Effectiveness of Mobile Learning as a means of Distance Learning in Tanzania

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Abstract

The aim of this research was to explore the effectiveness of Mobile learning (M-Learning) as a means of Distance Learning (DL). A sample of 120 students were interviewed by using both questionnaire and face- to-face interview. Spreadsheet was used as an instrument to analyse the findings. Results of this study indicate that, distance learning need broadband communication connections, which clearly is more suitable to support online learning. Since Mobile devices have a network connection (3G/4G) available almost (99.999%) of the time in almost every part of developed countries; learners can enjoy the biggest advantage of M-Learning technology- when used; that it can be used anywhere, anytime and its usage is easy access to a larger number of distance learners. It is therefore concluded that effectiveness of M-Learning can be used as a means of DL and once used facilitate the entire distance education by enhancing communication among distance learners and lecturers and ways of delivering lectures.

Keywords: M-learning, distance learning, e-learning, Tanzania

Introduction

Economically, Tanzania is one of the poorest nations in Africa with a national GDP of 33.23 USD Billion (URT, 2013). It is a country in which 40% of the population is living below the official poverty line. As poverty increases, there is an increasing number of people

who cannot access education especially tertiary and higher education. The universalization of education and its worldwide acceptance as a continuous or lifelong undertaking, coupled with concerns about educational access and equity (Sangai, 2004, Komba, 2009, Mshana, 2014), as well as the prevailing level of poverty, necessitate the use of various education delivery approaches to enable all citizens to benefit from this service. In traditional learning-teaching system, the learner has to be on-campus, to register as a full-time student and to attend face-to-face lectures and seminars. Communication between the teacher and the student is direct; this facilitates immediate exchange of messages and the resolution of learning challenges (Komba, 2009, Mshana, 2014). This approach limits education to many learners who are separated, by time and space, from those who are teaching.

Distance learning creates chances for many scholars to pursue their studies without physical presence at colleges. The California Distance Learning Project (CDLP, 2011) defined Distance Learning (DL) as an instructional delivery system that connects learners with educational resources. DL provides educational access to learners off campus in educational institutions and can augment the learning opportunities of current students. As a breakaway from traditional learning-teaching system, distance education relates to a methodology of teaching in the absence of a direct interaction between teacher and the student (Mshana, 2014). In case, learners are separated from mainstream education because of distance, time and other relevant reasons, they can fall back upon distance education on merit of its accessibility. This aspect of accessibility helps everyone educated once the constraints of attending classes at confined time slots and locations are removed. Learners need not travel across a new region or country for availing of the benefits of a course. They can access it by means of online method. Bijeesh (2013) commented

that, this not only saves time, but also cuts down financial expense. Moreover, most courses offered as part of distance learning method are cheaper than their regular counterpart. Much more needs to be done to help sustain the distance learners who are likely to feel isolated and alienated because of a low degree of interaction and communication with fellow learners, tutors, and the university as compared to those in traditional universities (Dzakiria, 2005). In trying to bridge the transactional distances faced by the learners, it was noted that the university needs to provide a higher level of support to the learners more regularly and unobtrusively and to engage them psychologically by motivating and reminding them to keep pace with course schedules and requirements, as well as to help them develop self-regulation skills (Crawford, 2008). This can only be done when implementing M-Learning in DL in all Universities or Institutions which offer distance education.

The Information and Communication Technology (ICT) Policy of Tanzania for basic education (URT, 2007), aims at using ICT to improve distance learning, as well as to enhance the quality of the learning experience itself. Other objectives are to expand and improve adult education, lifelong learning and literacy programme, notably for retraining and re-skilling the work force. As it has been revealed here in this introduction, there are some challenges which face Distance learners in most developing countries. Many institutions are using ICT-supported or ICT- based instruction either as their primary or supplementary delivery system in order to deal with those challenges. But with these efforts, many developing countries including Tanzania the adoption of ICT-based DL, such as online instruction, is not yet as popular as in developed countries like USA. Although it is gradually gaining momentum, obstructions such as the high cost of owning personal computers (PCs) and

availability of limited ICT- infrastructure coupled with limited networking capacity still hamper developing countries. Even if learner having PC or institutions own PCs, the connection to the Internet based on dial-up access. The quality of service for dial-up Internet access remains very poor and dial-up connection are generally very slow, with speeds typically below 28.8 kbps. These institutions need broadband communication connections, which clearly is more suitable to support online learning. The problem is not only connection, but PCs are not portable, learners can not use them anywhere, they cannot reserve power, and connection is limited to specific area even if wireless technology is used.

However, laptops could provide us usage for three to four hours maximum before it required connection to electrical power supply. Mobile devices, once fully charged, can provide the same for 48 to 96 hours. Laptops require connection to a network for Internet access, which is available at fixed locations in buildings or wireless access points, again at fixed and confined locations. Mobile devices have a network connection available almost (99.999%) of the time in almost every part of developed countries. Mobile devices network availability and penetration is happening at a dramatic pace in developing countries. The same should apply to education; learning and teaching should be able to take place anywhere whenever the student and the teacher are ready. With such flexibility in the provision of education, there is a possibility in getting everyone educated once the constraints of attending classes at confined time slots and locations are removed. It is from this view, the study was taking to explore the effectiveness of mobile learning as a means of distance learning especially in Tanzania and how it can be a solution to more limitations of its counterpart as we see the vital role it plays compared to the common ICT technologies. The study focused on

challenges facing DL students as well as the advantages of M-Learning as means of DL. Also to come up with a conclusion, the study evaluated students' preferences for M-Learning in DL.

Mobile Learning Concepts and its Evolution

The introduction of technology has promised increased and enhanced communication and interaction for distance and online learners. Regardless of the opportunities, there is limited evidence to support that this in fact occurs in practice. Indeed, some recent studies (Lonn & Teasley, 2009; McKeogh & Fox, 2009) suggest that most lecturers make little use of the interactive features of many ICT tools. There is also some evidence that although some tools such as lecture recordings are widely utilised, the majority of lecturers make no changes to their curriculum practices to integrate these technologies (Gosper et al., 2008; Preston et al, 2010).

Indeed, (Conole, 2007; 2008) suggests that there is a gap between rhetoric and policy in relation to the use of M-Learning for teaching and learning. Distance students are recognised for their busy lives and their preference for anywhere, anytime learning and much is also made of students' ownership and use of mobile technology and its potential to create and support M-Learning through active and engaged learning activities and making more effective use of situated and contextual learning environments (Ally, 2009). Nevertheless, to date the majority of higher education institutions in Tanzania appear to have largely ignored this opportunity to encourage and support M-Learning on an institutional scale. Adding to the opportunities for learners to experience learning with a range of technologies, the adoption of social networking tools such as Facebook, Twitter, Whatsapp, Instagram and SMS also continues to grow apace. Despite the opportunities offered by such tools, current research indicates

that much of the focus of students' use of tools such as Facebook is social. Motiwalla (2005) wrote that; 'One reason why M-Learning systems may not have been widely proliferated in education is due to a widening concern among faculty and administrators on the viability of the Wireless/Handheld (W/H) devices in online programs'. The introduction of W/H devices into the learning pedagogy raises concerns among faculty regarding their usefulness in education. For example, some faculty question whether students should be learning at the airport, bus or a train station with all the environmental distractions.

The immobile nature of personal computer (PC) and Internet has restricted the anytime-anywhere potential of e-learning to those moments when a learner is at home or at work in front of their PC. When in transit, a learner cannot access the courseware (course information and other applications) nor complete their course work (Motiwalla, 2005). Mobile device overcomes these limitations by allowing learners to disseminate information and complete other course work even when they are away from their hard-wired Internet connections. This enhances the anyplace potential of wired Internet to the next level, namely, anywhere (Mshana, 2014). M-Learning has the potential to give instant gratification to students by allowing them to interact with the instructors, other students in the course, and access course materials from anywhere.

In parts of Southern Africa (Traxler, 2009) and East Africa including Tanzania for example, the term mobile learning is recognized but it is grafted onto a tradition of open and distance learning (ODL) and onto different pedagogic traditions, ones that have occasionally been called 'instructive' and have concentrated on didactic approaches, not on discursive ones. M-Learning in these parts of the world is a

reaction to different challenges and limitations, usually those of infrastructure, poverty, distance, or scarcity issues of access to education. As learning has become more individualized, learner centered, situated, collaborative, ubiquitous, and continuing, so has the technology; ICT has similarly become more personalized, user-centered, mobile, networked, ubiquitous, and durable. These parallel progresses offer the possibility for M-Learning to support both the social constructive theory of learning and the conversation theory. M-Learning is in many ways a new phenomenon and its theoretical, pedagogical, organizational and technical structure is currently still developing (Brown, 2004). Many distance teaching as well as residential institutions have already started to experiment with mobile learning through pilot projects as part of their e-learning and ICT enhanced learning environments (Richter, 2010). Mobile learning involves "any sort of learning that happens when the learner is not at a fixed, predetermined location or learning that happens when the learner takes advantage of learning opportunities offered by mobile technologies" (O' Malley et al, 2003).

Nowadays, with the latest technology, learners are able to learn anything, at any place and any time they needed the knowledge. This advantage can never be obtained in traditional learning. Thus, mobile phone is the perfect delivery vehicle for learning in near future. Mobile and wireless technologies,- including handheld computers, Personal Digital Assistants (PDAs), camera-phones, smart phones, graphing calculators, personal response systems (PRSs), games consoles, and personal media players are becoming ubiquitous in most parts of the world and have led to the development of mobile learning as a distinctive but ill-defined entity (Cobcrift, 2006 and Naismith, et al., 2004, in Traxler, 2009)."Wherever

one looks, evidence of mobile penetration is irrefutable: cell phones, PDAs, MP3 players, portable game devices, handhelds, tablets, and laptops abound. No demographic is immune from this phenomenon. People are increasingly connected and are digitally communicating with each other in ways that would have been impossible only a few years ago" (Ellen, 2005 in Osang et al, 2013). Recently, many researchers have focused on M-Learning and its environment, such as users' acceptance of M-Learning (Phuangthong & Malisawan, 2005; Liu, 2009 in Osang et al 2013), setting the environment for M-Learning (Chao & Chen, 2009; Brown et al., 2006; Liu, 2008 in Osang et al 2013), and the application of M-Learning in developed countries.

Similarly, several researches have been carried out in developing countries. In Saudi Arabia, the results of the survey conducted at King Saud University as reported by Chanchary (2010 in Osang et al 2013), the author attempted to determine how the mobile technology can be utilized to improve student's retention at bachelor degree. The results indicated that the introduction of mobile teaching and learning can enhance the teaching and learning situation in that country. This is because M-Learning provides strong support to underpin different types of learning. In terms of access, it is clear that many learners might never be able to afford a personal computer, but they are very likely to afford to own a mobile phone, which in turn become their digital life.

Recent innovations in programme applications and social software using Web 2.0 technologies (e.g., blogs, wikis, Twitter, YouTube) or social networking sites have made mobile devices more dynamic and pervasive and also promise more educational potential (Park, 2011). However, it has been widely recognized that mobile learning is not

just about the use of portable devices but also about learning across contexts (Walker, 2006 in Park, 2011). Winter (2006 in Park, 2011) conceptualises the nature of mobile learning and addresses it as "mediated learning through mobile technology" (p. 9). Finally (Pea and Maldonado, 2006, p. 437) stated that mobile learning incorporates "transformative innovations for learning features". This shows that this new learning paradigm will evolve mobile devices with the rapid usage and ownership among the users.

Research Questions

i. What are the challenges facing DL students?
ii. What are the advantages of M-Learning as means of DL?
iii. What are the students' preferences for M-Learning in DL?

Research Method

The study is a descriptive research that adopted survey research method. Its aim was to explore effectiveness of mobile learning as a means of distance learning. The survey research method is used because bias was less likely as subjects were randomly assigned to treatments, and subjects and researchers were blind to the identity of the treatments. Questionnaire and interview were used for data collection. These two instruments were reviewed twice, one by a panel of experts in educational setting for determining its face validity, and second administered on the same kinds of respondent with a small number of sample for determining the internal consistency of the questionnaire.

Interviews were conducted and questionnaires were distributed to gather information from the selected five educational institutions that provide distance learning (DL) whereby the questionnaires were given to some of students from each provider. The target was to reach 150 students in these five institutions. Therefore, 150 Distance

Learning students were considered as sample of the study. Out of 150 students 120 students responded. Though the institutions were five, issues of equality in number or gender were not considered and hence depending on how easier to get students from the institution.
The researcher collected the data from the respondents through email and direct from the interview after the distribution of questionnaires to the five educational institutions and scoring was done after the collection of data. Five point rating scale was used to record score of all positive statements ranged from 5-1 for different response categories. Strongly agree (SA), Agree (A), Undecided (U), Disagree (DA) and Strongly Disagree (SDA). The data was analyzed by using spreadsheet software. Spreadsheet was used because there was no any analysis that involved more than one column so this software accommodated the analysis. Though handling missing values in spreadsheet is tough, yet Spreadsheet was vital because in this study the sample size was small so there were no many values which could cause handling them to be inconsistent and incorrectly.

Findings

The findings drawn out from the data analysis were as under:

Table 1: Opinions about the challenges facing DL students

S/N	Challenges	Response	Level of Agreement				
			SA	A	U	DA	SDA
1	Cost of study	N	66	48	0	6	0
		%	(55)	(40)	(0)	(5)	(0)
2	Contact with the	N	72	36	3	3	6
	lecturer/teacher	%	(60)	(30)	(2.5)	(2.5)	(5)
3	Lack of feedback from	N	36	60	12	6	6
	lecturers or other	%	(30)	(50)	(10)	(5)	(5)
	institution staff						
4	Student support services	N	96	18	6	0	0
		%	(80)	(15)	(5)	(0)	(0)

5	Alienation and Isolation	**N**	24	78	9	6	3
		%	(20)	(65)	(7.5)	(5)	(2.5)
6	Training on the uses of technology	**N**	60	30	6	12	12
		%	(50)	(25)	(5)	(10)	(10)

Results of table 1 indicates that 95% (SA, A) of respondents opined in favour of the statement that students suffer from the cost of the study in distance learning compared to the campus students and few (5%) disagree with the said statement. 90% of the respondents agreed that students face a challenge once they wish to contact their lecturers in DL. 80% also agreed that getting feedback from either lecturers or other staff is difficult. Similarly, 95% of respondents supported the statement that students lack support services from their lecturers, academic planners and schedulers, and technical assistance. Moreover, 85% agreed that in distance learning students feeling of alienation and isolation. And lastly, 75% of respondents opined in favour of the statement that most of students in DL lack training on the uses of technology such as computers and the use of Internet.

Table 2: Advantages of M-learning as a means of DL

S/N	**Reason**	**Respo nse**	**Level of Agreement**				
			SA	**A**	**U**	**DA**	**SD A**
1	M-learning improves communication between students and lecturer in DL	**N**	54	48	6	6	6
		%	(45)	(40)	(5)	(5)	(5)
2	M-learning provides immediate support in DL	**N**	48	60	6	3	3
		%	(40)	(50)	(5)	(2.5)	(2.5)
3	M-learning provides new opportunities in DL	**N**	42	48	18	9	3
		%	(35)	(40)	(15)	(7.5)	(2.5)
4	M-learning is available	**N**	84	24	6	6	0

	anytime, anywhere	%	(70)	(20)	(5)	(5)	(0)
5	M-learning provides	N	72	42	3	3	0
	quick feedback in DL	%	(60)	(35)	(2.5)	(2.5)	(0)
6	M-learning is affordable	N	66	30	12	9	3
	for DL	%	(55)	(25)	(10)	(7.5)	(2.5)

It is evident from table 2 that 85% of respondents agreed on the statement that M-Learning improves communication between students and lecturers in Distance Learning. The results here in table 2 show that M-Learning when used solves the challenges which are faced by traditional DL students. 90% of respondents reported that, M-learning provides immediate support to students in Distance learning. 75% of the respondents agreed that mobile learning provides new opportunities of DL and 90% agreed that mobile learning being flexible is available anytime and anywhere. Similarly, 95% of respondents supported the statement that quicker feedback in distance learning is possible through M-Learning. Also M-learning was declared affordable for distance learners by 80% respondents and negated by 10% respondents.

Table 3: Students preferences for Mobile Learning in DL

S/N	Area of Preferences	Response	Level of Agreement				
			SA	A	U	DA	SDA
1	Feedback about	N	66	42	3	6	3
	assignments	%	(55)	(35)	(2.5)	(5)	(2.5)
2	Information	N	42	72	3	3	0
	regarding	%	(35)	(60)	(2.5)	(2.5)	(0)
	assignment						
	submission						
3	Schedule of lectures	N	48	54	6	9	3
	and	%	(40)	(45)	(5)	(7.5)	(2.5)
	tests/examinations						

4	Results from tutors	**N**	78	36	3	3	0
		%	(65)	(30)	(2.5)	(2.5)	(0)
5	Results from	**N**	72	36	3	6	3
	examination offices	**%**	(60)	(30)	(2.5)	(5)	(2.5)

It is obvious from table 3 that 90% of respondents showed their preference for mobile learning to be utilized for receiving feedback about assignments in distance learning. 95% preferred mobile learning for obtaining information regarding assignment submission. 85% respondents favoured their preference to use the mobile learning for receiving schedule of lectures and tests or examinations and 95% conveyed their preference for receiving results from tutors through mobile devices. Lastly, 90% of the respondents declared their preferences about use of mobile devices for receiving their results from examination offices. The study focus on three variables only (challenges, advantages and preferences) because once captured through analysis and discussion accomplish the main objective of exploring effectiveness of M-learning as a means of distance learning in Tanzania without considering other factors.

Discussions

This section is divided into three parts reflecting on the specific objectives of this study as follows:

Advantages of M-Learning as means of Distance Learning

Many employers especially in private sector do not give their employees study leave and once the employee decides to go for studies (full time studies) without release letter from the employer, such employee risk his/her employment and will not get his/her salary for the whole period of the studies. Not only employees who suffered from this limitation, but there are numbers of people who

may wish to study but they do not have to attend fulltime education training on campus. It is from this limitation learners may opt education through M-Learning mode because does not need students physical presence to pursue their studies at college and it provides mobility as discussed by Naismith et al (2005, in Osang et al, 2013). As it is seen in the findings, 90% of respondents said that among the advantages of M-Learning as a means of distance learning is available anytime and anywhere (Table: 2, Figure: 2). With M-Learning, learning occurs at any place and at any time. The ordinary (non-mobile) PC with landline connections to the Internet is constrained by the places in which they are located and their availability. By contrast, learning with mobile is a learner-centred activity because it is both mobile and nomadic, and not pedagogically teacher-centred as in the case of traditional lectures and hardware installed in one particular location under the aegis of the university's authorities.

Besides Short Message Services (SMS) which can be used to communicate to lecturers, Distance learners can use mobile phones/ MP3 players to listen to their course lectures, and for storage and data transfer. Osang et al (2013) reminded that, M-Learning platform allows for immediate feedback to the Learner, educators and the parents. This supports the study as the findings show that almost 95% respondents appreciated M-learning as a means of distance learning provides quick feedback in DL (Figure: 2,). This is one of the challenges which a traditional DL has been facing. It was so difficult for a distance learner to get feedback from the lecturers or University. This argument is supported by the results from the findings in table 2. Based on its advantages, Vavoula (2005) in his recent study carried out as part of the MOBIlearn project, concluded that "mobile learning is more interactive, involves more 'bustle',

more contact, communication and collaboration with people"From these literature reviews, one can conclude that mobile learning can be an effective tool for learning or enhancing the teaching-learning process, because it increases access. Moreover, it can be harnessed anywhere, anytime. Similar to e-Learning, mobile technologies can also be interfaced with many other media like audio, video, the Internet, and so forth. In terms of usability of new technologies, there are two viewpoints that must be considered: one 'in support' and other 'against it.' In case of mobile learning technologies, some users may find it not very conducive to learning (i.e., screen too small; physical environment like being outside in the bright sunlight), while for others, the benefits of being able to learn on-the-move at a convenient location outweigh its optical disadvantages. Clearly, students' individual perceptions of mobile learning do matter.

Challenges facing DL Students

New technologies especially mobile technologies are now challenging the traditional concept of DL. Keeping in view the challenges of distance learners enrolled in various colleges and covering these challenge areas through M-Learning. Distance learners of these distance learning providers conveyed the importance of mobile learning to play a more central and effective role in providing students with much needed information i.e., provision of immediate and new opportunities for distance learning. From the findings, in Figure 1, there are challenges which are experienced by the traditional DL; those challenges are overcome by M-Learning as it is revealed in Table 2, Figure 2. Majority of the respondents in this study confirmed the importance of mobile devices for its flexible availability, improving the communication between students and tutor, gaining feed back of assignments (Table: 2, 3). This means that, through M-Learning as a means of DL, many

challenges which face distance learners such as lack of feedback, contact with teachers, lack of support services and much more as it has been brought to light by the findings (Table: 1) will be reduced. They just make a call or send SMS or receive instruction from their lecturers as well as from the university concerning their courses. Trinder (2005, pp 7-8 in El-Hussein et al, 2010) commented that, the most popular functions in all mobile phone remain the short messaging service (SMS) and the multimedia messaging service (MMS) frequently used functions in the delivery of higher education instructions. The increasing and ubiquitous use of mobile phones provides a viable avenue for initiating contact and implementing interventions proactively. For instance, SMS is highly cost-effective and very reliable method of communication. It is less expensive to send an SMS than to mail a reminder through regular postal mail, or even follow-up via a telephone call. Further, no costly machines are required (which is clearly the case in terms of owning a personal computer). If that is the case, effectiveness of M-Learning as a means of distance learning, reduce the cost which most of the respondents (95%) were complaining (Table: 1). But also this complies to the 80% of the respondents who agreed that M-Learning is affordable in distance learning (Table: 2).

El-Hussein et al (2010) wrote that, the mobile cellular devices have the capacity to link to the Internet and deliver content and instruction that can enable learners to learn at anytime and anywhere in a format that is culturally prestigious among people in the same age group. The connectivity to the internet through mobile devices does not need a technician or support from the technician as the connectivity through PC needs. This supports the findings as 75% of respondents suffer from the use of technology especially PC as they lack training (Table: 1). Since many people nowadays regardless the level of education are using mobile phone for various purposes;

effectiveness of M-Learning as a means of distance learning is simple to operate compared to the PC. It is simple now for these adults to use social networks to interact with their tutors as well as their fellow students for the academic purposes. Yousuf (2007) wrote, "It is observed here that majority of students were found use to SMS and Voice mail, whereas it is also suggested here, that mobile learning as an ideal medium may be promoted via use of MMS, pre-recorded MP3 files, and so forth new mediums". Training sessions for effective use of mobile devices in DL should be organized at both levels of students and tutors of distance education. This does not need training to use rather than when students are required to use other devices like PC and so forth.

Hosam et al (2013) commented that, "M-Learning helps to combat resistance to the use of ICT and can help bridge the gap between mobile phone literacy and ICT illiteracy". The findings showed that, 85% of respondents accepted that distance learners feel alienated and isolated (Table: 1) but the challenges are mitigated by institutions when providing a sense of personal involvement between the student and the institution through the application of M-Learning. For the distance learners, there were no way they could interact with their colleagues at the university, but the existence of M-Learning has solved the said challenge. Osang et al (2013) supports the study by saying that, educators and learners can share assignments and work collaboratively as a group by using the infrared function of a PDA or a wireless network such as Bluetooth, short messaging services and MMS. El-Hussein et al (2010) comments that, M-Learning devices also have the capacity to enhance a learner's sense of individuality and community as well as his or her motivation to learn through participation in collaborative learning. These devices stimulate a

learner's sense of ownership of the content as he/she participates actively in a variety of collaborative and cooperative social activities all of which are centred on the mobile learning device. Nowadays students can use social networks like Twitter, Face book, Whatsapp, Instagram, and Messengers, Chat ON, Google Talks etc to chat with other students as well as their tutors on academic issues anytime, anywhere by using mobile phones and hence enhance their studies environments. Therefore, this has resolved the challenge of alienation and isolation to the distance learners.

Students' Preferences for M-Learning in DL

M-Learning can also provide good support to inform various schedule of university, and other relevant information related to their studies. The order of their preferences regarding the use of mobile devices in DL on the bases of percentages was for receiving results from university offices, information about assignments submission, schedule of lectures, tests, examinations, results and other instructions from tutors, feedback on assignments and receiving examination results from the college (Table 3). In present study, majority of the respondents preferred the effectiveness of mobile learning as a means of distance learning whereas Traxler and Riordan (2003) in Yousuf, (2007) also support the findings of the study. . Mobile learning is more interactive, involves more contact, communication and collaboration with people (Vavoula, 2005, in Yousuf, 2007). Yousuf (2007) wrote, 'Mobile learning can also provide good support to inform various schedule of university, and other relevant information related to their studies'. This is also reported as findings by the researcher (Table: 3) which shows 85% of respondents agreed that M-Learning provides schedule of lectures and tests/examinations.

Conclusion

Recent generations of ICTs have given rise to new opportunities for sharing information, resources, and experiences, as well as providing networking opportunities with student peers, tutors, and the institution of higher education itself. The use of these technologies, however, does not necessarily mean the rejection of the earlier technologies used. In fact, the classic model of DL that uses print along with audio-video remains the most widely used modality in most Open Distance Learning institutions, especially in developing countries. Indeed, DL methods of course delivery still represent the most accessible medium for learning in developing countries.

On the other hand, the more flexible and enriching teaching and learning environment afforded by ICT is hard to ignore. Today, the use of mobile devices to enhance ODL systems is starting to take hold. Mobile technologies progressively appear to have a great future for distant learners in developing countries especially in Tanzania. Keeping in view the challenges of distance learners enrolled in DL programme and covering these challenging areas through M-Learning, distance learners convey the importance of M-Learning to play a more central and effective role in providing students with much needed information.

It is therefore, concluded that, despite the challenges, the availability of phones with different capabilities, the familiarity of the educators and students with the use of phones applications such as web surfing, video applications, text messaging, high social networking activities and availability of internet connection on Mobile devices are all positive pointers to the effectiveness of M-Learning as a means of DL. Both lecturers and students should count the challenges as opportunities towards their carrier and the technology must be built

in such a way that it combats these challenges to make the usability of mobile devices in learning process.

Areas for Future Works

In view of the importance M-Learning has in DL, the future researches should base on the following areas:-

- Critical evaluation of the challenges in implementation and uses of M-Learning in DL
- Critical evaluation of the adoption of M-Learning in DL especially in Tanzania

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