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Computer and Internet Facilities Use in Distance Education: A Survey of Sandwich Students of University of Ado-Ekiti, Nigeria

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Introduction

Distance education is taking a new dimension in the history of education in Nigeria. The Nigerian Government has demonstrated commitment to the development of distance learning by going into cooperation and partnership with International Organizations like the Commonwealth of Learning (COL), UNESCO and UNICEF. Dada(2001) gave a report of the international workshop organized by the Federal Government of Nigeria on Distance Learning in collaboration with UNESCO, UNICEF and Commonwealth of Learning(COL). According to him, this conference led to the formulation of a national policy on Distance Education and the design of a ten year programme. The provisions of policy and structural framework for the smooth take-off of distance education are strong indications that the Government is committed to the provision of Distance Education to those who are interested. Umoru-Onuka(2001) defines Distance Education as a means of providing alternative educational opportunities for those who lost such opportunities earlier and are now willing to take advantage of such alternative to ameliorate a lost opportunity or for those who could not afford education through its formal route because they want to study and at the same time keep their jobs'.

Distance Learning programmes embraces minimal physical contact between the teacher and student but emphasize much reliance on electronic communications. This implies that the learner receives the formalised learning while he/she is on a location outside the university- campus. Distance learning is variously described as external degree, part-time degree, correspondence or sandwich programmes. Mabawonku(2004) opines that it involves the open learning approach and little (occasional), if any, interaction with the teacher. She believes that the focus is on the needs of the individual student and is more learner- centred.

The advances in electronic – based information and Communication technologies (ICTs) rapidly transforming social and economic conditions across the globe have brought a great improvement in the education sector. This is by providing new tools for providing access to information and knowledge management as well as sharing. Khorrami-Arani(2001) asserts that computers have made a dramatic impact on our society, particularly in the field of education. Computers are common tools in most schools, and are being used increasingly in all subject areas.

The rationale behind the running of Distance learning programmes is that students could learn from there 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. This would enable the students to access electronic information resources like CD-ROM, Internet, Online Public Access Catalogue (OPAC) and other electronic databases through the use of computers. The use of computers facilitate learning as students make use of word processing applications to type assignments, do class work and surf the Internet to access current information for their time-papers and projects.

Provision of electronic resources in university libraries, cybercafés, homes and technology centres inn the universities is very crucial in that it provides access to vast amount of information which students need to achieve their academic goals. Ray and Day(1998) compares electronic and print sources and opines that recalling information from electronic information sources are often faster than consulting print sources.

Several studies have been conducted to survey the use of Internet and Computers by students in the universities. For example, Anasi(2006); Olatunji-Bello, Ibegwam and Odugbemi(2002); Ojo and Akande(2005); Ojedokun(2001) all focused on regular or full-time students' use of Internet facilities of the undergraduates but this study will focus the distance learning students or the sandwich students. Furthermore, it appears generally as if not much research have been done on distance learning in Nigeria and the use of information materials by the distance learning students(Mabawonku,2004). This study, therefore, was designed to investigate computer and Internet usage by distance learning students in university of Ado-Ekiti in Nigeria.

Literature Review

University education is expected to equip the students with skill in reading, inquiry, and independent thinking. Little wonder that Shaw and Giacquinta(2000) suggested that, faculty in addition to integrating computer use in their courses make regularly available a wide range of short –format, hands-on workshop ad demonstrations in which undergraduates can be given individual attention. Romiszowki and Mason(1996) cited in Sam et.al(2005) states that higher education will expand academic computing resources not only for their pedagogical benefits but also 'because it will be seen to be the duty of education to use such systems in order to prepare its graduates for the reality of a workplace where they will be obliged to use them'. Computing technology has tremendous impact on learning and teaching processes. This probably while Sam et.al(2005) quoting Bultzine(2000) and Reiser(2001) remarks 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". Ramirex(2003) carried out a study on the impact of the Internet on the reading practices of College students in National University of Mexico. The findings of the study reveal 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) investigated the pattern of Internet use by the undergraduates at the University of Lagos, Main Campus,

Akoka, Lagos. She discovered that even though the level of Internet use was low among undergraduates from both the Faculties of Law and Education, the study showed that 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 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'. Similar views were expressed by Ahmed and Cooke (2008) who wrote that utilization of electronic resources and the improvement of information skills requires continuous training programmes for end users.

Distance learning has to be all-embracing and comprehensive. Acquiring learning experience through independent inquiry of electronic resources materials is an integral part of the programme. This is because as the teacher and learner are separated in time or place or in time and place, the use of technical media including print, radio, and TV broadcast, video and audiocassettes, computer and Internet resources are unavoidable. This explains why universities running distance learning programmes must have well equipped libraries with both print and electronic resources. Simamora and Gunawan(2002) findings show how the member libraries of the Indonesia Distance Learning Network have developed an electronic library to support the students' learning. Mabawonku(2004) carried out a study on library use in distance learning in Nigeria, by surveying undergraduates in three Nigerian Universities. Her findings revealed that 62.3% of her respondents had never used video recordings while about 55.6% indicated that they had no access to audio-recordings. 6.8% always use the Internet resources while 79% used the computers regularly and 2.9% always used CD-ROM.

The findings of Kavulya(2004) in his study of 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 U.K 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 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. While several studies have been conducted on the use of Computer and Internet facilities by undergraduates on regular programmes in Nigeria and outside Nigeria, few studies have been carried out to survey the use of Computer and Internet facilities by Sandwich students in Nigeria Universities. The study is also timely as the Federal Government of Nigeria through the National University Commission (NUC) has made it mandatory for all the university libraries to be stocked with relevant information materials including both print and electronic resources. This initiative was taken to allow students' access to up-to-date, current information for learning and research purposes. It is therefore necessary to investigate the extent to which the Sandwich students in University of Ado-Ekiti are making use of computer and Internet facilities in the library, at home, in office, and cybercafés for their degree programme. It is envisaged that the findings of this study would reveal the extent to which information technology facilities are employed in the teaching and learning processes. The findings of the study

could also be used as baseline information for curriculum design and implementation on the best way to improve the quality of information and library service delivery for the sandwich programme.

Objectives of the Study

The main objective of the study is to investigate the level of usage of Computer and Internet facilities by the part-time external degree students of a selected Nigerian State University. The specific objectives were raised to investigate whether the students were Computer literate or not. The study also sought to know the location of access to the computer and Internet facilities, the frequency of their use of the ICT facilities and the reasons for using the resources. Also investigated were the constraints to the use of computer and Internet facilities and how the sandwich students acquired their computer and Internet use skills.

Methodology

Descriptive survey research design was adopted for the study. 280 Sandwich students were randomly selected in such a way that every one (200 level to 500 level) has a chance of being selected among the sandwich students. The questionnaire used for collection of data was distributed in 2007. 200, 300, 400, and 500 level students were chosen for the study because they have stayed long enough on the programme that the level of their usage of computer and Internet facilities could be easily assessed. The University of Ado-Ekiti was selected among the state universities running distance learning programme in the south-western Nigeria because it was the first state university that started the programme.

The survey was carried out by a self-developed questionnaire divided into 5 sections seeking information on the bio-data of the respondents, availability of computer and Internet facilities, frequency of computer use, constraints to the use of computer and Internet facilities and purpose of using these facilities. 280 copies of questionnaire were distributed but 200 of the copies returned were found usable, representing a response rate of 71.4%. The data collected was analysed using the SPSS package to run the descriptive statistics of mean, frequencies, percentages and standard deviations.

Findings and Discussion

The background information of the respondents on gender reveals that 81(40.5%) were males while 119(59.2%) were females. In terms of age, 5(2.5%) were between 15-20 years; 35(17.5%) were between 21-25 years; 90(45.0%) were between 26-30 years; 40(20.0%) were between 31-35 years; 20(10.0%) were between 36-40 years; 7(3.5%) were between 41-45 years while 3(1.5%) were above 46 years of age. The distribution of the respondents by their age shows the predominant age to be between 26-30 years. The entry qualifications of the respondents show that 80(40.0%) were holders of Diploma Certificate while 120(60.0%) were holders of National Certificate in Education (NCE). It must be noted that the qualifications requested from the respondents were their highest educational qualifications.

On the issue of computer literacy, 98(49.0%) indicated that they were computer literate; while 72(36.0%) indicated they were not; 17(8.5%) were not sure while 13(6.5%) did not respond to the question on computer literacy. The response shows that less than half of the respondents 49% were computer literate. This implies that majority of the respondents would not be able to use computers to perform word processing tasks with computer nor access Internet resources on their own. If they need to carry out any computer operations at

all, they would need to depend on the assistance of their colleagues. With regards to Internet literacy and use of Internet resources, 35(17.5%) use computer to access Internet resources while 36(18.0%) send and receive e-mail via the Internet. This low percentage of respondents (35.5%) using Internet facilities agrees with the findings of Mabawonku (2004) where few students (38.0%) indicated using the Internet to source information.

Table I: Frequency of Computer Use

Frequency	No. of Respondents	% of Users
Daily	20	10.0
Once a week	47	23.5
Twice a week	26	13.0
Monthly	47	23.5
Never	28	14.0
No. Response	32	16.0
Total	200	100.0

Table I reveals that 20(10.0%) of the respondents use computer daily; 47(23.5%) use it once a week; 26(13.0%) use computer twice a week while 47(23.5%) make use of computer monthly and 28(14.0%) of the respondents never used computer. A closer look at Table I shows that 93(46.5%) of the respondents use computer regularly if the first three levels of frequency of use (daily, once a week and twice a week) were interpreted as regular use of computer. The result indicates that majority of the respondents were irregular users of computer.

In order to ascertain the extent to which the lecturers encouraged the students to use computer and Internet facilities for their academic work, they were asked to indicate how often their lecturers gave them assignments that compel them to search for information on the Internet using computers. In reply to this question, 37(18.5%) indicated often; 69(34.5%) subscribed to sometimes; 66(33.0%) indicated rarely; while 28(14.0%) didn't reply.

These responses suggest that the teaching and learning processes were done mostly using the conventional methods and facilities. This finding supports Adetimirin (2008) report that use of ICT for academic tasks by undergraduates in 6 sampled Nigerian universities was low, with 73.2% of the respondents in the low use category and 21.0% and 17% in the average and high use categories respectively.

Table II: Location of Use of Computer and Internet Facilities

Location	No. of Respondents	Percentage (%)
At Home	42	21.0
Library	4	2.0
Cybercafé	67	33.5
Lecturers' office	11	5.5
At Work	25	12.5
No. Response	51	25.2
Total	200	100.0

As indicated in Table II, 42(21.0%) of the respondents have used computer and Internet facilities at home; 4(2.0%) used these facilities in the library; 67(33.5%) claimed they have used computer in the cybercafés while 11(5.5%) made use of them in the lecturers' office; 25(12.5%) used the facilities at work while 51(25.2%) refused to respond. These findings reveal that more

than seventy percent of the respondents made use of computer and Internet facilities outside the library.

A possible explanation for this may be that it was more convenient to access the facilities outside the university library. The finding of the study that more students 67(33.5%) preferred using the facilities in cybercafés to other locations agrees with the findings of Ojokoh and Asaolu (2005) who reported that majority of students surveyed felt more comfortable using the cybercafés when compared with those who use the Internet at home and town.

Table III: Reasons for Use of Computer and Internet Resources

Reasons	No. of Respondents	Percentage (%)
For word processing	120	60.0
To send/receive e-mail	36	18.0
To watch films	2	1.0
To search for information on the Internet for assignments	35	17.5
To play games	2	1.0
Others	5	2.5
Total	200	100.0

Table III indicates that the sandwich students use computer mainly for word processing as subscribed by 120(60.0%) of the respondents. 36(18.0%) use it to send and receive e-mail; 35(17.5%) use it to search for information on the Internet for assignments. The findings reveal that the undergraduates were more familiar with the use of computers for word processing applications like typing letters, assignments and projects than for using it to access information on the Internet and sending and receiving e-mail. This result indicates that the level of usage of Internet resources by the sandwich students is low. This findings contradict Ojokoh and Asaolu (2005) and Anasi (2006) who all reported high usage of Internet facilities by the undergraduates for academic purposes which implies that use of Internet resources have very high impact on academic career and other related activities of their respondents. The result of this finding has made it necessary for the sandwich students' lecturers to encourage them to use computers and Internet resources. This could be achieved by presenting their lectures in ICT formats and making it compulsory for the students to search for information on the Internet by giving those assignments that demand the use of Internet resources.

Table IV: Acquisition of Computer Use Skill

Options	No. of Respondents	Percentage (%)
Computer School	44	22.0
Self Training	29	14.5
In-House Training at Work	22	11.0
At Cybercafé/ Private Computer Centres	35	17.5
No. Response	70	35.0
Total	200	100.0

Table IV reveals that 130(65%) of the respondents have received training in computer use at different locations. As revealed in Table IV, 44(22%) attended computer schools for trainings in computer use. 29(14.5) trained in their places of work while 70(35.0%) didn't respond to this question. The response pattern had shown that majority of the sandwich students had acquired computer use skill. However, to assess the level of competence of the

students in the use of computer and Internet facilities, they were asked to rate their level of competence as High, Moderate, Low or No skill. The response is as shown in Table V.

Table V: Computer and Internet Use Competence

Competence Level	No. of Respondents	Percentage (%)
High	18	9.0
Moderate	82	41.0
Low	49	24.5
No skill	32	16.0
No. Response	19	9.5
Total	200	100.0

Table V has shown that 18(9.0%) of the respondents rated their computer use competence as high; 82(41.0%) rated their skill of computer and Internet facilities as moderate while 49(24.5%) of the respondents assessed their skill level as low. This indicates that only half of the sandwich students could perform computer operations using computers. A quick comparison of Tables IV and Table V seems to suggest that only those who have received trainings in computer use in Table IV indicated their ICT use competence as high, moderate or low in Table V. It is also logical to reason that those who didn't respond to the question on skill acquisition 70(35.0%) in Table IV were the class of respondents who indicated that they did not have any computer use skill (No skill) and those who didn't respond to the question at all making 67(25.5%). The Philosophy of distance education programme in Nigeria emphasizes minimal physical contact between the teacher and student but much reliance on electronic communications (Dada, 2001). This makes it mandatory for all the sandwich students surveyed to be computer literate and skilled in information retrieval processes as computers and other ICT facilities are expected to be used for interactive teaching, learning and for accessing web-based information by the students and their teachers. The findings of this study therefore imply the necessity for urgent attention to be given to trainings on skill acquisitions and more emphasis on Internet and computer literacy programmes by the management.

Implications of the Study

The study has unveiled the fact that even though the distance learning education programme is expected to be carried out in an ICT environment through electronic communication by the use of computer and Internet resources, half of the respondents surveyed could not use the ICT facilities because they lacked the skills for using them. The study also revealed that use of computer was mostly limited to word processing applications as the level of Internet usage was low among the sandwich students of University of Ado-Ekiti. This implies that the students would depend mainly on print information from textbooks, projects and journals for their academic and research work which may not be sources of current information like the Internet-based resources. This portends dangerous situation in this present age of global information explosion where academics and researchers depend mostly on current information widely accessible on the Internet.

Another important finding from this study is that the lecturers have not been aggressive enough in encouraging the students to use computers and Internet facilities. This implies that teachings and learning processes were carried out mainly under conventional atmosphere of chalk board and paper with little emphasis and use of electronic resources.

Conclusion and Recommendations

The study has established that all the students surveyed could not use computer and Internet facilities. It was also discovered that a moderate proportion of the respondents (50%) who could use the ICTs were mainly using them for word processing operations like typing assignments, class-works and projects. Lack of information searching skills also limited the use of Internet resources for academic purposes. The lecturers were not helping matters as they didn't compel the students to use the computer and Internet facilities by giving those assignments through which their computer knowledge and experience could be developed. Lecturers should not be satisfied with textbooks alone in preparing their lecture notes for teaching. They should incorporate Internet-based information in their notes and encourage the students to conduct research and carry out assignments that are computer-activity-based. This would indirectly force them to embark on independent learning and investigative study. The school management could also help the students to develop computer use skills by making all registrations, payments, checking results and supply of every form of information to be carried out and checked via ICT platform (online)

The researcher also found that most students prefer using computer and Internet facilities in cybercafés. This implies that the University library could not provide access to the facilities in a way and measure convenient and acceptable to the students when compared with what obtains outside the library. The library should make every effort to provide computers and Internet connectivity which is reliable and at a cheaper rate to what cybercafés are charging outside. Regular power supply should not be an inhibitor to the use of the resources in the library. In addition, the library should integrate programmes on computer literacy in their users' education programme. This should be an activity-based programme which provides for a wide range of short-format, hands-on workshops and demonstrations in which the sandwich students can be given attention.

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