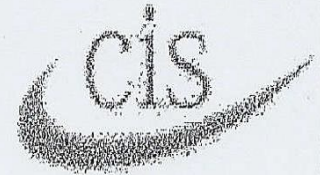


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Learning Electronically in Nigeria Universities: The Example of Federal University of Technology Minna, Nigeria

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ABSTRACT

This study examined the use of electronic learning facilities-in learning in Nigeria Universities with a case study of the Federal University of Technology Minna, Nigeria. A survey design was adopted for this study, since a large number of students were involved. The population of the study comprised all the students in the university. A total of 120 students from across the levels were involved a sample for this study. The sample was composed through a multi-stage sampling technique, using proportionate random Sampling. Questionnaire was used as instrument for data collection. Data collected were analysed with the use of descriptive statistics (frequency count, mean score and percentage, Result revealed that the e-learning facilities were inadequate and students' access to these are very negligible among others. Recommendations were also made.

Keywords: *Learning, Electronic, University, Technology, Minna, Nigeria*

1. INTRODUCTION

Electronic learning popular referred to as e-learning is increasingly becoming acceptable in tertiary institutions the world over. This is as a result of the opportunity provided by the institution and move students taking part in it (OECD, 2005). Electronic learning is basically the use of information and communication technologies (ICTs) to enhance and support leaning teaching and research. Eteng and Ntui. (2009). With e-learning, there is a shift from the traditional approach of teacher-directed didactic to modern methods where computer technology plays an significant role, thereby improving the quality, efficiency and effectiveness of teaching, learning, research and educational management.

The unprecedented increases in students enrolment at all levels in tertiary education in Nigeria has exposed the poor infrastructural situation in the country.

This is evident in the unmanageable nature of the school systems, resulting from crowded classrooms, dilapidated and uninhabitable structure, poor and inadequate facilities that should support teaching learning and research. The result of this is the production of low quality graduates that are not marketable in the world driven by technology.

The need for e-learning has now become important more than ever before as the objective of university education in Nigeria as defined in the National Policy on education (2000) includes the provision of high level manpower for national development and this is to be achieved through its programme of teaching, learning and research. Electronic learning can help adults in developing their literacy and innumeracy skills, while also building ICT skills for life and work. (CILIP, 2005).

With electronic learning, direct attachment to classrooms is reduced and the population is decongested.

2. LITERATURE REVIEW

The development of information technologies makes the increasingly wider application of multimedia in education possible. According to Tamas and Vauthier 1996, despite the high cost of the systems and their use, multi-media education builds on the basic principles of individual learning, interactivity and freedom of learning in terms of time, pace and pace.

E-learning is defined by OECD, 2001, as the use of ICT to enhance and support learning in tertiary institutions. They argued that e-learning covers a wide range of systems, from students using e-mail and accessing work on-line while following a course on campus to programmes offered entirely on line.

According to Shockley, (2003) e-learning is the delivery of a learning training or education programme by electronic means. Shockley (2003) argued that e-learning involves the use of a computer or electronic device (e.g a mobile phone in some way to provide training, educational or learning materials. It also involves the use of internet, an intranet. CD – ROM and DVD can be used to provide learning materials.

In 2007, Bassey et al cited in Eteng and Ntui (2009) investigated the Nigerian graduating students access to e-learning technology in Universities in South-South Nigeria. Results of the survey indicate that the number of graduating students in Nigeria higher institutions who has access to e-learning technology was negligible.

Another survey was conducted by (Akuchie, 2008) in five universities in North Central zone of Nigeria. The finding revealed that lecturers and students are not literate in the use of most aspects of information and communication technology (ICT). According to Akuchie, (2008), most e-learning facilities are not available in the universities and where they exist they are either not

functional or inadequate and lecturers and students do not employ ICT facilities for teaching and learning.

Writing on the potential of e-learning Sam. (2011), quoting Egwu, argued that e-learning is a logical and strategic approach to achieve the technological transformation of Nigeria, adding that the deployment of ICT is critical in the implementation of education road map, which is designed to revamp the education sector. According to (Sam 2011), e-learning is expected to redefine education, for example the classroom will no longer be demarcated by brick walls rather "students can communicate with their teachers from their bedroom or wherever they are especially during strikes, while housewives can receive lecturers from their kitchen without having face-to-face interaction with their teachers.

Sam, (2011) also identified infrastructure availability as the bane of e-learning in Nigeria especially with the erratic power supply situation compounded by lack of access to technology. Writing of the problem of implementing e-learning in Nigerian Universities, Kamba (2009) argued that investment and commitment to develop an e-learning application is very poor and below expectations in the universities.

On the objective of university education, Bamgbaye (1997), opines that by far the most important objective of university education is the training of the mind. In other words, university education endows the student with a special way of looking at things. It trains him to be objective and impartial in the handling of data, to be as accurate as possible in his observations and conclusions, to be able to apply his knowledge in different situations, but above all to learn to think.

In the same vein, Majasan (1999), argued that universities are organizations engaged in advancement of knowledge, they teach, train and examine student.

3. PROBLEM STATEMENT

Most universities the world over are founded on the concept of service to man, primarily to meet the development need of society. This is usually done through a systematic approach to research. To achieve the above therefore, the learning environment must be improved upon. As a result of difficult economic environment in Nigeria, and increased enrollment in our universities, there is overcrowding of few available facilities. Statistics has shown that only about 10% of more than one Million applicants are admitted every year in the universities. There is also the problem of over crowding due to inadequate infrastructure. In view of these therefore, what is the role if any of e-learning in Nigerians education

system. How has the system been able to utilize the potentials of e-learning which includes minimization of distance time space as in most cases it does not require learning interaction between lecturers and students in a fixed mortar and brick location (Oruame, 2007). This is the focus of attention of this study as it addresses a case study of Federal University of Technology, Minna, Nigeria.

4. OBJECTIVE OF THE STUDY

The broad objective of this study is to examine the use of electronic learning facilities in learning in the Nigerian Universities with a case study of the Federal University of Technology Minna, Nigeria. Specifically therefore, the study will:

- Determine the adequacy of e-learning facilities available in the university understudy.
- Ascertain the level of accessibility of e-learning facilities in the university.
- Ascertain the actual use of e-learning facilities in teaching and learning
- Identify some of the problems that militate against the use of e-learning resources in teaching, learning and research.

5. RESEARCH METHODS

A survey design was adopted for this study, since a large number of students was involved. The population of the study comprised of all the students in the university. A total of 120 students from across the levels were involved as sample for the study. The sample was composed through a multi-stage sampling technique using proportional random sampling. First the university was grouped into strata based on schools/faculties. This gave a total of six schools/faculties, secondly random sampling was used to select one department across from each of the strata. This gave a total of six departments used for this study. Questionnaire was used as instrument for data collection. Data collected were analysed with the use of descriptive statistics (frequency count, mean score and percentage).

DATA PRESENTATION AND DISCUSSION OF RESULTS

The questionnaire was administered on the sampled students in the selected schools/faculties used in this study over a period of six weeks. The result on questionnaire administration and retrieval is shown in table 1.

Table 1: Details of Sample Departments

SCHOOLS/FACULTIES	Sample Department	NO. Administer	NO. RETRIEVED
Agric and Agriculture technology	Department fishery	36	31
Engineering and engineering . technology	Dept. of mechanic engineering	29	25
Environmental technology	Building	26	21
Information and communication technology	Computer science	20	15
Entrepreneurial technology	Entrepreneurship	10	9
Science and science education	Biochemistry	21	19
Total		142	120

Table 1 shows that about 80% of the respondents responded and returned their completed questionnaire

TABLE 2: Availability of E-Learning Facilities in the University

Item	Readily Available	Sparingly available	Not sure.
Internet	30 (24.8%)	76 (63.3%)	(11.9%) 14
Computer	35 (29.4%)	71 (59.6%)	13 (11.0%)
CD ROM	16 (13.8%)	73 (60.6%)	31 (25.7%)
LCD Projector	22 (18.3%)	51 (42.2%)	47 (39.4%)
Photocopiers	120 (100%)	-	-
Audio Cassette	10 (8.3%)	17 (13.8%)	93 (78.0%)
Video Cassette	19 (15.6%)	22 (18.3%)	79 (66.1%)
Mobile Phone	10 (100%)	-	-
Scanners	33 (30.3%)	21 (19.3%)	55 (50.5%)

Table 2 shows the availability of e-learning facilities in the university. Mobile phone and photo copier ranked highest as all the 120 respondents (100%) indicated them. The students argue that they are readily available. This is closely followed by computer with 35 (29.4%) of the students indicating it. Ranking third is the internet as 30 (24.8%) of the respondent indicated it. It is observed that internet service is available in the AFRI-HUB service situated in the library in the main campus. The result above is corroborated by the studies of Eteng and Ntui (2009) who investigated the Nigeria graduating students access to e-learning technology. The result revealed that a good number of the students do not have access to e-learning technology.

Table 3 given below shows the accessibility level of e-learning facilities in the university. Accessibility here mean effective and independent use of resources: The table 3 above shows the frequency and percentage of accessibility of e-learning faculties in the university. From the table 46 (38.5%) of indicated internet as very high. While all the students 120 (100%) said that mobile phone is easily accessible. 30 student corresponding to (24.8) have access to computer. this ranked third after mobile phone and internet. They are closely followed by audio cassette 10 (8.3%) CD ROM (13.5%) and video cassette 19(15.6%).

Table 3: The level of accessibility of e-learning facilities in the university

Item	RESPONSES			
	VERY HIGH	HIGH	LOW	VERY LOW
Internet	46 (38.5%)	11 (9.2%)	63 (52.3%)	-
Computer	30 (24.8%)	70 (58.7%)	20 (16.5%)	-
CD ROM	16 (13.8%)	74 (61.5%)	22 (18.3%)	7 (5.6%)
LCD Projector	14 (11.9%)	6 (4.6%)	98 (81.7%)	2 (1.5%)
Photocopiers	25 (21.1%)	8 (6.4%)	87 (72.5%)	-
Audio Cassette	10 (8.3%)	-	-	110 (97.7%)
Video Cassette	19 (15.6%)	-	-	98 (84%)
Fixed telephone	-	44 (34.9%)	-	75 (64.1%)
Mobile phone	120 (100%)	-	-	-
Scanners	19 (15.6%)	5 (4.6%)	96 (80%)	-

Table 4: Uses of e-learning facilities in teaching and learning in the university

Item	Responses		
	Often	Sometime	3 never
Internet	19 (17.4%)	32 (29.4%)	64 (53.2%)
Computer	10 (8.3%)	19 (15.6%)	91(76.1%)
CD ROM	10 (8.3%)	25 (21.1%)	85 (70.6%)
E-Mail	23 (20.2%)	50 (41.3%)	46 (38.5%)
Audio Resources	16 (13.8%)	32 (26.6%)	71 (59.6%)
Video Resources	13 (11%)	19 (15.6%)	88 (73.4%)
Mobile Phone	14 (11.9%)	28 (22.9%)	78 (65.1%)

The result in table 4 above reveals that majority of the students haven't ever used internet in their study. This position is indicated by 64 (53.2%) of the students. A very small percentage (17.4%) of them use it often. This result is very surprising as it is at variance with the position of Hinson (2005) who argued that internet remains the most widely used E-learning facility in the

world. The other facilities like CD ROM E-Mail Video resources, computer, audio cassette etc are also rarely used by the students. This finding is not surprising as it corroborates the study of Akuchie (2008) in five universities in North central of Nigeria which shows that most of the students are not literate in the use of most of the e-learning facilities.

Table 5: Challenges in the use of e-learning facilities in learning in the university

Item	Frequency	Percentage
Power (failure, fluctuation, surge)	120	100
Obsolete faculty	30	24.8
Lack of skilled manpower	67	52.3
Power infrastructure	92	77.1
Inadequate funds	95	79.8
Inadequate e-learning facilities	100	83.5

This study also investigated the inhibitors to the use of e-learning facilities by the students in the university. Ranking highest as the greatest inhibitor to the use of e-learning facilities is power outage. This is indicated by all the 120 (100) students in this study. This is closely followed by inadequate e-learning facilities as indicated by (83.5%) of the respondents. Ranking third as indicated by 95 (79.8%) of the students is inadequate fund. Other challenges identified by the students include obsolete facilities, lack of skilled man-power and poor infrastructure.

The position of this finding is in line with the result of a study by Bassey et al (2007) who investigated the Nigerian graduating students access to e-learning facilities universities in south south Nigeria. The result reveals that the students access to e-learning facilities was negligible.

6. CONCLUSION AND RECOMMENDATION

This study has examined the use of e-learning facilities in learning by the students of Federal University of Technology Minna, Nigeria. It has revealed that the facilities available in the university are not adequate. Majority of the students do not have access to the available e-learning facilities, and revealed some inhibitors to the use of e-learning facilities. These include, power outages, obsolete e-learning facilities, lack of skilled manpower and poor infrastructure.

To enhance e-learning in Federal University of Technology, Minna, the following recommendations are made:

- Government should show more political will by increasing the financial resources available to the university especially in the area of e-learning facilities which is capital intensive.
- The university administration should influence policies and provide enabling environment for e-learning. They should also seek public and

private partnership like that of Afri HUB.

- Students should take advantage of the enabling environment to enhance their knowledge and access to e-learning facilities.

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