engender trust in the systems, institutions or individuals who have responsibility to uphold them but when they are violated they cause distrust.

### **Conclusions**

The purpose of the research was to mobilise key stakeholders so that they support the mainstreaming of e-Learning in open and distance learning as an agent for modernization of education, for all subjects and skills. The research looked at challenges in terms of the current situation of ICT for education and training in the Zimbabwean context, the potential obstacles to full scale adoption of eLearning, and the necessary pre-conditions to mainstreaming it in ODL processes. In this study, historical, technological, social, political and economic challenges appeared to be inextricably linked leading to challenges that include ICT infrastructures and teachers' competencies. Startling revelations came out from this study where e-learning was seen as the monster under the bed and technology adoption acceptance is grossly affected. As the study shows, students will be happy to enroll online if they are guaranteed usefulness and benefits that outweigh existing practices. They remain stubbornly rigid if their time is wasted by too much effort put into using technology, system malfunctioning and challenges of accessing electronic materials.

Existing research has dealt extensively with the factors affecting customers' offline repurchase behaviour. Relatively, the amount of research that have considered mainstreaming of e-learning in a developing country is small, as such this paper adds value by contributing to the relatively sparse literature in the area by bringing in new ideas on challenges of mainstreaming e-learning in a developing country. The outcome of this research not only corroborates some of the findings of prior studies, but is also an advance over many as the variables identified in this research will go a long way

towards improving chances of mainstreaming e-learning in a developing country environment. While there has been a recent increase in research on e-learning, the quantum and quality is still a far cry relative to the amount of work done in many of the other disciplines such as quality, leadership and pedagogical aspects. The progress in mastering ICT and in mainstreaming e-learning in the Zimbabwean context for retaining the niche in distance education has been extremely disappointing. Although many effective instructional technologies of distance education have been in use for years, getting the universities in this study to adopt the technology is often a stumbling block. This suggestion appears to be valid, as computers and telephones in several societies put learner who own or use them in the elite class of the society. This puts minorities such as women, the disabled, black community and others at the margins.

### **Recommendations**

In view of the need to engage students other than the “early adopters” with the opportunities in e-learning, the study considered it important to recommend development of e-learning success basing on the conclusions of the study, this research gives the following recommendations:

- Relevant government agencies could find the outcomes of this research useful, particularly with respect to developing internet infrastructure that is student friendly and does not put minorities at the margins.
- There is a need to enhance competition among internet service providers since, with greater competition; students would have greater options and better services at competitive prices.
- A reputable student support centre with customer relationship management at the fore-front will enable e-learning service provision for the disadvantaged so that they are not pushed to the margins.
- Quality e-learning service tailored to satisfy customers’ needs can enhance customer satisfaction, and help to reduce the digital divide.
- E-learning institutions to improve their competitiveness by effectively managing and delivering services to customers that guarantee highest level of ethical standards, efficient processes and beneficial outcomes.
- To mainstream e-learning, there is need for institutions to invest more resources and time to understand their students’ social background and find ways to include them in the digital scholarship.
- It is crucial for the respective online firms to recognise the importance of managing consumer expectations and be able to provide functional, reliable and easy-to-use systems that enable enjoyable online learning experiences.

### **References**

Aboelmagd, M. G.(2010). Predicting e-procurement adoption in a developing country, an empirical integration of technology acceptance model and theory of planned behavior. *Industrial Management & Data Systems*, 110 (3), 392- 414



- Asare, K. A., Alejandro, T. G. B., Granot, E. & Kashyap, V. (2011). The role of channel orientation in B2B technology adoption. *Journal of Business & Industrial Marketing*, 26 (3),193–201.
- Asselin, M. (2007). Learning to learn: an examination of instructional support during a grade 9 research project, *Studies in Media and Information Literacy Education*, 4, 1-18.
- Asselin, M. & Doiron, R. (2008). Towards a transformative pedagogy for school libraries 2.0, *School Libraries Worldwide*, 14(2) 1-18.
- Brown, C. & Czerniewicz, L.(2007) *Trends in student use of ICTs in higher education in South Africa*. Paper presented at the 10th Annual Conference on the World Wide Web Applications, University of Cape Town, Cape Town
- Bruner, G. C. II and Kumar, A. (2007). Explaining consumer acceptance of handheld internet devices, *Journal of Business Research*, Vol. 58 No. 5, pp. 553-8. 2005
- Casey, M. & Savastinuk, L. *Library 2.0: A Guide to Participatory Library Service*, Information Today Press, Medford, NJ.
- Chiome, C. (2011). *Revisiting quality in Open and Distance Learning: A Southern African perspective*. LAP Lambert Academic Publishers: Saarbrucken, Germany.
- Chiome, C. & Kurasha, P. (2011). *Quality for e-learning: Some useful lessons*. LAP Lambert Academic Publishers: Saarbrucken, Germany.
- CNNIC (2010). 26th Statistical Survey Report on the Internet Development in China, China Internet Network Information Center, Beijing, available at: [www.cnnic.cn](http://www.cnnic.cn).
- Davis, F. D., Bagozzi, R. P. & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, 35(8), 982-1003.
- Doiron, R. & Asselin, M. (2011). Exploring a new learning landscape in tertiary education. *New Library World*, 112(5-6), 222-235)
- Granot, E., (2006). *Revealing Victoria's secret: a hermeneutic exploration of female new luxury consumers*. PhD dissertation, University of Massachusetts Amherst, MA.
- Hume, M. (2008). Understanding core and peripheral service quality in customer repurchase of the performing arts. *Managing Service Quality*, 18(4)349-369
- Kim, J. H., Kim, M. & Kandampully, J. (2009), Buying environment characteristics in the context of e-service, *European Journal of Marketing*, 43(9/10), 1188-1204
- Kim, S. & Stoel, L.(2004). Dimensional hierarchy of retail website quality. *Information and Management*. 41(5)619-633
- Latham, D. & Gross, M., Broken (2009). *Undergraduates look back on their experiences with information literacy in K-12 education*, Retrieved from [www.ala.org/ala/mgrps/divs/aasl/aaslpubsandjournals/slmrb/slmrcontents/volume11/lathamgross.cfm](http://www.ala.org/ala/mgrps/divs/aasl/aaslpubsandjournals/slmrb/slmrcontents/volume11/lathamgross.cfm)
- Lee, Y. (2006). An empirical investigation into factors influencing the adoption of an e-learning system. *Online Information Review* 30(5) 517-541

- Lee, C. H., Eze, U. C. & Ndubisi, N. O. (2011). Analyzing key determinants of online repurchase intentions Asia Pacific. *Journal of Marketing and Logistics* 23(2) 200-221
- McHugh, J. (October, 2005). Connecting to the twenty-first century student. *Edutopia Magazine*. Retrieved from [www.edutopia.org/ikid-digital-learner](http://www.edutopia.org/ikid-digital-learner).
- Monsuwe, T. P. Y., Dellaert, B. G. C. & Ruyter, K. D.(2004). What drives consumers to shop online? A literature review”, *International Journal of Service Industry Management*, 15(1), 102-21.
- Mutula, S. M. (2011). Ethics and trust in digital scholarship *The Electronic Library*. 29(2), 261-276
- Neely, W. P. & Tucker, J. P. (2010). Unbundling faculty roles in an on line distance education programmes. *International Review of Research in Open and Distance Learning*. 11(2), 1-13
- O’Brien, L., (2005). E-research: an imperative for strengthening institutional partnerships, *EDUCAUSE Review*, 40(6), 64-77
- O’Really, T., (2005) *Web 2.0: compact definition*. Retrieved on 29 September 2008 from [http://radar.oreilly.com/archives/2005/10/web\\_20\\_compact\\_definition.html](http://radar.oreilly.com/archives/2005/10/web_20_compact_definition.html)
- Pandit, N. R. (1996). The creation of theory: a recent application of the grounded theory method”, *The Qualitative Report*, (2)4,107-26.
- Park, C. & Jun, J. ( 2003). A cross-cultural comparison of internet buying behavior: effects of internet usage, perceived risks, and innovativeness, *International Marketing Review*, 20(5), 534-53.
- Pienaar, H. (2008), *Development and implementation of an e-Information strategy for an academic library*. Paper presented at Libraries and Information Management Forum 2008, Sandton, Johannesburg, 21-22 August.
- Pitkow, J. E. & Kehoe C. M. (1996). Emerging trends in the WWW user population, *Communications of the ACM* 39 (6), 106–108
- Rossman, G. B. & Rallis, S. F. (2003). *Learning in the field: An introduction to qualitative research* (2<sup>nd</sup> ed). Thousand Oaks, CA: Sage Publications,
- Rye, S. A. & Zubaidah, I. (2008). Distance education and the complexity of accessing the Internets, *Open Learning: The Journal of Open and Distance Learning*, 23(2), 95-102
- Seidman, I.(1998). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. New York, NY: Teachers College Press,
- Sharma, K. (2011). *Critical success factors in crafting strategic architecture for e-learning at H. P. University*. London: Emerald group Publishing.
- Strauss, A. & Corbin, J. (1990). *Basics of Qualitative Research: Grounded Theory, Procedures and Techniques*. Newbury Park, CA: Sage
- Tong, X.(2010). A cross-national investigation of an extended technology acceptance model in the online shopping context. *International Journal of Retail and Distribution Management* 38(10) 742-759
- UNESCO (2008).Ethical issues of information society. Retrieved on 26 July 2008 from [www.unesco.org/webworld/en/ethic-information-society](http://www.unesco.org/webworld/en/ethic-information-society)

- Vaughan, K. & MacVicar, A (2004). Employees' pre-implementation attitudes and perceptions to E-Learning: A banking case study analysis. *Journal of European Industrial Training*. 28(5), 400-413
- Widmer, L Mainstreaming e-learning in education. Paper presented at the conference on mainstreaming e-learning in EU member countries. Brussels: 16-17 June 2011. Retrieved from: [http://ec.europa.eu/information\\_society/events/cf/daa11/item-display.cfm?id=5989](http://ec.europa.eu/information_society/events/cf/daa11/item-display.cfm?id=5989) 2011
- Youngman, F.(2007), paper presented at Digital Scholarship Conference, Gaborone, University of Botswana Library, 12-13 December. 2007
- Zhou, T.(2011). The impact of privacy concern on user adoption of location-based Services. *Industrial Management & Data Systems*. 111(2) 212-226.