THE AVAILABILITY AND UTILIZATION OF ICT FACILITIES AND MATERIALS IN TEACHING AND LEARNING IN ISAAC JASPER ADAKAR BORO COLLEGE OF EDUCATION, SAGBAMA, BAYELSA STATE

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ABSTRACT

The study focused on the availability and utilization of ICT facilities and materials in teaching and learning in Isaac Jasper Adakar Boro College of education, Sagbama, Bayelsa state. Three research questions and one hypothesis was used in the study. Survey research design was used for the study; Random sampling technique was used to select 26 lecturers and 300 students from the institution. ICT availability questionnaire (ICTAQ) and ICT utilization questionnaire (ICTAQ) items were used as instrument for data collection. Four point likert scales was used to answer questions on ICTUQ items. Three lecturers from the faculty of education in the University of Port Harcourt face validated the test instruments using Cronbach Alpha method. The reliability coefficient for the instrument was calculated to be 0.86. The mean and standard deviation were used to analyze the research questions. While z-test was used to analyze the hypothesis which was tested at 0.05 level of significance. From the findings in research question 1, it revealed that most ICT facilities listed in the options were not available in the institution. All the responses from research question 2 were rejected to the various questions. Research question 3 also shows total rejection of the 5 response items presented on the table. The null hypothesis was accepted as z-calculated value of 0.571 was less than z-tabulated value of 1.960. Finally, it was recommended that ICT facilities and materials should be made available for teaching and learning in the institution. Also, lecturers should be trained continuously on the use of modern ICT facilities.

KEYWORDS: ICT, Facilities, utilization, materials.

INTRODUCTION

The speed at which ICT utilization is going into the world is such that only nations and countries that are committed to ICT will compete in the present day global market. The 21th century learners have been describe as the neat generation leaner who is a digital native (Enwereuzo and Obiefuna, 2012). This because the 21st century learner deemed to have formal access to computer enabled technology. These learners play video games, watch television, send text messages and e-mails and pay little or no attention to reading their text books. Oblinger (2004) in a research findings confirmed the assertion and noted that digital natives, by the age of 21 years will have spent 10,000 hours playing video games, sent 200,000 emails, used 20,000 hours in watching television, spent 10,000 hours on cell phone but less than 5000 hours in reading. This to a great extent will affect their performances in schools unless their new interest were adequately channeled and integrated in their academics.

The awareness of computer enabled technology in Nigeria and the use of ICT are very recent but fast spreading. Youth and children have access to computer which is located in several parts of the urban cities. Most of these outfits are observed to reader assistance to their users on the use of the new technologies.

The main objective of national computer education (1998) is to ensure that the general populace appreciates the impact of information and Communication Technology (ICT). Also, one of the innovation and changes that necessitated the 4th edition of the National policy on education was the introduction of ICT into the school system (National Policy on Education, 2004).

The policy stipulated that government shall provide necessary infrastructure and training for integrating ICT into the school system. Materials used for ICT teaching and learning are educational robots, multimedia projectors, teleconferencing devices, video phone systems, online library, computer laboratories, etc. In this modern era of educational research, one must have knowledge of the use of computer in teaching and learning. Nwana (2008) pointed out that computer literacy involves operating a computer on daily basis to solve problems or perform tasks, browsing the internet and using e-mail, reading computer pamphlets, textbook, etc.

This in no doubt has been accepted as indispensable in the contemporary world and has given a significant impact on the quality of education in the world.

There is therefore the need to access the availability and utilization of ICT materials in Isaac Jasper Adakar Boro College of Education Sagbama, Bayelsa State.

PURPOSE OF THE STUDY

The purpose of the study is to;

i. Find out the ICT facilities and materials available in Isaac Jasper Adakar Boro College of Education, Sagbama, Bayelsa State.

ii. Ascertain the extent to which lecturers use ICT facilities and materials in teaching in Isaac Japer Adakar Boro College of Education Sagbama, Bayelsa State.

iii. Determine the extent to which students use ICT facilities and materials in learning in Isaac Jasper Adakar boro College of Education, Sagbama, Bayelsa State.

RESEARCH QUESTIONS

The following research questions guided the study;

1. What are the ICT facilities and materials available in Isaac Jasper Adakar Boro College of Education Sagbama, Bayelsa State?

ii. To what extent do lecturers use ICT facilities and materials in teaching in Isaac Jasper Adakar Boro College of Education, Sagbama, Bayelsa State?

iii. To what extent do students use ICT facilities and materials in learning in Isaac Jasper Adakar Boro College of Education, Sagbama, Bayelsa State?

HYPOTHESIS

i. There is no significant difference between the mean responses of lecturers and students on the use of ICT materials in teaching and learning in Isaac Jasper Adakar Boro College of Education, Sagbama, Bayelsa State.

METHOD

Survey research design was used in the study. Random sampling technique was used to select 26 lecturers and 300 students in Isaac Jasper Adaker Boro College of Education, Sagbama, Bayelsa State.

ICT availability questionnaire (ICTAQ) was used as instrument for data collection. The ICTAQ items were based on four point likert scale consisting of Higher Available (HA) Moderately Available (MA) Sparingly Available (SA) Not Available (NA). (Nworgu and Oyim, 2006).

ICT utilization questionnaire (ICTUQ) was also used to ascertain lecturers and students involvement on teaching and learning with ICT. Five point likert scales consisting of Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD), No opinion (NO) was used to answer research question two and three. Three lecturers from the faculty of education in Port Harcourt, face validated the instruments. Their comments and corrections were effected before final copies were distributed. The reliability of the instrument was calculated to be 0.86 using Cronbach Alpha method.

The data were analyzed using mean (x), Standard Deviation (S.D) and z-test. Mean and standard deviation were used to analyze the research questions, while z-test was use to analyze the hypothesis at 0.05 level significance. Mean value of 3.50 and above was accepted, while 3.49 and below was rejected.

RESULTS

TABLE 1

Research question 1: what are the ICT facilities and materials available on Isaac Jasper Adakar Boro College of Education, Sagbama, Bayelsa State?

S/N	Items available	HA 4	MA 3	SA2	NA 1	NR	MEAN $\bar{x}$	SD	DECISION
1	Multimedia/online system	0	0	0	26	26	1.0	2.1	Not available (reject)
2.	Computerized classroom	0	6	10	10	26	1.9	1.5	Not available (reject)
3.	Online computers	0	2	14	10	26	1.7	1.6	Not available (reject)
4.	Internet connected lecture Hall	0	4	10	12	26	1.7	1.6	Not available (reject)
5.	Fax machines	0	2	3	21	26	1.3	1.9	Not available (reject)
6.	Computerized boardrooms for meeting project students.	3	4	5	14	26	1.9	1.5	Not available (reject)
7.	Educational Television	3	6	6	11	26	2.0	1.4	Not available (reject)
8.	Videos and tape recorders	0	4	4	18	26	1.5	1.7	Not available (reject)

TABLE 2

Research Question 2: To what extent do lecturers use ICT facilities and materials in teaching and learning in Isaac Jasper Adakar Boro College of Education, Sagbama, Bayelsa State?

S/N	Items available	SA 5	A 4	D 3	SD 2	NO 1	NR	$\bar{x}$	SD	DECISION
1.	Multimedia/online system is used in the classroom	2	3	10	11	0	26	2.9	1.6	Reject
2.	I teach in classroom that are computerized	2	3	11	9	0	26	2.8	1.6	Reject
3.	I use online computer to teach	4	5	10	7	0	26	3.2	1.6	Reject
4.	I use fax machines in my office.	0	0	11	12	3	26	2.3	1.8	Reject
5.	I use computerize board in giving lectures	0	0	12	13	1	26	2.4	1.8	Reject
6.	Videos are used in the classroom.	0	4	5	14	3	26	2.4	1.8	Reject

TABLE 3

RESEARCH QUESTION 3

To what extent do student use ICT facilities and materials in learning in Isaac Jasper Adaker Boro College of Education Sagbama, Bayelsa state?

S/N	Items available	SA 5	A 4	D 3	SD 2	NO 1	NR	$\bar{x}$	SD	DECISION
1.	Multimedia are used in our classes	0	10	250	40	0	300	2.9	1.8	Reject
2.	I learn in a computerized class	20	40	45	55	140	300	2.2	1.8	Reject
3.	I use computerize board in learning in my classroom	10	15	110	170	5	300	2.6	1.7	Reject
4.	Video are used in teaching in my class	10	20	30	210	30	300	2.2	1.8	Reject
5.	School computers are connect to the internet	30	40	100	100	30	300	2.8	1.6	Reject

TABLE

HYPOTHESIS:

There is no significant difference between the mean responses of lecturers and students on the use of ICT materials in teaching and learning in Isaac Jasper Adakar Boro College of Education Sagbama, Bayelsa state.

Respondents	NO	x^{-}	S.D	Df	Z-cal	Z-crit	Decision
Lecturers	26	2.7	1.7	325	0.571	1.960	Accept
Students	300	2.5	1.7				

DISCUSION

Based on the finding of the study, it was revealed that ICT facilities are not available in the school as responses from research question 1 showed total rejection from the mean value of the various items. Ololube, Ubogu, and Egbezor (2007) reported that ICT materials and facilities are not available in Nigerian tertiary institutions.

Responses from research question 2 revealed that items 1-6 were all rejected to the various items. This shows that lecturers in the institution are not so exposed to ICT materials and facilities. Evoh (2007) state that ICT materials such as virtual classrooms, virtual laboratories, e-libraries and internet facilities are not available for teaching and learning in low-income countries like Nigeria.

Research question three items revealed that students are not exposed to learning with ICT materials and facilities as responses to the various questions were rejected.

The null hypothesis was accepted as Z-calculated value of 0.571 was less than Z-tabulated value (1.960) at 0.05 level of significance. This shows that there is no significance different

between the mean responses of lecturer and student on the use of ICT materials and facilities in Isaac Jasper Adakar Boro College of Education, Sagbama, Bayelsa State.

CONCLUSION AND RECOMMENDATIONS

The use of ICT materials and facilities are highly needed in teaching and learning in tertiary institutions. There is the need for school management to put in effort to install ICT facilities in the classrooms. Also lecturers should be exposed to ICT facilities for teaching and carrying out research work in the school. Standard and regular training should be organized to update lecturers on the use of ICT facilities in Education

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