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African Journal of Educational Management, Teaching and Entrepreneurship Studies
VOL.14 (2), January-April, 2025 https://ajemates.org

UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGY FACILITIES FOR TEACHING BUSINESS EDUCATION COURSES AND ACADEMIC PERFORMANCE OF STUDENTS IN COLLEGES OF EDUCATION IN DELTA STATE NIGERIA

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ABSTRACT

The study assessed utilization of information and communication technology facilities for teaching business education courses and academic performance of students in Colleges of Education in Delta State. Two research questions and two null hypotheses were raised in line with the purpose to guide the study. The study adopted survey research design. The population of the study comprised 123 Business Education lecturers in Colleges of Education in Delta State. The entire population of 123 Business Education lecturers was used as respondents for the study. The instrument for data collection was a structured questionnaire titled Information and Communication Technology Usage for Teaching Business Education Questionnaire (ICTFUTBEQ), it was validated by two experts from School of Secondary Education (Business) and Department of Measurement and Evaluation, Federal College of Education (Technical), Asaba. Spearman's Rank Correlation was used to determine the reliability of the instrument which yielded a reliability coefficient of 0.89. Validated copies of the questionnaires were distributed to Business Educators by the researchers. 123 was administered and retrieved because as at the time of administration, some respondents could not be reached. Data collected were analyzed using descriptive statistics of mean and standard deviation for the research questions while the hypotheses was tested using t-test at 0.05 level of significance. Findings revealed that business educators do not use computer for teaching Business Education courses in Colleges of Education in Delta State. There is significant difference in the mean rating between male and female business educators on the use computer for teaching Business Education courses in Colleges of Education

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in Delta State among others. It was recommended that business education lecturers/teachers should try as much as possible to make effective use of available computer facilities and improvise were necessary. Also, business education lecturers should endeavour to update their knowledge and skills in the use of computer facilities for effective teaching of business education courses.

Keywords: Utilization; Information and Communication Technology; Facilities; Business Education; Academic Performance; Colleges of Education

Introduction

In recent times, there have been intense global campaigns for the introduction of Information and Communications Technology (ICT) in education. ICT stands for information and communication technologies. ICT refers to technologies that provide access to information through communications. It is similar to information technology (IT), but primarily focused on communications technologies. This includes the internet, wireless network, cell phones and other communications medium". In the past few decades information and communications technologies have provided to society with vast array of a new communication capabilities (Balash, Yong & Bin-Abu, 2018).

It was on the basis of this that Abdulla Al-Hawaj and Twizell, (2016) observed that the use of ICT in teaching is critical to make learners learn better and teachers to teach well. It ensures transactional instructional communication where the teacher manages the human materials, time and space to make sure that instructional conditions help in drawing student's attention to stimulation and recall stimulus thereby improving performance (AlAmmary, 2017). No doubt ICT enable students to learn faster, remember longer, gain more accurate information and receive and understand delicate concepts. The use of ICT in schools includes computers, internet facilities, audio-visual devices, multimedia projectors etc. Computers and internet facilities are now in place in many institutions of learning. It is expected that educators will see ICT as a major teaching and learning device across all educational institutions. Kosoko-Oyedeko and Tella (2018) have shown that with the power of interactivity and participation of multimedia and communication devices, the computer proves an excellent tool for the teaching and learning of school subjects.

Onwuka (2015) opined that teaching is a process of making impression on passive students, hammering in the facts. The preoccupation of teachers involved in this method is to handover to the students whatever the teachers themselves received from others. Teaching is an attempt to bring about desirable changes in learner behaviour and reflects the expected behaviour needed in improving on the learner and the society where he lives. Teaching is sometimes instructing, explaining or telling (Abdulla Al-Hawaj&Twizell, 2016).

Ajayi (2010) opined that teaching of business courses had gone beyond the teacher standing in front of a group of students and disseminating information to them without the students' adequate participation. The researchers posit that with the aid of ICT, teachers can take students beyond traditional limits, ensure their adequate participation in teaching and learning process and create vital environments to experiment and explore this new development is a strong indication that the era of teaching without ICT skills are gone. Any teacher with adequate and professional skills in ICT utilization will definitely have his students perform better in classroom learning. Ajayi (2010) further explained that the use of these facilities involves various methods which include systematized feedback, computer-based operation/network, audio-conferencing, video conferencing, internet/worldwide website and computer assisted instruction. It must however be stressed that the effective use of the various methods of the ICT in teaching and learning depends on the availability of these facilities and teachers' competence in using them. Information and Communications Technologies is now widely utilized in teaching and learning of business education but where it is deployed, it has tended to supplement rather than displace traditional approaches to teaching and learning Adomi, (2016).

With the emergences of Information and Communications Technology in Business Education in Colleges of Education, teaching and learning has changed from traditional chalkboard to electronic learning requiring such skills as internet browsing, Microsoft word, power point, Microsoft excel and teleconferencing gadgets from teachers and students. Nwosu (2016) specifies the benefits of ICT skills to business education students to cover development of multiple sensory delivery, increased self-expression, active and cooperative learning. A graduate of Business Education from various institutions are supposed to be at the fore front of applying ICT skills in their daily contact which is geared towards preparing them for the place of work and also the classroom. All these therefore form the background to which the study is based on utilization of information and communication technology facilities for teaching business education courses and academic performance of students in Colleges of Education in Delta State.

Statement of the Problems

Application of information and communications technology (ICT) in teaching has given a lot of concern among thepolicy makers and experts and has become blight to national development especially ineducation sector in Nigeria. Business Education lecturers are expected to combine information and communications technology in the teaching and learning process, they ought to use technology so that it supports instruction and enables learners to use technology as an important tool to meet their information and learning needs but this expectation has not be met among the tertiary institutions where business education is

taught in Nigeria. Even with the incorporation of ICT into the curriculum of Business Education, the lecturers are still unable to use ICT facilities in teaching. Despite the introduction of the new teaching method that are ICT based, most lecturers prefer to use the traditional method in teaching and learning Business Education such as chalk board, outdated equipment for teaching skills acquisition courses such as typewriter. A lot of reasons were advanced by lecturers and students for still maintaining the old method of teaching and learning and this becomes a problem in the application of ICT in teaching and learning in Business Education (Ezekoka & Okoli, 2017).

It was observed by Adomi (2016) that the incorporation of ICT in teaching Business Education has not made any much impact due to unavailability of the relevant ICT facilities for teaching purpose, the ICT facilities provided cannot go round the lecturers due to their unavailability which is making the lecturers to be deficient in using the ICT facilities, lack of adequate ICT facilities also tends to hamper effective teaching and learning in Business Education. It was also observed that some lecturers are not skilled in using ICT in teaching their students as such prefer to stick to the traditional method of teaching. Although, there are numerous investigation concerning ICT facilities usage for teaching business education in Nigeria but there is no known study concerning Colleges of Education in Delta State. Hence this necessitated this study, utilization of information and communication technology facilities for teaching business education courses and academic performance of students in Colleges of Education in Delta State.

Purpose of the Study

The main purpose of this study was utilization of information and communication technology facilities for teaching business education courses and academic performance of students in Colleges of Education in Delta State. Specifically, the study sought to;

1. determine the extent to which lecturers use computer practical application for teaching Business Education courses in Colleges of Education in Delta State.
2. examine the extent to which lecturers use computer projector for teaching Business Education courses in Colleges of Education in Delta State.

Research Questions

The following research questions guided the study;

1. To what extent do lecturers use computer practical application for teaching Business Education courses in Colleges of Education in Delta State?
2. To what extent do lecturers use computer projector for teaching Business Education courses in Colleges of Education in Delta State?

Research Hypotheses

The following hypotheses was tested at 0.05 level of significance

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1. There is no significant difference in the mean rating between male and female business educators on the use computer practical application for teaching Business Education courses in Colleges of Education in Delta State.
2. There is no significant difference in the mean rating between of male and female business educators on the use computer projector for teaching Business Education courses in Colleges of Education in Delta State.

Methodology

Survey research design was adopted as a plan of action in the conduct of the study. According to Fowler (2012) survey design is a research design that is used to collect detailed functional information that describes the existing phenomena with focus on people, their belief, behaviors and inter-relation of sociological and physiological variable. The adoption of this design was informed by its efficient way of collecting information about the population of interest, ease of administration of research instrument (questionnaire), which can be tailored to the problem the researchers is studying. The population of the study comprised of 123 Business Education lecturers in Colleges of Education in Delta State.The population of this study is sizeable and manageable, thus, there was no sample for the study. This means that, the entire population of 123 Business Education lecturers was used as respondents for the study.

A structured questionnaire titled "Information and Communication Technology Usage for Teaching Business Education Questionnaire (ICTFUTBEQ)" was used to get information from the respondents. The questionnaire was made up of two parts, A and B. Part A was used to collect information on personal data of the respondents while part B contained items for answering the two research questions. The questionnaire was structured on a four-point scale. The numerical value of the scale points (Responses modes) is as follows: Very High Extent (VHE) = 4 points, High Extent (HE) = 3 points, Low Extent (LE) = 2 points and Very Low Extent (VLE) = 1 point. The questionnaire was validated by two experts from School of Secondary Education (Business) and one from Department of Measurement and Evaluation, Federal College of Education (Technical), Asaba. They were requested by the researcher to validate the items for appropriateness and ambiguity and based on their recommendations; necessary corrections were made on the instrument to bring it to its final state. In order to establish the reliability of the instrument, a test-retest method was used to administer the instrument twice to 10 Business Education lecturers in Federal College of Education (Technical), Umunze, Anambra State, who are not part of the study. Spearman's Rank Correlation was used to analyze the data retrieved. The coefficient released was determine if the instrument is reliable or not.

Validated copies of the questionnaires were distributed by the researchers to Business Educators. The data

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collected from the respondents was used for data analysis. Data collected from respondents was analyzed using, mean and standard deviation. The decision rule for the research questions was based on the mean score, which was slated on 2.50. Therefore, any mean scores of the respondents' statements which rates 2.50 and above was regarded as high extent while means scores of the respondents' statement which rates below 2.50 was regarded as low extent. The hypothesis was tested using t-test at 0.05 level of significance. Where the P-value is greater than 0.05 the hypothesis was accepted but where P-value is less than 0.05 the hypothesis was rejected.

Presentation of Results

This section presents the results and discussion of the findings of the study. The presentation of results was done in line with each of the research questions and hypotheses that guided the study.

Analysis of Data on Research Questions

Research Question 1: To what extent do lecturers use computer practical application for teaching Business Education courses in Colleges of Education in Delta State?

Table1: Mean Scores on extent lecturers use computer practical application for teaching Business Education courses in Colleges of Education **(N = 123)**

S/N	STATEMENTS	$\bar{x}$	S.D	Remarks
1	Business educators use computers for creating and distributing course materials, such as handouts, slides, and study guides, for Business Education courses.	2.71	0.71	High Extent
2	Lecturers use computer simulation in teaching business education courses	1.39	0.74	Low Extent
3	Educators use a computer to assess and grade students' work (e.g., through digital quizzes, assignments, or electronic grading systems) in Business Education courses.	2.39	0.89	Low Extent
4	Business education lecturers incorporate computer-based software (e.g., spreadsheet programs, accounting software) during Business Education lessons.	1.80	0.68	Low Extent
5	Lecturers use video recorders alongside computer system for recording teaching activities in the classroom	1.59	0.71	Low Extent
6	Educators connect projectors to computer system in teaching business education courses	1.32	0.62	Low Extent
7	Business lecturers use CD-ROM, flash drives containing prepared lessons materials for teaching using computer system	1.37	0.79	Low Extent
8	Lecturers use computers to track students' progress and performance (e.g., digital gradebooks, progress reports) in Business Education courses.	1.82	0.91	Low Extent
9	Educators use computers to access online professional development resources (e.g., webinars, online courses, academic articles) to improve teaching of Business Education.	3.01	0.87	High Extent
10	Lecturers use computer to display instructional videos, tutorials, or simulations during my Business Education lessons.	1.91	0.79	Low Extent
	Grand Mean	**1.93**	**0.66**	**Low Extent**

Result presented in Table 1 reveals the extent does lecturers use computer practical application for teaching Business Education courses in Colleges of Education

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in Delta State. The result revealed that the respondents rated items 2, 3, 4, 5, 6, 7, 8 and 10 lesser than the decision-making mean rating score 2.50 this indicated low extent. Items 1and 9 were rated above 2.50 which indicated high extent. Standard deviation scores range between 0.62 to 0.91 were obtained indicating close spread of respondents' opinion ratings. A grand mean score of 1.93 which is below the decision-making mean rating score of 2.50 confirms that respondents rated low extent, this indicated that lecturers do not use computer practical application for teaching Business Education courses in Colleges of Education in Delta State.

Research question 2: To what extent do lecturers use computer projector for teaching Business Education courses in Colleges of Education in Delta State?

Table 2: Mean Scores on extent lecturers use computer projector for teaching Business Education courses in Colleges of Education. **(N = 123)**

S/N	STATEMENTS	$\bar{x}$	S.D	Remarks
21	Lecturers regularly use a computer projector to display lesson slides (e.g., PowerPoint) during my Business Education lectures.	1.90	0.81	Low Extent
23	Business educators use a computer projector to show instructional videos or multimedia content in my Business Education classes.	2.01	0.90	Low Extent
24	Lecturers use a computer projector to display online resources (e.g., websites, online databases) to support teaching in Business Education courses.	2.32	0.79	Low Extent
25	Educators use a computer projector to display charts, graphs, and other visual aids during Business Education lessons.	1.81	0.72	Low Extent
26	Business education lecturers use a computer projector to display real-time data or examples from business software (e.g., spreadsheets, financial reports) during Business Education classes.	2.11	0.87	Low Extent
27	Educators use a computer projector for interactive teaching activities, such as demonstrating software programs or business simulations in my Business Education courses.	1.79	0.69	Low Extent
28	Use of computer projector to showcase case studies, reports, or other business-related documents to enhance learning in Business Education courses.	1.93	0.88	Low Extent
29	Business educators use the computer projector to make my Business Education lessons more interactive and engaging for students.	2.09	0.69	Low Extent
30	Lecturers use computer projector to display the course syllabus, learning objectives, and important announcements in Business Education courses.	2.43	0.98	Low Extent
	Grand Mean	**1.84**	**0.73**	**Low Extent**

Result presented in Table 2 reveals the extent does lecturers use computer projector for teaching Business Education courses in Colleges of Education in Delta State. The result revealed that the respondents rated items 21 to 30 lesser than the decision-making mean rating score 2.50 this indicated low extent. Standard deviation

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scores obtained ranges between 0.69 to 0.98 indicated close spread of respondents' opinion ratings. A grand mean score of 1.84 which is below the decision-making mean rating score of 2.50 confirms that respondents rated low extent, this indicated that lecturers do not use computer projector for teaching Business Education courses in Colleges of Education in Delta State.

The following hypotheses were formulated and tested at .05 probabilities or alpha level.

H0$_1$: There is no significant difference in the mean rating between male and female business educators on the use computer practical application for teaching Business Education courses in Colleges of Education in Delta State.

Test of Hypotheses

Table 3: t-test of independent sample on the use computer practical application for teaching Business Education courses in Colleges of Education in Delta State

Variables	N	Mean	Std. Dev.	Std Error mean	t-value	df	p
Male	53	12.1190	1.86300	.14373			
					2.942	266	.0004
Female	70	11.5300	.94767	0.9477			

From the statistics presented in table 3, it revealed that the male business educators mean is 12.1190 while for the female was 11.5300 and the standard deviation for male is 1.86300 and for female is .94767. The standard error mean for male business educators is .14373 and for female business educators is .09477. The observed t-value is 2.942 and the probability level of significance for the test is 0.004 ($p<0,05$), table value 1.97. This means that the null hypothesis which stated that significant difference in the mean rating between male and female business educators on the use computer for teaching Business Education courses in Colleges of Education in Delta State is rejected. By implication, the test revealed that the respondents disagreed on the use computer for teaching Business Education courses in Colleges of Education in Delta State.

H0$_3$: There is no significant difference in the mean rating between of male and female business educators on the use computer projector for teaching Business Education courses in Colleges of Education in Delta State.

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Table 4: t-test of independent sample on the use computer projector for teaching Business Education courses in Colleges of Education in Delta State

Variables	N	Mean	Std. Dev.	Std Error mean	t-value	df	p
Male	53	12.3751	1.83343	.14145			
					3.280	266	0.001
Female	70	13.1600	1.99352	.19935			

The table 4 result indicated a mean of 12.3751 for male business educators and 13.1600 for female business educators, with a standard deviation of 1.83343 for male and 1.99352 for female. A standard error mean of .14145 for male and .19935 for female. The observed t-value is 3.280 and the probability level of significance for the test is 0.001 ($p<0.05$), t-value of 1.97. This means that the null hypothesis which stated that there is a significant difference in the opinion of male and female business educators on the use computer projector for teaching Business Education courses in Colleges of Education in Delta State is rejected. This implies that the respondents disagreed the use computer projector for teaching Business Education courses in Colleges of Education in Delta State.

Discussion of Findings

Findings from research question one revealed that business educators do not use computer practical application for teaching Business Education courses in Colleges of Education in Delta State. The null hypothesis was rejected, this stated that there is significant difference in the mean rating between male and female business educators on the use computer practical application for teaching Business Education courses in Colleges of Education in Delta State. The finding is in accordance with the statement of Barroso (2019) who stated that from the smartphones in our pockets to the smart devices controlling our appliances at home and everything in between, computer technology is everywhere. It should come as no surprise that the use of computers in education has not been increasing and in many ways has not revolutionized traditional education in Nigeria (Barroso, 2019).

Findings from research question two revealed that business educatorsdo not use computer projector for teaching Business Education courses in Colleges of Education in Delta State. The null hypothesis was rejected, this stated that there is significant difference in the mean rating between male and female business educators on the use computer projector for teaching Business Education courses in Colleges of Education in Delta State. The finding is in line with the statement of Ngozi, Samuel and Ameh (2012) who stated that computer projector is one of the recent innovations in classroom that enables lecturers to display charts, pictures, words etc. the lecturer can use it

effectively in place of the chalk board. In contrary, they posited that lecturers do not generally use a digital projector, in conjunction with a laptop or desktop computer, to project the computer screen image on to a screen or wall.

Conclusion

Based on the findings of the study, it would be concluded that in other to maximize the potentials of ICT in education, it requires that business education lecturers make efficient use of ICT facilities as an instructional tool in teaching business education courses. However, this study finding has revealed that business education lecturers do not make use of computer practical application and computer projector in the course of teaching business education courses. There is the need to improve on the use of ICT facilities not only because ICT brings a new mix of professional and instructional knowledge advantages to teachers, but it is also consistent with the modern education life and global practices.

Recommendations

Based on the findings of the study, the following recommendations are therefore made:

1. Business education lecturers/teachers should try as much as possible to make effective use of available computer facilities and improvise were necessary. Also, business education lecturers should endeavour to update their knowledge and skills in the use of computer facilities for effective teaching of business education courses.
2. The management Colleges of Education should promote the use of e-library facilities by making provision of e-libraries. Also, the available one should be well equipped for effective usage.
3. In-service programmes such as seminars, conferences, in service courses and workshop should be organized by information and communication technology (ICT) literate business educators on regular bases to train and retrain serving business education lecturers on the effective use of computer projectors in teaching business education courses. With the use of projectors, they do not need to write on board, all illustrations will be simulated with the computer.

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