KNOWLEDGE AND USAGE OF INTERNET AMONG DISTANCE LEARNERS IN SELECTED LOCAL GOVERNMENT AREAS OF ADAMAWA STATE, NIGERIA

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Abstract

It is acknowledged world wide that education contributes immensely in the development process. This fact has created a burning desire in every government to increase access to education to all its citizens. This need has also generated high demand for education especially in developing countries. To meet up to this demand, distance education emerged as one of the ways of widening access to education for applicants who qualify but due to varying reasons such as societal norms, home and work place commitments could not be in the existing conventional tertiary institutions. The study investigated the extent to which, at their personal level, students utilize the few Internet facilities that are available in their localities that could form a basis for making a case for the use of interactive electronic platforms in the distance learning programs in the State. Five local government areas were chosen for the study, three considered rural and two urban. The issue of gender disparity as it affects knowledge and usage of the Internet was also determined. The population of the study comprise all the distance learning centres in the five local government areas with a total of 3,650 participants. The proportionate random sampling technique was used. The objective of the study was to determine the knowledge and usage of internet facilities. The research was guided by eight research questions. Percentage was used in analysing the data. The results revealed that learners have some access to and utilize internet facilities to some extent. The findings show that learners use the internet mostly for e-mails, text messages, phone contacts, registration, and downloading supplementary readings. Based on these findings recommendations were made to improve the situation.

Key words: knowledge, usage, distance learners, Internet, Distance Education

Introduction

Realising the immense contribution of education in the development process, many countries embarked on various projects to increase access to education for all her citizens irrespective of age, gender or location. The burning desire to increase access generated unparalleled demand for education especially in developing countries (Nwizu 2005). With the high demand the environmental system was faced with unparalleled request for the supply of education. This situation brought about the need for other modes of education of which Distance Education (DE) is one of them. Distance learning is a way of meeting the learning needs of students who are willing and qualified for admission into tertiary institutions but cannot benefit from conventional tertiary education due to commitments at work place, cultural/social background and family commitments. The knowledge and usage of Internet facilities

would be of tremendous advantage for delivery of the programmes.

Bollog and Overland (2001) submitted that developing countries are turning to state run DE programmes to take the place of ever increasing enrolments and lack of physical building spaces. Greenberg (1998) defines Distance Education as "a planned teaching/ learning experience that uses a wide spectrum of technologies to reach learners at a distance and is designed to encourage learner interaction and certification. Keegan (1995) also states that Distance Education and training results from the technological separation of teacher and learner which frees the learner from the necessity of travelling to a fixed place, at a fixed time, to meet a fixed person in order to be trained". To successfully implement DE one or more aspects of ICT has to be employed of which the internet is one.

It is important however, to note that internet in itself does not give meaning to Distance Education, what gives meaning to Distance Education is the effective utilisation of the Internet facilities in the teaching/ learning process of Distance Education programmes. Idris (2006) Observed that the future of the global village is not limited by, or dependent on merely advanced technology to provide networking and interactivity in distance learning, but it depends on our ability to understand technology and what it can do and apply it in our context and to our purpose. The success of Distance Education programmes will be facilitated by access and usage of ICT (of which the Internet is one) for instruction. The World Bank (2005) notes that usage may be a better indicator of success of a particular programme than access, pointing out that both access and usage depend heavily on legal, regulatory, economic and social frameworks within which information are used. The use of the Internet for distance learning makes the delivery more widely and evenly distributed than just reliance on printed materials.

Distance Education broadly seeks to meet the learning needs of children, youth, and adults by 2015. Participants at the World Education Forum in Dakar, Senegal, "endorsed a comprehensive vision of education, anchored in human rights, affirming the importance of learning at any place or age, emphasizing the need for special measures to reach the poorest and most vulnerable people (UNESCO, 2007). A good number of distant learners in Adamawa State are located in some of the remotest parts of the state and largely affected by socio-cultural factors which deprive them of full access to higher education. This has made it necessary for the government to explore alternative ways of meeting their educational aspirations. One of such avenues is the use of technology-mediated learning (Ministry of Local Government and Chieftaincy Affairs, 2006).

Internet facilities are thus a powerful tool for providing educational services for distance learners and, most importantly, meeting the aspirations of those who qualify but cannot enrol in the existing tertiary institutions due to varying reasons. Studies show that Internet offer possibilities to distance learners to engage in not only distance learning programs but e-commerce, e-governance, and all other aspects of developmental activities (Bisnath, 2004; Daly, 2003; Huyer & Sikoska, 2003; Kwapong, 2007). It is in light of this that the researcher wants to determine the extent of Internet knowledge and usage among distance learners and its implication to the attainment of goals of Distance learning programmes in Adamawa State.

Statement of the Problem

The success of Distance Education programmes will be facilitated by usage of ICT for instruction. The World Bank (2005) notes that usage may be a better indicator of success of a particular programme than access; it further notes that both access and usage depend heavily on legal, regulatory, economic and social frameworks within

which information are used. The use of the Internet for distance learning makes the delivery more widely and evenly distributed than just reliance on printed materials.

The ability of NCE distance education learners to use the internet to access, generate and disseminate information will go a long way in facilitating the attainment of NCE by Distance Learning System (DLS) and Special Teacher Upgrading Programmes (STUP). Therefore, the problem of this study is to examine the knowledge and usage of the Internet for information generation among NCE by Distance learning participants in Adamawa State.

Objectives of the Study

The objectives of this study is to determine
i. If learners in Distance Education programme know what internet is
ii. if learners in Distance Education programme use the internet
iii. how long on average they stay on the internet
iv. if they know that the internet is a source of educational material

Research Questions:

The study is guided by the following research questions:
1. Do learners in NCE Distance Education programme in Adamawa State know what Internet is?
2. Do NCE learners in Distance Education programme in Adamawa State use the Internet?
3. How long on average do NCE learners in Distance Education programme in Adamawa State use the Internet?
4. Do NCE learners in Distance Education programme in Adamawa State know that the Internet is a source of educational material?

Significance of the study

The significance of this study is that technology mediated learning is expected to create awareness among Distance learners as well as learners from conventional institutions on the availability of learning resources on

the internet which could be accessed even on cell phone owned by students of tertiary institutions in the state. The study is also expected to serve as a resource data base for researchers interested in technology-mediated learning and teaching in Adamawa State. The greater the significance should lie in the effect of teachers who are ICT compliant on the education system

Method and instrument

The study adopted the comparative survey design to determine the extent of knowledge and usage of the internet among the distance learners (male and female) in the selected local government areas. The study used five distance learning centres located in five selected local governments. The LGAs were selected through random sampling technique. Three are considered rural and two urban. These centres operate both Distance learning programmes (DLS) and Special Teacher Upgrading Programme (STUP) both offering courses leading to the award of Nigeria Certificate in Education (NCE). Local Governments that have less population density were considered "rural" while local governments with high population density were considered "urban". The basis for the selection of these centres is because internet facilities exist in these local governments and the local governments are representative of both the rural and urban centres of the state and are deemed to have adequate number of distance learning centres which will appropriately focus the research.

Research instrument

Questionnaire was the main instrument used. The questionnaire was designed by the researcher and subjected to scrutiny by two experts in the areas of measurement and evaluation and statistics of Adamawa State University, Mubi. The internal consistency of the instrument was determined using Special Teacher Upgrading Programme, Gombi Centre and Distance Learning System Hong Centre participants. Face validity was the method used in determining the validity of the instruments. The instrument having been

scrutinised by experts was administered to participants of Hong and Gombi Centres. The reliability coefficient arrived at from the pilot study was 0.80 using the Cronbach alpha coefficient.

Population and sample

The population for the study comprised all the students participating in Nigeria Certificate in Education (NCE) through Distance Education Programmes (Distance Learning System (DLS) and Special Teacher Upgrading Programme (STUP) in the five local governments (Gerei, Song, Maiha, Mubi South and Mubi North Local Governments). Preliminary study showed that there were three thousand six hundred and fifty (3,650) participants located in these five local Governments pursuing NCE through DLS/STUP. Of these five local governments, three (Gerei, Song & Maiha) are considered rural while the two (Mubi North & Mubi South) considered urban.

A total sample of 365 learners was selected using simple random sampling technique of balloting. However, only 360 questionnaires were completed correctly and returned giving a percentage return rate of 98.63%. The break down of the sample per centre is as follows: Gerei 62, Song 71, Maiha 50, Mubi South 84, Mubi North 98

Procedure for data collection

The researcher with the help of three research assistants administered the instrument on the participants at the various study centres during their usual face to face contact with their instructors.

Results and Discussions

Table 1: Research question 1

Do NCE learners in Distance Education programme in Adamawa state know what Internet is?

Sex	Yes	No	Total
Male			
Rural LGA	83	20	103
	80.60%	19.40%	100%
Urban LGA	76	7	83
	91.60%	8.4%	100%
Total	159	27	186
	85.5%	14.5%	100%
Female			
Rural LGA	72	48	120
	60.00%	40.00%	100%
Urban LGA	48	6	54
	88.90%	11.10%	100%
Total	120	54	174
	69.96%	31.45%	100%

Data on knowledge of Internet appeared to be relatively high among all the respondents. Table 1 shows that a total of 85.5% know what Internet is while only 14.5% are ignorant. Along gender lines, 80.6% of the men from rural local governments as against 91.6% of the men from the urban local governments know what an Internet is. Also, 60% of the women in the rural local governments and 88.9% of the women from the urban local governments know about the Internet. Another significant observation is that at the local government level there is a high gender difference in the rural local governments than the urban ones.

Table 2: Research Question 2

How often do NCE learners in Distance Education programme in Adamawa state use the café?

Sex	Occasional	Once	Twice	Thrice	Above thrice	Total
Male Rural LGA	3 3.45%	35 40.23%	23 26.44%	21 24.14%	5 5.75%	87 100%
Urban LGA	8 9.205	40 45.98%	30 34.48%	26 29.89%	22 25.28%	126 100%
Total	11 1.41%	75 35.21%	53 24.88%	47 22.07%	27 12.67%	213 100%
Female Rural LGA	3 4.05%	22 29.73%	33 44.60%	13 17.57%	3 4.05%	74 100%
Urban LGA	9 12.16%	31 41.89%	19 25.68%	12 16.22%	12 16.22%	83 100%
Total	12 7.64%	53 33.76%	52 33.12%	25 15.92%	15 9.55%	157 100%

Table 2 shows that frequency of usage of the café per week was higher among the men than the women as 59.17% of the men and 43.61% of all the women indicated that they use the café.

Table 3: Research question 3

What do NCE learners in Distance Education programme in Adamawa state use the internet for?

Sex	Send e-mails	Chat with friends	All of the above	Other	Total
Male Rural LGA	21 18.00%	12 11.50%	32 27.90%	42 42.60%	107 100%
Urban LGA	41 33.33%	8 6.50%	29 23.20%	47 37.60%	125 100%
Total	62 26.72%	20 8.62%	61 26.29%	89 38.36%	232 100%
Female Rural LGA	28 51.87%	15 27.77%	4 7.41%	7 12.96%	54 100%
Urban LGA	20 27.03%	4 5.41%	25 33.78%	25 33.78%	74 100%
Total	48 37.50%	19 14.84%	29 22.66%	32 25.00%	128 100%

As shown in Table 3, more females than males use the Internet for sending e-mails and chatting with friends only (37.50% & 14.86% respectively). In terms of multiple use of the Internet the women from the rural LGAs formed the least percentage.

Table 4: Research Question 4
Do NCE learners in Distance Education Programme in Adamawa State know that the Internet is a source of educational material?

Sex	Yes	No	Total
Male Rural LGA Urban LGA	45 70.31 97 64.00%	19 29.31 3 4.00%	64 100% 100 100.00%
Total	141 86.50%	22 13.45%	163 100%
Female Rural LGA Urban LGA	58 92.06% 119 93.07%	5 7.94% 8 6.30%	63 100% 127 100%
Total	177 93.15	13 6.84	190 100%

To find out if respondents know that the internet is a source of educational material, the results showed that most respondents were aware that the internet is a source of educational materials (93.15%). Both the men and women from the urban LGAs topped the entire list with 64.00% and 92.06% respectively. The significant observation was that both males and females from the urban LGAs are aware of the fact that the internet is a source of educational materials.

Discussion of findings

The findings on knowledge and usage of Internet applications among distance learners (men and women) in both rural and urban local governments reveal that learners have reasonable knowledge of internet facilities such as cyber café, mobile phone and modem and few of them are privately utilizing these Internet facilities to some extent in spite of the limited infrastructural developments. This finding hinges on the fact that these facilities are domiciled in the localities where the Distance Education centres are located. On the other hand cyber café is not accessible to most learners because of the cost and congestion by users. It should be noted that the Internet remains the largest data and communication network in the world; however, the study showed that skills in the use of the Internet awareness remains low among DE participants in the state for information generation and dissemination. This is in line with the report of the World Bank (2005) that only 3.1% of Africans had access to the Internet in 2004. This study found out that the cheaper and non-interactive Internet facilities like the modem and the cell phones are utilised by participants effectively in generation and dissemination of information because they are accessible and affordable. The study further reveal that though males use the internet more than the females yet gender and location (urban or rural) is not a hindrance to DE participants as regards usage of the internet as one can access the Internet anywhere as long as one has the facilities (modem or mobile phone for example). Many women, the study reveal do not stay very long on the Internet to browse information but use mobile phones on daily basis for communication. This give a clue that given the opportunity and support, both male and female distance learners in urban and rural areas will utilize technology-mediated educational activities. This is not surprising because most of the women have conflicting domestic demands (as well as social norms) that do not allow them to be away from the home for too long.

Oduaran (1991) observes that problems of DE participants in the effective use of technologies may arise mainly from cost and poor state of infrastructural facilities like

electricity. Distance Education participants especially in Adamawa State do not have the needed skills to effectively utilise some new technologies in the use of the internet. If this is so the interactivity required for the utilization of the Internet for distance education programmes in the state cannot be actualised without creating awareness for the need to acquire necessary skills by the participants. The only interactive Internet facility used in the generation and dissemination of information discovered by this study is the mobile phone (cell phone). United Nations (2005) report that if 77% of the world's population is able to access and use the mobile network, the number of cell phone subscribers world-wide would continue to increase at a very rapid rate especially in developing countries. This is acceptable because cell phones are used mostly for internal and domestic communication hence accessible to both sexes, old and young, rural or urban.

Conclusion

This paper has looked at the provision of distance learning in some selected local government areas of Adamawa State, and the challenges which Internet could be used to address in spite of the limited infrastructural development in the state. The literature review has shown that telecommunication, most especially mobile telephony, is increasing at a great rate in the state. Focusing on distance learning students, the research reveal that distance learners, from both rural and urban local government areas in the state, have a fair idea of the Internet and utilizes it to some extent.

Recommendations

In the light of the research findings, the following recommendations are made:

i. there is need for legislation to authorize all local governments in the state establish cyber cafés at the local government headquarters and all averagely populated towns having more than one post primary school to enable teachers access information needed to update their knowledge based on their various fields.

ii. Since most of the students of either NCE by DLS or NCE through STUP came from the Teaching Boards (ADSUBEB & PPSMB), government should work out modalities where all teachers in the state's employment get laptops to make them computer literate.

iii. Senior secondary schools and primary schools in areas where they are connected to the national grid be provided with internet connections through establishment of cyber café within a reasonable distance so that the few teachers that have computers could access internet services at their places of work.

iv. Charges for the use of cyber cafés by teachers and students be subsidized through legislation by the authorities to encourage more teachers and students of both secondary and primary schools access information on current methods of teaching/learning.

v. Legislation by the state house of assembly be made directing all local government councils to see that funds are made available for the sustenance of the cyber cafés at the local government headquarters and their environs.

vi. Knowledge of computer should be made one of the criteria for the promotion of all staff serving with the Teaching Boards in the state.

vii. Periodic workshops and seminars be organized for staff of the Teaching Boards in the state so as to acquaint them with various search engines and various ways of browsing documents on the net.

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APPENDIX A

THE QUESTIONNAIRE
(Give short answers only)

1. Do learners in Distance Education programme in Adamawa State know what Internet is?
2. Where do learners in Distance Education programme in Adamawa State access the Internet?
3. Do learners in Distance Education programme in Adamawa State use the Internet?
4. How long on average do learners in Distance Education programme in Adamawa State use the Internet?
5. How often per week do learners in Distance Education programme in Adamawa State use the internet?
6. How much per hour do learners in Distance Education programme in Adamawa State pay?
7. Do learners in Distance Education programme in Adamawa State know that the Internet is a source of educational material?