ASSESSMENT OF THE APPLICATION OF ICT TO TEACHING AND LEARNING IN PRIVATE UNIVERSITIES IN SOUTH SOUTH GEOPOLITICAL ZONE OF NIGERIA

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ABSTRACT
This research was carried out to assess the extent of application of ICT to teaching and learning in Nigerian private universities. Four research questions and three hypotheses guided the study. Descriptive survey design was adopted for the study. The population used as the sample consisted of 8 private universities from the south south geopolitical zone, particularly from Delta and Edo States. A validated questionnaire with a reliability coefficient of 0.96 was used for data collection. The quantitave statistics: frequency counts, percentage and mean were used. The inferential statistic was applied to assess the significance of the hypotheses. Analysis of Variance (ANOVA) was the technique of estimation and the F- statistic was used to test whether the hypotheses at 0.01, 0.05 and 0.1 significance respectively. The results revealed that there is a significant relationship between the use of ICT in teaching and learning in private universities. The results show that the application of ICT promotes teaching and learning in higher institutions of learning, particularly universities that have well-equipped ICT units are able to enhance their lecturers' teaching and students' learning capacity.

Keywords: Information communication technology (ICT), Teaching and Learning, South South Geopolotical Zone, Private Universities.

1.   INTRODUCTION
Information communication technology (ICT) supports teaching and learning, research activities including collaborative learning and inquiring. The effective integration of this technology into classroom has the potential to transform the nature and process of the learning environment and envision a new learning culture. ICT among other advantages guarantees interactivity, flexibility and convenience of teaching and learning in an ICT supported environment. It opens up opportunities for learning because it enables learners to access, extend, transform and share ideas and information. ICT is the process of gathering, accessing and disseminating data (or information) for an enhanced teaching and learning (Miller and Akume, 2009). ICT is daily giving rise to new concepts, new ideas and making impact not only in the industries/businesses but also in the education sector. ICT has simplified education through the application of electronics media, Internet, etc. Ndukwe (2006), the production and introduction of calculators and computers in the education system globally has helped in simplifying teaching and learning in schools, thereby promoting national stability and economic survival. ICT has dramatically redefined the world we live in. We now live in a knowledge economy where the amount of knowledge available to individuals, organizations and nations determine their competitive position and therefore their level of development and sustainability. The world has witnessed a phenomenal growth in communication technology, computer network and information technology. Development of new broadband communication services and convergence of telecommunication with

computers have created numerous possibilities to use a variety of new technology tools for research, teaching and learning (Ezenwafor, 2012). The integration of computers and communications facilities offers unprecedented opportunities to the education systems with its capacity to integrate, enhance and interact with each other over a wide geographic distance in a meaningful way to achieve specific learning objectives. The federal government affirmed that teaching and learning with the support of ICT facilities is a key to quality education and this will continue to be given major emphasis in all educational planning and development since no education system may rise above the quality of its teachers, and by extension, no nation can rise above the quality of her leaders (FRN, 2009). The application of ICT in development of teachers and students is necessary for stability in our economic and political system as a nation. Teachers contribute to global development, particularly in the right environment equipped with the ensential facilities to teach, conduct research and dessiminte findings (Okoro, 2013) for knowledge acquisition and development of the nation. Okolocha and Ile (2007) stated that technology, particularlt ICT has opened a new world of teaching and learning and this has drastically increased output.The ICT policy in Nigeria should call for the update of our education programmes and training of students to acquired relevant competencies. Core ICT policy in regard to programmes offer the universities should form part of the new training arena in Nigerian universities.

The purpose of this study is to share with the readers the findings of a study carried out to investigate the application of ICT to teaching and learning in private universities in Nigeria. This paper therefore, is carried out to assess the extent to which ICT is applied to teaching and learning in private universities in Nigeria using Edo and Delta States as a case study. Also, this study seeks to investigate the attitudes of teachers towards the use of ICT for educational purposes. Technology is now at the threshold of its maturity in all sectors in Nigeria. An overview of the research is to establish the extent to which ICTs are used in teaching and learning processes in private universities and the influence it has on the teaching and learning processes.

1.1   Statement of the Problem

There has been a global clamour for a re-orientation of teaching and learning towards greater use of ICT facilities. The success of this clamour, however, depends largely on the availability of ICT facilities and the knowledge possessed by lecturers and other supporting staff in our tertiary institutions. And the extent these facilities and knowledge are deployed by lecturers to support teaching and learning. It is in this regard, this study attempted to investigate the level of ICT availability, access and knowledge and its potentials in enhancing teaching and learning in private tertiary institutions in the south south geopolitical zone of Nigeria.

1.2   Purpose of the Study

The purpose of this study was to assess the availability of ICT facilities, access level and ICT knowledge possessed by lecturers and support staff and how these have deployed to enhance teaching and learning in private universities in the south south geopolitical zone. To address the study effectively, private universities in Edo and Delta States were evaluated.

2.   RESEARCH QUESTIONS

Based on the research problem, the following research questions were raised to guide the study:

- i.   Which ICT facilities are available in respondents' universities?
- ii.   What is the adequacy and accesses to the various ICT facilities available in respondents' universities?
- iii.   What are the factors that hinder lecturers from using ICT facilities?
- iv.   What is the attitude and perception of lecturers towards the use of ICT for teaching?

2.1   Hypotheses

The following hypotheses were formulated for the study and tested at 1%, 5% and 10% level of significance

- i. H_0: The use of ICT does not enhance teaching and learning in our universities.
- ii. H_0: The use of ICT does not have impact on class size.
- iii. H_0: The use of ICT in universities does not promote lecturers- students' relationship.

3.   RELATED WORK

The recent years have been characterized by some new and outstanding technologies that have impacted human lives and the most important of them is Information Communication Technology (ICT). It encompasses computers, Internet service provision, telecommunications equipment and services, information technology equipment and services, media and broadcasting, libraries and documentation centers, commercial information providers, network-based information services, and other related information and communication activities.

The field of education has been impacted by ICTs positively, which undoubtedly has affected teaching, learning, and research (Yusuf, 2005). A great deal of research has proven the benefits of ICT applications to the quality of education (Al-Ansari, 2006). It is an established fact that ICTs have the potential to innovate, accelerate, enrich, and deepen skills, to motivate and engage students, to help relate school experience to work practices, create economic viability for tomorrow's workers, as well as strengthening teaching and helping schools change (Yusuf, 2005). Today, many organizations, including tertiary and research institutions as well as individuals turn to the ICT, particularly the Internet for accurate and up-to date information. Online collaborator, which refers to sharing ofinformation, working or trading with various people at different places through the Internet is becoming common practice (Ubulom1, Enyekit, Onuekwa, *et al*., 2011).

As stated by Jhurreev (2005), much has been reported about the impact of technology, especially computers, in education. Computers and application of technology have become more pervasive in the society today. This has led to the concern about the need for computing skills in everyday life. When ICT is applied to teaching and learning it can lead to the motivation of students since it captures and sustains students' curiosity and attention throughout their lessons and enables lecturers to maintain complete classroom control and interest in a lesson (Nwaiwu, 2009). It can enable lecturers to explain concepts that would ordinarily have been difficult to elaborate orally, which leads to easy comprehension of what is being taught by the students (Reil, 2000).

The roles and responsibilities of lecturers (or teachers) in tertiary institutions are closely tied to the central functions of higher education. Broadly defined, lecturers/teachers fulfill three primary functions at the university: teaching, research, and community service (Okoro and Okoro, 2009). Teaching, using ICT infrastructure has the advantage of motivating students; helping to recall previous lectures; providing new instructional stimuli; activating the learner's response; providing methodical and steady feedback; facilitating appropriate practice; sequencing learning appropriately; and providing a viable source of information for enhanced teaching and learning. Teachers who use this system of instructional strategy would be able to kindle in the hearts of the learners, a desirable attitude towards information technology tools in their entire way of life (Tella, Toyobo, Adika *et al*., 2011)

Many countries now regard understanding ICT and mastering the basic skills and concepts as part of the core of education, alongside reading, writing and numeracy. Daniels (2002) stated that ICTs have become within a very short time, one of the basic building blocks of modern society. He affirmed that if ICT tools are to improve institutional effectiveness and efficiency, it is obvious that their application in support of teaching and learning should be seriously considered.

4.   METHODOLOGY

This study drew sample from the population of lecturers, technicians, and facilitators in the private universities in Delta and Edo States. The nature of this study did not permit the use of probability sampling method because the respondents' universities were few. The study therefore employed convenient sampling method. Fifty eight (58) respondents were randomly selected from various private universities, which include lecturers, technologists and students. The researcher designed a questionnaire to elicit the information needed for the study. The questionnaire has two main sections. The first section has information on the personal data of the respondents. The second section contains information relating to assessment of application of ICTs in teaching and learning in respondents' respective universities. The questionnaire was personally administered by the researchers to the respondents in their various institutions to ensure effective feedback. The researcher made use of descriptive and inferential statistics. The descriptive statistics were frequency counts, percentage and mean. The inferential statistics was applied to assess the significance of the hypotheses. Analysis of Variance (ANOVA) was the technique of estimation. The F- statistic was used to test whether the hypotheses were significant or not at 1%, 5% and 10% respectively.

5.   DATA ANALYSIS

In this section we analyse the data obtained from the survey conducted. The analysis is based on the hypotheses raised to guide the study.

I. H_0: The use of ICT does not enhance teaching and learning in private universities

Table 1: ANOVA

	Sum of Squares	**DF**	**Mean Square**	**F**	**Significance**
Between Groups	4.232	2	2.116	5.984	.009
Within Groups	7.072	20	.354		
Total	11.304	22			

Table 1 shows the impact of the use of ICT facilities on learning. The value obtained from F-Statistic computed is 5.984 and the corresponding P- value obtained is 0.009 which is less

than the 0.05 level of significance. This means that there is a significant relationship between the use of ICT in teaching and learning in private universities. This shows that the use of ICT facilities have significantly impacted on teaching and learning. The indication is that the application of ICT promotes teaching and learning in higher institutions of learning, particularly universities that have well-equipped ICT units are able to enhance their students' learning capacity.

II. H_0: The use of ICT does not have impact on class size

Table 2: ANOVA

	Sum of Squares	DF	Mean Square	F	Sig.
Between Groups	3.676	2	1.838	3.026	0.071
Within Groups	12.150	20	0.608		
Total	15.826	22			

The F- Statistic in Table 2 is 3.026 and the corresponding P- value is 0.071. The P- value indicates that the use of ICT has impact on the class size at 10% level of significance. The P-value is less than 0.1 significance level and this shows that it is significant at 10%. This finding shows that the use of ICT has significant impact on class size. This finding shows that lectures are easy to deliver in classes with many students where ICT facilities are available. Students are fascinated by the use of ICT facilities, thereby enhancing study and learning. They therefore listen with rapt attention to whatever the lecturers are ready to impact.

III. H_0: The use of ICT in universities does not promote lecturers- students' relationship

Table 3: ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2.435	2	1.217	4.058	.033
Within Groups	6.000	20	.300		
Total	8.435	22			

From Table 3, F – Statistic is 4.058 and the P-value is 0.033 which is less than 0.5 level of significance. This shows that the use of ICT in universities has impact on lecturers - students' relationship. Students are ready to interact with their lecturers when teaching takes place with the use of ICT facilities. This further confirms the use of ICT in our universities as effective tool for study and learning.

6. CONCLUSION

The adoption and use of ICTs in education have a positive impact on teaching, learning, and research. ICT can affect the delivery of education and enable wider access to the same. In addition, it increases flexibility so that learners can access education services regardless of time and geographical barriers. It can influence the way students are taught and how they learn. It provides the rich environment and motivation for teaching and learning process which seems to have a profound impact on the process of learning by offering new possibilities for learners and teachers. These possibilities can have an impact on students' performance and achievement. Similarly wider availability of best practices and course

materials made available by ICT, can foster better teaching and improved academic achievement of students. The empirical results of this investigation show that the successful integration and application of ICT in teaching and learning in private universities no doubt enhances academic delivery to students. Further study would compare ICT availability in private and public universities and the extent to which it has enhanced research, teaching and learning in selected institutions.

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