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Survey of Availability of Electronic Media for Teaching in Colleges of Education in Oyo State

Florence Olutunu Daramola

Department of Educational Technology, University of Ilorin, Nigeria

Correspondence: E-mail: florencedaramona@yahoo.com

ABSTRACTS

New and emerging technologies challenge the traditional process of teaching and learning and the way education is managed. This study examined the survey and availability of electronic media for teaching in colleges of education in Oyo State, Nigeria. The research design adopted for this study was the descriptive survey research design. The target population for this study includes selected lecturers in Colleges of Education, Oyo State. Simple random sampling techniques were adopted to draw out the sample for the study. A hundred lecturers out of the total population of 196 academic staff of Oyo State Colleges of Education participated. The selection constituted lecturers from all disciplines across the selected institution. The result obtained from this study indicated that some Information and Communication Technology (ICT) facilities were available and adequate: some were available but not adequate while others were not available at all. This implies that inadequate resources could affect the lecturer's lesson delivery. It was however recommended that ICT facilities should be made available in all institutions of learning to improved teaching-learning processes.

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1. INTRODUCTION

New and emerging technologies challenge the traditional process of teaching and learning and the way education is managed. The new communication technologies have the promise to reduce the sense of isolation and open access to knowledge in many ways. Thus, changing the process of teaching and learning by adding elements of vitality to the learning environment. Lecturers are the key component in the learning environment and therefore the impact of Information and Communication Technology (ICT) on teachers and the strategies they employ to facilitate the environment is crucial (Reyes *et al.*, 2017).

Lecturers of this century have to be skilled in ICTs usage to remain relevant in the system that shifted from pedagogy to demagoguery. Kumar and Kumar (2003) suggest that lack of adequate training and experience and the resultant lack of confidence leads to reluctance to use computers by lecturers. Lecturers are the gatekeepers of students' access to educational opportunities afforded by technology. They, therefore, need technical skills training in the use of technology either through pre-service or in-service courses to improve the teaching and learning process (Chapman *et al.*, 2010).

Colleges of education in Nigeria is one of the higher institutions with the responsibility of producing teachers of holders of Nigerian Certificate in Education (NCE). The major function of these institutions is to train teachers in all fields of learning for primary and basic schools, who are capable of combining technical and science skills with pedagogical skills. Lecturers are the dispenser of knowledge and research through the use of various ICTs.

Colleges of education lecturer(s) prepare teachers that feed the primary and junior secondary school level of education in Nigeria with manpower demands. It is at this level that they should have their first encounter with technology in the classroom, this they will put to use when eventually they leave school and are gainfully employed to teach in the primary and secondary schools. It is in this light that the training of students' teachers, who are expected to drive the new ICT into the advanced education system (Ebisine, 2014).

The advancement, that ICT resources offer in higher education, can be evident through the availability of quality resources materials and instructional delivery. This can only be attained when it is drastically integrated into the instructional process in the teacher education system. Productive instructional delivery enhances learners' creative and intellectual development through the use of ICTs resources, for instance, in the use of multimedia images, graphics, audio, text, and motion for high-quality learning.

Essentially, colleges of education are to provide full-time courses in teaching, instruction, and training and to conduct courses in education for qualified teachers. Colleges of education 'were to produce highly qualified professional teachers for the primary and secondary levels of education. Therefore, to ensure colleges of education products attain the broad goals of tertiary education, as well as, ensure quality in the preparation of teachers, relevance and professionalism, there is a need for optimal utilization of ICTs in teaching and academic quality assurance (Ebisine, 2014).

Lewis and Smith (2002) summarized problems of ICT implementation as limited equipment, inadequate skills, minimal support, time constraints, and the teachers' lack of interest or knowledge about computers. In Nigeria, most ICT facilities are not sufficient to enhance quality education to learners and teachers, even where it exists there are not sophisticated enough to stand the test of time like the ones acquired in developed countries (Tinuoye & Adogbeji, 2013).

2. METHODS

The research design adopted for this study was a descriptive survey research design. The target population for this study included selected lecturers in Oyo State College of Education, Oyo. Simple random sampling techniques were adopted to draw out the sample for the study a hundred lecturers out of the total population of 196 academic staff of Oyo State College of Education were participating in this study the selection constituted lecturers from all the disciplines across the institution.

A questionnaire was used to collect information for this study. The questionnaire is titled "Questionnaire for Availability of ICT for Teaching". In this study, the statement was composed concerning the availability of electronic media devices The statement contained three phases on the available electronic media devices in Oyo State College of Education, Containing Section A. B. and C Section A of the questionnaire elicits demographic information of the respondent, Section B elicited information from lecturers about the Availability of electronic media devices, Section C sought to ascertain the Availability of electronic media facilities.

The instrument was validated by four lecturers in the department of educational technology for the relevance and suitability of the instruments for the study using standard measures to check for its clarity, appropriateness, correctness, commensuration of questions with the topic of the research, and other necessary criteria for the validity. Their comments and corrections were used to produce the final copy. The instrument was pilot tested on ten lecturers in the University of Ibadan, Oyo state.

The data were subjected to Cronbach's alpha and the result was 0.76 and 0.78 respectively. We visit the sample College of Education to administer the questionnaire. Permission was sought from the administrator of the college of education concerned which was retrieved later for analysis after they were carefully filled. The data obtained from the questionnaire was subjected to inferential and descriptive statistics. Percentage and frequency count were used to answer the research questions. Data collected were coded using Statistical Package for Social Sciences (SPSS) version 23.0 for windows.

3. RESULTS AND DISCUSSION

Table 1 indicates that computer laboratories have 73% adequately available, 26% for not adequately available, and 1% for not available. Internet facilities have 51% adequately available, 44% not adequately available, and 5% for not available. E-mail services have 47% adequately available, 40% for not adequately available, 13% for not available. The satellite has 25% adequately available, 54% for not adequately available, 21% not available. Telephone. has 67% adequately available, 27% for not adequately available, 6% for not available 2. Laptop 69% for adequately available, 26% for not adequately available, 5% for not available.

The overhead projector has 55% adequately available, 34.0% for not adequately available, 11% for not available. Interactive whiteboard has 65% adequately available, 33% not adequately available, 2% for not available. The public address system has 63% adequately available, 30% not adequately available, 7% for not available. Wireless technology has 25.0% adequately available, 55.0% not adequately available, and 20% not available.

The printer has 72.0% adequately available, 26% not adequately available, and 2% not available. The scanner has 63.0% adequately available, 35% not adequately available, and 2% not available. The projection screen has 54.0% adequately available, 37% not adequately available, and 9% not available. Television has 55.0% adequately available, 36% not adequately available, and 9% not available.

The digital microscope has 29.0% adequately available, 44% not adequately available, and 27.0% not adequately available. The digital camera has 45.0% adequately available, 46% not adequately available and 9.0% not available. Maintenance workshop has 46% adequately available, 50% not adequately available, and 4.0% not available. Spare parts and accessories rooms have 21% adequately available, 65% not adequately available, and 14% not available.

Table 1. Percentage Distribution of Electronic Media Availability and Resources.

No	Note	Not Available		Available Not Adequate		Available and Adequate		Total Frequency	
		Frequency		Frequency		Frequency			
1	Computer Laboratories	1	1.0%	26	26.0%	73	73.0%	100	100.0%
2	Internet Facilities	5	5.0%	44	44.0%	51	51.0%	100	100.0%
3	Email Services	13	13.0%	40	40.0%	47	47.0%	100	100.0%
4	Satellite	21	21.0%	54	54.0%	25	25.0%	100	100.0%
5	Telephone	6	6.0%	27	27.0%	67	67.0%	100	100.0%
6	Laptop	5	5.0%	26	26.0%	69	69.0%	100	100.0%
7	Overhead Projector	11	11.0%	34	34.0%	55	55.0%	100	100.0%
8	Interactive Whiteboard	2	2.0%	33	33.0%	65	65.0%	100	100.0%
9	Public Address System	7	7.0%	30	30.0%	63	63.0%	100	100.0%
10	Wireless Technology	20	20.0%	55	55.0%	25	25.0%	100	100.0%
11	Printer	2	2.0%	26	26.0%	72	72.0%	100	100.0%
12	Scanner	2	2.0%	35	35.0%	63	63.0%	100	100.0%
13	Projector Screen	9	9.0%	37	37.0%	54	54.0%	100	100.0%
14	Television	9	9.0%	36	36.0%	55	55.0%	100	100.0%
15	Digital Microscope	27	27.0%	44	44.0%	29	29.0%	100	100.0%
16	Digital Camera	9	9.0%	46	46.0%	45	45.0%	100	100.0%
17	Maintenance Workshop	4	4.0%	50	50.0%	46	46.0%	100	100.0%
18	Spare Parts and Accessories	14	14.0%	65	65.0%	21	21.0%	100	100.0%

The result obtained from this study indicated that some electronic media facilities were available and adequate, some were available but not adequate while others were not available at all.

Electronic media are seen to be an instrument that facilitates learning and enhances learning (Bakar *et al.*, 2020; Jacobsen & Forste, 2011). It is of note that lecturers of nowadays know about electronic media facilities, how to create using electronic media new learning environment and are also concerned about the change that is expected in the teaching (teachers becoming collaborators) and are still doing their best to be more updated about the effective use of ICT.

4. CONCLUSION

The effective utilization of electronic media in lecture preparation and presentation, instructional delivery, individualized learning, as well as collaboration and evaluation of learning will significantly be of great benefit to our society if electronic media facilities can be available for teaching. From the data analysis result in chapter four, it could be concluded that

electronic media facilities and resources are available but not adequately used. It can be deduced that if electronic media facilities can be integrated into the school curriculum, preparations must be made available by lecturers at every education level. This showed that there is a need to facilitate the use of electronic media in teaching and learning and the need for lecturers to develop in their students a critical awareness of electronic media applications.

5. AUTHOR'S NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

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