THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES AMONG DISTANCE LEARNING STUDENTS OF THE UNIVERSITY OF IBADAN, NIGERIA

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Abstract: The last decade has witnessed rapid growth in the introduction of information and communication technologies (ICTs) in distance learning. The Distance Learning Centre (DLC) of University of Ibadan, Nigeria has also improved its mode of service delivery in line with the global trend by including e-learning and e-materials. The Centre has embraced the use of various ICTs platforms in the form of Internet and other electronic materials in the delivery of most of its services to the students. This study therefore evaluates the preference, level of adoption and usage of these ICTs by the students. Simple random sampling technique was employed for administration of 100 copies of structured questionnaire to the students. The use of Internet ranked topmost among the ICTs platforms used by the students, although majority of the students are still faced with the challenge of inaccessibility and visit commercial cyber cafés to access Internet for their studies. About 47.9 percent of the students preferred hard copies of DLC course materials and 58.5 percent strongly disagree with the use of CD as DLC reading materials. Majority of the students also preferred to visit DLC office rather than obtaining information on its website. DLC therefore needs to embark on more awareness creation on the need for ICTs usage and strategy to increase adoption by its students.

Keywords: Distance Learning, ICT, Electronic materials, Internet, Technology adoption

INTRODUCTION

Distance learning has been defined as all learning that takes place where there is no face-to-face interaction between students and teachers (Maurice, Charles, and Ofori-Darko, 2012). It is also described as any interaction between learners and between learners and teachers that is mediated by technology (Keegan, 2008). Thus, distance education includes one in which printed and written word, the telephone, computer conferencing or teleconferencing is used to bridge the physical gap between the instructor and the learner (UNESCO, 2005).

During the last decade, distance education witnessed a rapid growth with the introduction of information and communication technologies (ICTs) to support teaching and learning activities (Allen & Seaman, 2010) thereby expanding and globalising higher education generally. The adoption of ICTs in higher education institutions has shifted from print-based correspondence packages alongside technologies such as CD-ROMs to web-based learning environments. Because of the expansion of the Internet in recent years, it has become the most important tool for delivering distance education. The Internet is very crucial in that it provides access to vast amount of information, which students need to achieve their academic goals. For many, the situation has become reasonably challenging as the traditional distance education model transforms with the affordances provided by the use of ICTs (Szücs Tait, Vidal and Bernath, 2009). A consequence of this shift has been that in many cases the focus on supporting the distance learner, which characterised earlier models of distance education, has been lost (Guri-Rozenblit, 2009).

There are number of arguments for and against the introduction of ICTs in distance learning. One school of thought believes that the "eLearning strategy has failed to comprehensively prepare the way for the issues unique to distance education" (Forsyth, Pizzica, Laxton and Mahony, 2010). Another school of thought in support of ICTs believes that ICTs is rapidly transforming social and economic conditions across the globe and this have brought a great improvement in the education sector (Sheybani and Javidi, 2004). Dhanarajan (1999) cautions total reliance on technology and that it is insufficient to make distance education of high quality.

The University of Ibadan Distance Learning Centre (DLC), formerly known as *Centre for External Studies*, started in 1988, through the Department of Adult Education (Commonwealth of Learning International, 2001). Its focus was initially on training teachers, particularly practicing teachers, who needed to upgrade qualifications, as well as guidance/counselling training and development of adult educators. The main thrust of delivery in the Centre's programmes was through printed materials developed by university lecturers. After registration, students take materials home to study, and then return to the University for a six-week residential session. At this session, they also write a final examination. The Centre established study centres to support students (where they are able to register, collect materials, and organize teaching practical).

Currently, the Centre has improved its mode of service delivery in line with the global trend by including e-learning and e-materials. The use of Internet has been employed in delivery of most of its services like the online application for its courses, students' registration, and circulation of course materials by uploading on the web, among others. In addition, almost all the course materials have been converted into soft copies on CD and uploaded online for students' wider accessibility. In addition, lectures are delivered through radio to the students. To improve knowledge on the use of computer and Internet, DLC designated some computer training centres to teach its students on various computer packages. With all these transformation, the rate of adoption of these ICTs by students and contributions to their studies are not yet understood. There is therefore the need for assessment of the extent to which the students have welcomed the transformation and how this is contributing to their studies. The aim of this study is therefore to evaluate the extent to which the DLC students have adopted, preferred, and used the ICTs platforms employed by the University of Ibadan DLC. The quality of ICT services rendered by the DLC designated computer training centre is also assessed.

LITERATURE & THEORETICAL FRAMEWORK

According to UNESCO (2002), open and distance learning represent approaches that focus on opening access to education and training provision, freeing learners from the constraints of time and place and offering flexible learning opportunities to individuals and groups of learners. The use of information resources for independent study and learning makes the distance learning degree programme of the same standard and quality like the regular/full-time programme (Akande, 2011). Furthermore, the rationale behind the running of distance learning programmes is that students could learn from their chosen locations, which could be thousands of miles away. It is therefore expected that distance learning would demand much use of information and communication technology (ICT) and related support services. This would enable the students to access electronic information resources like CD-ROM, Internet, Online Public Access Catalogue (OPAC), and other electronic databases using computers.

Distance education is also characterised by the learner taking greater control over what to learn and when to learn it. Even though teachers are responsible for packaging and facilitating students' learning, teacher-student face-to-face contact constitutes a minor part of the learning process. The

multi-mode approach, using several media for facilitating teaching and learning is a trademark of effective distance education/open learning (Commonwealth of Learning (COL) International, 2001).

According Blake et al (2003), there are four types of online distance learning situations in use today. The first one is web based computer training that offers no additional interaction but is located on the internet while the second is web or electronic performance support systems that offer the opportunity to access support services, tools, and discussions online. The third type of online distance learning situation is asynchronous classrooms that may use email and discussion groups where students and instructors are not necessarily participating at the same time and the fourth is video conferencing with audio used to facilitate discussions. All four types of systems may use multimedia components in the instruction. Many participants in online distance learning classes prefer to have at least one face-to-face meeting as part of the schedule (Porter, 2004).

Filipczak (1995) notes that distance learning on the internet can be cheaper, faster, and usually more efficient than other learning modes, but not necessarily more effective. As Dede (1996) puts it, "access to data does not automatically expand students' knowledge; the

availability of information does not intrinsically create an internal framework of ideas" (p. 199). To help learners make effective use of distance learning methods, skilled facilitation is essential (Rohfeld and Hiemstra, 1995).

Computing technology has tremendous impact on learning and teaching processes. Sam *et al* (2005) note that "educators who advocate technology integration in the learning process believe that it will improve learning and better prepare students to effectively participate in the 21st century workplace". In a study carried out by Ramirex (2003) on the impact of the internet on the reading practices of college students in National University of Mexico, it was discovered that there was a growing interest in digital reading and that a significant percentage of the surveyed students increasingly depended on the internet for their school related activities because it was easy and fast. Anasi (2006) discovered that even though the level of internet use was low among undergraduates from both the Faculties of Law and Education of the University of Lagos, yet internet use has a very high impact on the academic/career related activities of the students. In Iran, Seifkashami (2003) reported that the internet was expanding very rapidly with tens of thousands of users, mostly academic as many universities commissioned computer sites to promote internet

use by both students and professors.

Studies have revealed that lack of information searching skills by students has been a significant factor hampering their use of computer and electronic resources. Gui (2007) advocated the need to teach information skills in institutions of higher learning as an urgent solution to this problem. According to him, "intensive efforts must be made to teach information skills to meet up with the hurried pace of information technology development". Ahmed and Cooke (2008) expressed similar views that users of electronic resources require continuous training programmes on the improvement of information skills.

The study of Kavulya (2004) on distance education in Kenya showed that the students in the four universities studied had access to internet resources. A study conducted by Rowland and Rubbert (2001) on the information needs and practices of Distance Learning Students in the UK showed that part-time students were making use of electronic information sources. Their findings revealed that 12% of their respondents did not have internet access at home and only 3% made no use of the internet at all and over 75% of the respondents were familiar with search engines.

THE TECHNOLOGY ACCEPTANCE MODEL (TAM)

The Technology Acceptance Model (TAM) was developed by Davis to explain computer-usage behavior (Davis, 1986). The goal of TAM is "to provide an explanation of the determinants of computer acceptance that is general, capable of explaining user behaviour across a broad range of end-user computing technologies and user population while at the same time being both parsimonious and theoretically justified" (Davis 1986; Davis *et al* 1989).

The theoretical basis of the model was Fishbein and Ajzen's Theory of Reasoned Action (TRA) (Ajzen and Fishbein, 1977). TRA is a widely studied model from social psychology, which is concerned with the determinants of consciously intended behaviours (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1977). TRA postulates that a person's performance of a specified behaviour is determined by his or her behavioural intention (BI) to perform the behaviour, and BI is jointly determined by the person's attitude (A) and subjective norm (SN) concerning the behaviour in question.

PURPOSE & DETERMINATION OF TECHNOLOGY ACCEPTANCE MODEL (TAM)

The purpose of TAM is to predict the acceptability of a tool and to identify the modifications, which must be brought to the system in

order to make it acceptable to users. This model suggests that the acceptability of an information system is determined by two main factors: perceived usefulness and perceived ease of use (Figure 1).

Perceived usefulness is defined as being the degree to which a person believes that the use of a system will improve his performance while perceived ease of use refers to the degree to which a person believes that the use of a system will be effortless.
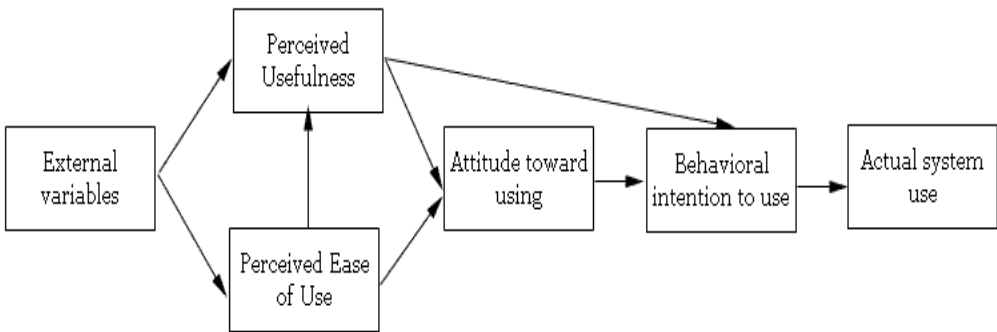
Figure 1: Technology Acceptance Model (Source: Davis *et al*, 1989)

Several factorial analyses demonstrated that perceived usefulness and perceived ease of use can be considered as two different dimensions (Hauser and Shugan, 1980; Larcker and Lessig, 1980). As demonstrated in the Theory of Reasoned Action (TRA), the Technology Acceptance Model postulates that the use of an information system is determined by the behavioural intention, but on the other hand, that the behavioural intention is determined by the person's attitude towards the use of the system and by his perception of its utility. According to Davis, the attitude of an individual is not the only factor that determines his use of a system, but is also based on the impact, which it may have on his performance. Therefore, even if an employee does not welcome an information system, the probability that he will use it is high if he perceives that the system will improve his performance at work. Besides, the Technology Acceptance Model hypothesizes a direct link between perceived usefulness and perceived ease of use. With two systems offering the same features, a user will find more useful the one that he finds easier to use (Dillon and Morris, 1996).

Davis (1986) perceived that ease of use also influences in a significant way the attitude of an individual through two main mechanisms: self-efficacy and instrumentality. Self-efficacy is a concept developed by Bandura (1982). The concept explains that the more a system is easy to use, the greater would be the user's sense of efficacy. Moreover, a tool that is easy to use will make the user feel that he has control over what he is doing (Lepper, 1982).

Efficacy is one of the main factors underlying intrinsic motivation (Bandura, 1982) and it illustrates the direct link between perceived ease of use and attitude. Perceived ease of use can also contribute in an instrumental way in improving a person's performance. Because the user will have to deploy less effort with a tool that is easy to use, he will be able to spare efforts to accomplish other tasks (Davis, 1986).

It is, however, interesting to note that the research presented by Davis (1989) to validate his model, demonstrates that the link between the intention to use an information system and perceived usefulness is stronger than perceived ease of use. According to this model, we can therefore expect that the factor, which influences the most users, is the perceived usefulness of a tool. Although the initial TAM model was empirically validated, it explains only a fraction of the variance of the outcome variable, IT usage (from 4% to 45%, according to McFarland and Hamilton, 2006). Therefore, many authors have refined the initial model, trying to find the latent factors underlying perceived ease of use and perceived usefulness.

METHODOLOGY

The study is a survey of students in each of the five Faculties (Art, Science, Social Science, Agriculture and Education) participating in the Distance Learning Programme of the University of Ibadan, Nigeria. The DLC programme is specifically designed to suit the working class; whose schedules, distance, financial condition, and other situations may not permit them to undergo full-time studies at the University. The structure of the programme is such that the students are to read their course materials at their convenience, communicate with their lecturers from time to time, and only converge on at designated venues for six weeks in a year for revision and examination. The study took place during the 2012 revision periods at different designated venues in Ibadan, Oyo State, South-west Nigeria.

For adequate sampling of the students partaking in the different programmes, each of the venues for the designated DLC programmes was visited by the researchers. Selection of the students was carried out at class level. To select

the students required for the questionnaire administration, random sampling was used. Within a class, the students were manually counted, and then five percent was calculated. All the students in the class were then given numbers, and the number derived from the five percent (required for the questionnaire administration) was obtained using random numbers. This process was repeated in the different designated venues. In all, a total of 94 students were surveyed.

Structured questionnaire, containing both open and close-ended questions, was administered to all the selected students. The questionnaire was structured to assess the students' use of ICTs platforms provided by the DLC as well as the proficiency in the use of ICTs for their study. The ICTs in focus covered available Internet facilities to the students, DLC online electronic materials, and materials on CD, as well as lectures on University of Ibadan Diamond

FM. After random selection of the students, copies of the questionnaire were self-administered.

RESULTS
Knowledge in the use of ICTs by the Distance Learning Students

Only 2.1 percent of the students indicated that they do not know how to use Internet while the remaining 97.9 percent indicated that they know how to use Internet (Table 1). When the students were asked on where they acquired the knowledge on the use of Internet, 56.4 percent indicated that they were trained at commercial training centres not designated by DLC. As presented in Table 1, 27.7 percent of the students indicated that they learnt the use of Internet themselves while 10.6 percent were taught the use of Internet by their friends. More than 80 percent of the students indicated that they acquired the knowledge on the use of Internet before their admission into Distance Learning Programme.

Table 1: Knowledge in the use of ICTs by the Distance Learning Students

Categories/Variables	Responses	Frequency	%
Know how to use Internet	- Yes	92	97.9
	- No	2	2.1
	Total	**94**	**100**
Where DLC students acquired the knowledge on Internet use	- From friend	13	13.8
	- Computer Training Centre	53	56.4
	- Learn it myself	26	27.7
	- No response	2	2.1
	Total	**94**	**100**
When DLC students acquired the knowledge on Internet use	- Before admission	76	80.9
	- After admission	16	17.0
	- No response	2	2.1
	Total	**94**	**100**

Source: Field Survey, 2012

Internet Facilities, Reliability, And Accessibility by DLC Students

On the accessibility to Internet (Table 2), more than half of the students (51.1 percent) did not have access to their personal Internet while about 49.0 percent visit commercial cyber café to access Internet for their studies. Only 14.8 percent have access to Internet connection at home and those that use personal Internet modem on their computer were 13.8 percent. Very few students (3.2 percent) informed that they access Internet on their mobile phones for their studies. On stability of the Internet network use for studies, about 55.3 percent informed that the network was always fluctuating while 37.2 percent informed that the network was relatively stable (Table 2).

On the frequency of use of the Internet, close to half of the students (47.8 percent) stated that they use Internet every day, 24.5 percent use Internet twice a week and 23.4 percent use Internet once a week. The students were also asked the period of the day that they normally preferred to use the Internet, 60.6 percent of the students responded that they access the Internet any period of the day while 23.4 percent access Internet at night (Table 2).

Table 2: Internet Facilities, Reliability, and Accessibility by the Distance Learning Students

Categories/Variables	Responses	Frequency	%
Have access to personal Internet	- Yes	48	48.9
	- No	46	51.1
	Total	**94**	**100**
Facility use to access Internet by the DLC students for their studies	- Personal Internet modem	13	13.8
	- Internet connection at home	14	14.8
	- Internet connection in the office	9	9.6
	- Cyber café	46	49.0
	- Internet on the phone	3	3.2
	- No response	10	9.6
	Total	**94**	**100**
Reliability of the Internet network	- Stable	35	37.2
	- Fluctuate	52	55.3
	- No response	1	1.1
	- Do not know	6	6.4
	Total	**94**	**100**
Frequency on the use of Internet by the students	- Every day	45	47.8
	- Once a week	22	23.4
	- Twice a week	23	24.5
	- Do not know	3	3.2
	- No response	1	1.1
	Total	**94**	**100**
Period of the day that the students access Internet the most	- Morning	6	6.4
	- Afternoon	7	7.4
	- Night	22	23.4
	- Any period of the day	57	60.7
	- No response	2	2.1
	Total	**94**	**100**

Source: Field Survey, 2012

Internet Usage by the DLC Students

As presented in Table 3, communication ranked highest on the reasons why DLC students of the University of Ibadan use Internet with 55.3 percent. This was followed by 17.0 percent of

those that used the Internet for educational purposes such as obtaining information and materials to do assignments. Also from Table, we observe that about 86.2 percent of the students indicated that they prefer the use of Internet for academic purpose, especially to do their assignment. On the frequency of obtaining necessary information on the Internet for academic purpose, 46.8 percent of the students indicated that they always obtain the necessary information and those that indicated that they sometimes obtain the necessary information closely follow this. Only 1.1 percent indicated that they never obtain necessary information on the Internet.

Table 3: Internet Usage by the Distance Learning Students

Variables	Responses	Frequency	%
Top among the primary usage of Internet by the students	- For work / business purpose	10	10.6
	- For Education purpose	16	17.0
	- For communication (Email, Facebook, Twitter, etc)	52	55.3
	- Acquire general knowledge	14	14.9
	- No response	2	2.1
	Total	**94**	**100**
Preference for the use of Internet to do assignment and study	- Yes	81	86.2
	- No	10	10.6
	- No response	3	3.2
	Total	**94**	**100**
Frequency of obtaining necessary information on Internet	- Always	44	46.8
	- Sometimes	40	42.6
	- Rarely	7	7.4
	- Never	1	1.1
	- No response	2	2.1
	Total	**94**	**100**

Source: Field Survey, 2012

Students' Usage and Effectiveness of ICTs Services rendered by DLC

The result of the students' responses on the usage and effectiveness of ICTs media adopted by the University of Ibadan Distance Learning Centre is presented in Table 4. The summary of the highest percentage of the students' responses are presented below.

i. *Preference for DLC course materials:* About 47.9 percent of the students found it easy to read and understand the prescribed DLC course materials. However, majority of the students strongly disagreed (58.5 percent) with the use of DLC electronic materials on CD.

ii. *Online communication and obtaining information from DLC*: The students were asked to evaluate the use of online communication with DLC; 42.6 percent responded that they use to send email to DLC Officer to make enquiry (42.6 percent), and 33.0 percent informed that there is no response from DLC whenever they send email to request information from DLC (33.0 percent). However, 35.1 percent of the students agreed that they use to receive email from DLC. About 26.6 percent of the students indicated that they prefer to use phone calls to make their request for information to the DLC Officer.

iii. *Effectiveness of the information on DLC website:* Concerning processing of registration on the DLC website, 31.9 percent of the students agreed that it is difficult to register on DLC website, and 47.9 percent agreed that it is easy to generate and print registration receipts on DLC website. On the information posted on the DCL website, 41.5 percent disagreed that the information on DLC website is not up to date, whereas 48.0 percent agreed that they normally obtain adequate information on DLC website when required. About 28.7 percent of the students strongly agreed that there are no adequate course materials on DLC website.

iv. *Listening to DLC lectures on Diamond FM*: About 34.0 percent of the students normally listen to DLC information or lectures on University of Ibadan Diamond FM (34.0 percent). Inadequate listening to the radio lecture by many of the students could be due to timing that the lectures are aired on radio, and their preference.

v. *Checking results on DLC website:* the students were asked to give feedback on their experience on checking of results on DLC website. Thirty-six percent of the students responded that they have trouble in checking their results on DLC website.

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Table 4: Students' responses on the usage and effectiveness of ICTs services rendered by the University of Ibadan Distance Learning Centre

Questions		SA	A	D	SD	Do not know	No response
I found it easy to read and understand DLC course materials	Freq %	20 21.3	45 47.9	15 16.0	10 10.6	0 0	3 3.2
I prefer DLC electronic materials on CD than hard copy in book	Freq %	2 2.1	4 4.3	29 30.9	55 58.5	1 1.1	3 3.2
I prefer DLC hard copy in book than electronic materials on CD	Freq %	57 60.6	19 20.2	4 4.3	10 10.6	0 0	4 4.3
It is difficult to register on DLC website	Freq %	18 19.1	30 31.9	29 30.9	10 10.6	4 4.3	3 3.2
It is easy to generate and print registration receipts on DLC website	Freq %	21 22.3	45 47.9	15 16.0	10 10.6	0 0	3 3.2
I experience difficulties in checking my result on DLC website	Freq %	18 19.1	21 22.3	34 36.2	18 19.1	0 0	3 3.2
I normally obtain adequate information on DLC website when required	Freq %	15 16.0	46 48.9	23 24.5	7 7.4	0 0	3 3.2
Information on DLC website is not up to date	Freq %	9 9.6	30 31.9	39 41.5	11 11.7	2 2.1	3 3.2
I normally listen to DLC information or lecture on University of Ibadan Diamond FM	Freq %	9 9.6	32 34.0	26 27.7	16 17.0	8 8.5	3 3.2
I use to send email to DLC Officer to make enquiry	Freq %	12 12.8	19 20.2	40 42.6	17 18.1	3 3.2	3 3.2
I use to receive email from DLC	Freq %	30 31.9	33 35.1	21 22.3	5 5.3	2 2.1	3 3.2
There is no response whenever I send email to request information from DLC	Freq %	15 16.0	16 17.0	31 33.0	12 12.8	17 18.1	3 3.2
There is no adequate material on DLC website	Freq %	27 28.7	28 29.8	20 21.3	6 6.4	9 9.6	3 3.2
I prefer to make a phone call to request for information from DLC Officer	Freq %	25 26.6	21 22.3	23 24.5	19 20.2	3 3.2	3 3.2

Source: Field Survey, 2012

DISCUSSIONS OF THE RESULTS

Computing technology has tremendous impact on learning and teaching processes in distance learning. In a situation where students cannot use softcopy or online instructional materials, it implies that they will depend mainly on print information from textbooks, projects, and journals for their academic and research work, which may not be sources of current and updated information like the Internet-based resources. This situation pose negative implications on the education of the students in this present age of global information explosion where academics and researchers depend mostly on current information widely accessible on the Internet. Furthermore, the use of information resources for independent study and learning makes distance learning degree programme of the same standard and quality like the regular/full-time programme (Akande, 2011). In addition to the use of ICTs for academic activities, technology integration in the learning process should be aimed at improving learning and preparing students for effective participation in the 21st century workplace.

Majority of the sampled DLC students in this study know how to use Internet. These results contradict the findings of Akande (2011) on the level of Internet usage among the sandwich students of University of Ado-Ekiti in Nigeria where he discovered that half of the respondents surveyed could not use the ICTs facilities because they lacked the skills for using them. A related study conducted by Rowland and Rubbert (2001) on the information needs and practices of Distance Learning Students in UK showed that part-time students were making use of electronic information sources. Their findings show that 12 percent of their respondents did not have Internet access at home and only three percent made no use of the Internet at all and over 75 percent of the respondents were familiar with search engines.

Unlike the findings of Kavulya (2004) in his study of distance education in Kenya that the students in the four universities studied had access to Internet resources; findings of this study revealed that majority of the DLC students did not have full access to Internet. Despite unavailability of personal Internet to majority of the students, they patronise commercial cyber cafés in order to access Internet. Reasons given by the students for using Internet for their academic purposes include detail, direct, reliable, and accurate information obtained from the Internet on the subject matter; broadening of the knowledge of the students on the subject matter; faster rate of information retrieval than consulting the hardcopy publications; currency of the

information; and relevance of the online materials.

The present study supports a number of previous findings that indicated increase in the use of Internet by students. For instance, the study of Ramirex (2003) on the impact of the Internet on the reading practices of college students in National University of Mexico revealed that there was a growing interest in digital reading and that a significant percentage of the surveyed students increasingly depended on the Internet for their school-related activities because it was easy and fast. In addition, Anasi (2006) also found that Internet use has a very high impact on the academic / career related activities of undergraduate students at the Faculties of Law and Education, University of Lagos. In Iran, Seifkashami (2003) reported that the Internet was expanding very rapidly with tens of thousands of users, mostly academic as many universities computer sites to promote Internet use by both students and professors.

Challenges that the students faced in the use of Internet in doing their academic work include lack of personal Internet facility, fluctuation and failure of the Internet network, access to relevant information online, not easy to operate, expensive and costly, and time consuming. In line with some of these, studies have revealed that lack of information searching skills by students has been a significant factor hampering their use of computer and electronic resources. Based on this, Gui (2007) advocated the need to teach information skills in institutions of higher learning because it has the potential of meeting up with the hurried pace of information technology development. Ahmed and Cooke (2008), who note that utilization of electronic resources and the improvement of information skills require continuous training programmes for end users, expressed similar views.

Many of the students indicated low preference for the use of prescribed softcopy of the DLC course materials especially on CD. The main reason why the students did not prefer the use of the CD is that many did not either have personal computer to continuously read the materials nor have printing machine to print into hard copy. In addition, printing of the course materials at the commercial centre is considered expensive because of many pages contained in each of the material. Some of the students also informed that DLC should adopt the use of other platforms of ICTs apart from Internet in discharging its educational services. For instance, some students stressed the use of audio electronic materials and expanding mobile technology because these have assisted in their studies.

As explained by Davis (1986) in the widely used Technology Acceptance Model (TAM), the ease of use of technology by an individual is influenced significantly through *self-efficacy* and *instrumentality*. By self-efficacy, it is believed that the more a system is easy to use, the greater should be the user's sense of efficacy (Bandura, 1982), consequently, the easy nature of a technology will make the user feel that he has a control over what he is doing (Lepper, 1982). On the other hand, efficacy is one of the main factors underlying intrinsic motivation and has a direct link between perceived ease of use and attitude (Bandura, 1982; Lepper, 1982). Perceived ease of use can also contribute in an instrumental way in improving a person's performance (Sam, Othman, and Nordin, 2005). Because the user will have to deploy less effort with a tool that is easy to use, he will be able to spare efforts to accomplish other tasks (Davis, 1989; McFarland and Hamilton, 2006).

CONCLUSION

The DLC has employed the use of various ICTs platforms for its distance learning programme. Although faced with a slow adoption process, especially accessibility of the Internet technology, the students are gradually adjusting to the system. The use of Internet still ranked topmost among the ICT platforms used by the students. Despite the fact that majority of the students did not have personal facility to access Internet, they resolved to visiting commercial cyber café to access Internet for their studies.

The management of DLC has converted almost all the course materials for its programmes from hard copy to softcopy on CD and uploading same online for wide accessibility by the students. However, many of the students complained of non-accessibility of the materials online due to lack of personal Internet and computer. Some students also complained that printing of such materials from soft copy into hard copy that they can easily read is expensive. DLC also aired some of its lectures through the University of Ibadan Diamond FM radio as a way to sustain continuous teaching of the students; however, less than half of the sampled students listened to the lectures on radio. Majority of the designated computer training centres by DLC for the students are not performing up to expectation with the level of ICT requirements among the students. This poses another challenge to the implementation of ICTs policy of the University.

Base on the foregoing challenges, DLC needs to evaluate effectiveness of the information and communication technologies introduced into its programme and the adoption level by the students. Due to the fast spreading of ICTs across all sectors of the economy,

the DLC students should be encouraged to key into the current development and adopt the use of ICTs for their studies. Students should also familiarise themselves with the website of DLC to access necessary information, and consistently check the website of DLC to reduce the stress and cost of travelling down for enquiry. There is need for more awareness creation among the students on the DLC lectures aired on radio. With the advent of mobile phones with FM radio, students can create time to listen to the lectures at their leisure anywhere they are within and outside the campus. The broadcast time for the radio lectures should also be publicized and such times should be suitable time for most of the students.

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