THE EVALUATION OF TEACHING AND LEARNING PROCESS THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN SELLECTED TERTIARY INSTITUTIONS IN YOBE NIGERIA

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ABSTRACT

The assessment on the impact of ICT in teaching and learning of students was carried out in Mai Idris Alooma Polytechnic Geidam and Federal Polytechnic Damaturu, Yobe State. Questionnaires were used for the collection of data from the mentioned above Polytechnics; simple percentage was used for the data analysis. The results of the study show that quality of students, lack of adequate functional ICT infrastructure, and low morale on the part of the lecturers and poor supervision are attributed to the poor performance in the Polytechnic system. Based on the findings of the study, it is recommended that the use of teacher competency test (TCT) should be used for secreting and accrediting candidate for the profession.
Keyword: Assessing, ICT, Teaching, Learning, Students.

INTRODUCTION

Today we live in an age of cutting-edge technology where Information and Communication Technology (ICT) has become the order of the day. This digital era has witnessed a drastically changes in the workplace and environment that entail continuous training and timely acquisition of new knowledge. In such a scenario there is a growing demand on almost everyone, both academics and students in learning organizations to become technologically literate. The major challenges facing the Polytechnics today are the identification of what role ICT and e-learning will play in the future of higher education and how to implement the appropriate strategies which will meet the needs of the information age learner.

Information and Communication Technology (ICT) can be defined as a "diverse set of technological tools and resources used to communicate, and create, disseminate, store and manage information" (Blurton 2005). This technology includes computers, the internet, broadcasting technologies (Radio and Television) and telephony. Technological change is a process that has accelerated over the past fifteen years and has created a new national economy "powered by technology, fueled by information and driven by knowledge" (U. S Dept. 2005). The role of ICT in teaching and learning can never be over emphasized, as ICTs can help students to ask questions, predict hypothesis, obscene, measure, record, interpret their results and evaluate their performances in the learning process. ICT (information and communication technology) has been widely practiced in managing teaching and learning process in higher educational institution. For instance, the use of learning management system (LMS) has played a vital role in teaching and learning process particularly on the coursework. Also the use of teaching and learning courseware (TLC) such as e-books has make teaching and learning process more effectively. Despite the keenness by institutions of higher learning to effectively used ICT in educational programs, they are confronted with enormous problems that may have impeded its proper implementations. In such scenario, we need to address many questions that may arise such as: What can we then expect from ICT and e-learning in the future and what are the trends and technologies we might see in education during the coming years?

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Are our lecturers and students ready for e-learning and what is the level of ICT and e-learning readiness of lectures in the campus? These and other questions lead to the assessment of the impact of ICT in teaching and learning of student in Polytechnics in Yobe State Nigeria. The challenges therefore are

- To determine the general impact of ICT teachers and students in Polytechnics.
- To determine the barriers and problems on usage of ICT teaching tools by teachers and students in Polytechnics.

METHODOLOGY
Research Design
The type of design for this study is a survey design. Survey method was based on information from lecturers and students.

Population
The target population of the study comprises of both academic staffs and students of the selected institutions these are: Mai Idris Alooma Polytechnic, Geidam Yobe State and The Federal Polytechnic, Damaturu Yobe State.

Sample and Sampling Procedure
One hundred and thirty (130) academic staff and One hundred and fifty (150) students were sampled for the study. Random sampling was employed for the research work. Two different act of questions were administered to academic staff and students. Simple mean and percentage were used in arriving at the academic staff index (i.e mean value of the teachers) and students' academic achievements after which the various indices were correlated using spearman product moment correlated coefficient techniques the scores of all respondence in that institution on each item were added and divided by the number of respondent (mean) to arrive at the various indices for the institution.

RESULT AND DISCUSSION
Result
RESEARCH QUESTION 1: What are the general quality of ICT teachers and students in Polytechnics?
Table 1.0: Response of Questionnaire

S/N	STATEMENT	CATEGORY	RESPONSE %	
			YES	NO
1	Have you obtained your PGDE?	Teacher	61	39
2	Does your course of study have direct bearing on ICT?	Teacher	60	40
3	Do you have ICT facilities for teaching and learning of students in the institution?	Teacher	81	19
4	If yes, to what extend have you used those facilities for teaching and learning of the student?	Teacher	39	61

Table 1.1:   Response of Questionnaire

S/N	STATEMENT	CATEGORY	RESPONSE %	
			YES	NO
5	Did you offer any ICT course(s) during your study period in the institution?	Student	80	20
6	Was one of ICT method used for teaching you?	Student	35	65
7	Does your institution have internet connectivity?	Student	73	27
8	Did you ever make good utilization of internet facilities to carry out your academic work such as assignments, seminars and projects research?	Student	80	20

From table 1 show 61% have Post Graduate Diploma in Education, 60% have direct bearing on ICT, 81% have ICT facilities for teaching and learning of students and 61% disagreed of not using those ICT for proper teaching and learning of students and 39% agreed of the proper used of the facilities. Whereas 39%, 40%, 19% disagreed with teachers response.

Similarly table 1.1 show 80% agreed that they offer ICT course(s) during the period of their studies, 35% agreed that ICT method was used for teaching and learning of students , 73% agreed that there is internet connectivity in their institution, 80% agreed of making the good utilization of the internet facilities where as 20%,65%,27% and 20 disagreed with the students response.

RESEARCH QUESTION 2: What are the barriers and problems on usage of ICT teaching tools by teachers and students in Polytechnics?

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Table 2.0:   Response of Questionnaire

S/N	STATEMENT	CATEGORY	RESPONCE	
			YES	NO
1	Was lack of proper management of ICT facilities major challenges in your institution?	Teacher	73	27
2	Was source of power a major challenges for ICT facilities in teaching and learning of students?	Teacher	65	35
3	Was poor internet connectivity a major problem in teaching and learning of the students?	Teacher	90	10
4	Does ICT serve as a medium for all correspondence of your institution?	Teacher	20	80

Table 2.1:   Response of Questionnaire

S/N	STATEMENT	CATEGORY	RESPONCE	
			YES	NO
5	Do you have an ICT centre for carry out practical course work efficiently?	Student	61	39
6	Did your lecturers attend to you whenever there is problem regarding ICT?	Student	40	60
7	Did you think power source is a major problem for proper implementation of ICT in your institution?	Student	81	19
8	Does your institution have a website/portal for e-admission, e-registration, e-result checking, etc?	Student	39	61

From table 2 show   73% agreed that lack of proper management is one of major challenges of ICT in there institution, 65% agreed that lack of good sources of power is also one of the major problem of ICT, 90% agreed that poor internet connectivity is a major challenges of ICT, 20% agreed that ICT serve as all medium for correspondence in their institution. Whereas 27%, 35%, 10% and 80% disagreed with the teachers response.

Similarly, table 2.1 show 61% agreed that they have ICT centres for carrying out practical, 40% are of the opinion that lecturers attends to them whenever there is problems related to ICT, 81% agreed that source of power is one of a major problem of ICT and 39% are of the opinion of having portal/website, Whereas 39%, 60%, 19% and 61% disagreed with students response.

DISCUSSIONS

Finding with regard to research question 1 shows that 61% agreed that they have possess post graduate diploma in education that help them for preparation before going into the class, some teachers do not adequately get themselves prepared for their lesson while others do, so poorly (Halima, 2001). Since adequate preparation is necessary say for good execution in the classroom, and good execution in classroom, is necessary for effective learning, it is therefore, difficult to guarantee that learners, most especially in Nigerian Polytechnics, are learning what they are actually to learn. 60% also agreed that course of the study have direct bearing on ICT while 40% disagreed that the course of study do not have direct bearing on ICT; 81% agreed that they have ICT facilities for teaching and learning of students while 19% disagreed of not having those ICT facilities and 61% disagreed of not using those ICT the proper teaching and learning of students while 39% agreed of the proper used of the facilities.

Many lecturers tend to teach as they have been taught. Henceforth, there is a need not only to introduce the use of computer education into lecturer education courses but more importantly, the use of learning technologies needs to be modeled throughout the teaching and learning process. The challenge therefore lies in providing attractive, interesting and meaningful opportunities for academic staff to integrate the use of information and communication technology into their teaching.(Chan, Y.F and Sidhu, G.K 2005)

Finding regard to research question 2 shows that 73% agreed that lack of proper management is a major challenges of ICT in their institution, while 27% disagreed with that view; also 65% agreed that lack of good sources of power is a major problem of ICT, while 35% disagreed that source of power is not a major problem of ICT; 90% agreed that poor internet connectivity is a major challenges of ICT, while 10% are of contrary view; 20% agreed that ICT serve as all medium for correspondence in their institution, while 80% are of the contrary view; 61% agreed that they have ICT centres for carrying out practical, while 39% disagreed , 40% are of the opinion that lecturers attends to them whenever there is problems related to ICT, while 60% are of the contrary view. Understanding of science, little wonder why educators like Balogun (1982) have emphasized for need of laboratories for effective teaching science.

The finding in this research may be due to the quality of student (verbal ability, intelligent quotient, socio-economic background, student attitude to work etc.) admitted into Polytechnic, lack of proper management and low performances of the internet connectivity for academic activities for both students and staffs of the polytechnic may have been attributed to this comparative poor performance in Mai Idris Alooma Polytechnic Geidam. On the other hand, the comparative above average performance observed in the Federal Polytechnic Damaturu, sampled in this study, was connected with lack of functional ICT infrastructure, lack of constant power supply, lack of proper management of ICT centers as well as low morale on the part of the lecturers and probably poor supervision may have been attributed to this poor performance.

No matter how good the aims were; the modern the ICT facilities or active the management of the polytechnics, the value of the students is determined by the teachers. It is therefore imperative to pick right kind of persons in the teaching profession.

CONCLUSION

The general falling standard of education is great concern to concerned parents, policy makers, administrators and educationist. Each year, the quality of students been produced seems to be up to sub-standard while education is becoming more expensive.

Since the result of this research, had further strengthened the assertion that, teachers training programme, power source, poor management of ICT facilities, lack of good internet connectivity, as well as good conducive learning environment among others are yard stick, hence the better the ICT infrastructure, the better the quality of lecturers and good performances of the students; the Government, NBTE, institutional administrators, parents and every stake holders in the education sector, are here by encourage to rise on their toes in improving the parameters in question.

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RECOMMENDATION

Based on the findings of the study, the following recommendations were made:-

- Since the choice of teaching as a career by most people is done as a last resort, the use of teacher competency test (TCT) as advocate by Onyedeji (1991) should be used for secreting and accrediting candidate for the profession.
- The primary and secondary schools need to be over hauled for better as it is the fundamental stage for every child education and has strong influence on a child performance in the polytechnic system of education.
- Government needs to ensure that the cost of telecommunications, hardware and software are cheap, which will involve examining existing taxes and impact duties.
- The Rectors should ensure there is good proper management of the ICT facilities, constant supply of electricity and good internet service for easy take off the ICT method for teaching and learning of students in the polytechnic.

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