

Extent of Utilization of ICT Resources and its Perceived Contributions to Business Education in Colleges of Education

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Abstract

This study examines the extent of utilization of ICT resources and its perceived contributions to business education in Colleges of Education. Four research questions guided the study. Related literature and some empirical studies were reviewed. The study employed a survey research design. The population consisted of 175 respondents (lecturers and students). A modified 4-point Likert rating scale made up of 47 structure questionnaire items was used in generating data for the study, while the instrument was face validated by some experts. Data collection was analyzed using the statistical mean (\bar{x}) and standard deviation. The finding revealed that business education lecturers and students utilize ICT resources at a small extent in business education programme and business education lecturers and students agreed that ICT utilization contributes at a great extent to growth of business education programme in Colleges of Education. It was recommended among others that University management should make the environment conducive by providing ICT resources for business education programmes to boost students and lecturers utilization for quality teaching and learning and University management should engage, encourage and sponsor their business education lecturers and laboratory technologist for re-training programmes to update their ICT knowledge, skills and competencies to effectively utilize the resources for quality instructional delivery in their programmes.

Keywords: *Utilization, Information, Communication Technology Resources, Business education*

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Background to the Study

Education has for long been recognized as a basic instrument of economic growth, social development and technological advancement of any society or nation. It is in recognition of this fact that government is required to commit immense resources to ensure the provision of education for their citizens and also tailor their policies towards ensuring that it is made accessible to the generality of their citizenry. In today's rapidly evolving educational landscape, it is essential to develop 21st century literacy among students, while also encouraging faculty to adopt and innovate teaching practices that effectively integrate technology. Based on this, highly effective school system and improved students' outcome should be the key objectives of the government and private sector. This is because education of highest quality is the foundation for future of the country. For the progress of a nation and the enrichment of society in general, there is need for quality education. In today's world of technology and global competition, quality education is of utmost importance for societal development, and the future of the nation. Therefore, the skills, knowledge, and values to be imparted in students must be of high quality especially in business education programme.

Business education is education for and about business or training in business skills (Esene, 2012). According to Okoli (2020), business education is that aspect of the total educational programme that provides the knowledge, skills, understanding and attitudes needed to perform effectively in the business world as a producer and/or consumer of goods and services that business offers. Business education is an important part of general education which emphasizes skill acquisition for office use. It is a multi-disciplinary programme that encompasses Accounting, Secretarial Studies now Office Technology and Management (OTM) and Marketing/Distributive education (Okorie, 2020). An individual who receives training in business education can easily develop potentials for entrepreneurship pursuits especially in this era of economic recession and unemployment. The programme is concerned mainly with the development of relevant and saleable skills and knowledge that would enable an individual to function effectively in the world of work.

In order to actualize these lofty objectives of business education towards national, socio-economic growth and development, educational institutions and their systems must function in line with set standards. As a result, a systematic qualitative administration, teaching and learning are required of business education in Nigeria. However, business education being a skill acquiring discipline requires the use of laboratories adequately equipped with information and communication technology resources for practical skills acquisition as well as provision of information and knowledge needed for high quality teacher preparation tantamount to teacher effectiveness in the labour market. Today's labour market demands a quality workforce that can use technology as a means to increase productivity and creativity. This requires networks such as fixed wireless and satellite broadcasting networks, telecommunications and applications like the Internet, Intranet, database management systems and multi-media tools. These skills include identifying reliable sources of information, effectively accessing these sources of

information, synthesizing and communicating such information to colleagues and associates.

Information and Communication Technologies (ICTs) have become key tools and have a revolutionary impact on how people see and live in the world. It has become so important that every country, organization or institution no matter how highly or lowly placed want to identify and embrace ICT. The place of ICTs in education and the world in general cannot be ignored. Modern day business is conducted and facilitated through the use of telephones, fax machines and computer communication networks through the Internet. This phenomenon has given birth to the contemporary e-commerce, e-medicine, e-banking and e-education among others. Bandele (2016) summed up that ICT is a revolution that involves the use of computers, Internet and other telecommunication technology in every aspect of human endeavour. Bandele posited that ICT is simply about sharing and having access to data with ease. It is regarded as super highway through which information is transmitted and shared by the people all over the world.

Information and Communication Technology resources can be described as tools through which people work with the information and communication processing needs of an organization. It encompasses the computer hardware, software; the network and several other devices (video, audio, photography, camera, etc) that convert information (text), images, sound, and motion and so on into common digital form (Vannili, 2015). ICT resources have a wider spectrum of application and utilization with enormous relevance to universities teaching and learning activities.

Utilization of ICT resources in teaching and learning is a good development with tremendous potentials for qualitative teaching and learning output on tertiary education in general and business education in particular. This is evident as the National Policy on Education (FRN, 2014.17) places emphasis on the provision and utilization of information and communication technology (ICT) when it states that “in recognition of the prominent roles of information and communication technology in advancing knowledge and skills necessary for effective functioning in the modern world, there is urgent need to integrate information and communication technology (ICT) into education in Nigeria”. The Federal Ministry of Education (2021) affirmed further that, quality learning outcome depends on the quality of teaching and learning inputs and the qualitative processing of the inputs which among others include the use of ICT facilities for teaching and learning. As Ijaduola (2020) asserted, the efficiency of the product of educational institution is the result of inputs (teachers, equipment, and infrastructural facilities classroom, laboratories, libraries, computers and consumable materials) as well as the process (instructional delivery) such that where the input and process are faulty, the output will be faulty.

Over the years, the challenge in business education programmes in Nigerian tertiary institutions has been the quality of the graduates in relation to employment demands. Despite numerous efforts of relevant stakeholders, criticisms still abound about the extent

to which the graduates satisfy the demands of employers in different organization in the country. In other words, there is no clear evidence that the utilization of ICT has contributed to effective teaching and learning in business education in tertiary institutions in Nigeria generally and Colleges of Education in particular. Arising from the foregoing, this study therefore, determined the extent of utilization of ICT resources and its perceived contributions to business education in Colleges of Education

Statement of the Problem

In developed countries of the world, ICTs have been found to facilitate qualitative teaching and learning in different fields of education. However, the extent to which information and communication technology (ICT) resources are utilized in business education programmes in colleges of education is unclear. Onasanya (2020) noted that when ICT resources are optimally utilized in business education by competent lecturers, qualitative learning outcome in the programme will be guaranteed. It is uninteresting and common to see Nigerian business education graduates enroll in roadside computer centers to acquire ICT skills which ought to have been mastered in their university's days. This why Anoke, (2018) reported that some employers of labour are complaining that business education graduates especially those recruited by local and multi-national private companies could not manipulate basic ICT resources which are fundamental tools of operations in the companies. This may not be unconnected with the reports that ICT resources are not adequately utilized in teaching business education courses in the nation's tertiary institutions. There seems to be a gap in the practical skills especially as regards the ICT resources utilization proficiency in the present teaching of business education courses. Despite the potential benefits of ICT integration, such as enhanced teaching and learning, improved student engagement, and better preparation for the digital workforce, there is a perceived gap in the effective utilization of ICT resources in business education programmes. This gap may be attributed to various factors, including inadequate ICT infrastructure, limited teacher training and support, and insufficient curriculum integration. As a result, the perceived contribution of ICT resources to the effectiveness of business education programmes in colleges of education remains uncertain. Therefore, this study aims to investigate the extent of utilization of ICT resources and its perceived contribution to business education programmes in colleges of education in Delta State.

Purpose of the Study

The purpose of this study was to determine the extent of utilization of ICT resources and its perceived contributions to business education programmes of Colleges of Education. Specifically, the study sought to determine the:

1. Extent to which lecturers utilize ICT resources in instructional delivery in business education programmes in Colleges of Education;
2. Extent to which students utilize ICT resources in business education programmes in Colleges of Education;
3. Extent to which students perceive ICT resources utilization contribute to business education programmes in Colleges of Education;

4. Extent to which lecturers perceive ICT resources utilization contribute to business education programmes in Colleges of Education.

Research Question

The following research questions guided the study:

1. To what extent do students utilize ICT resources in business education programmes in universities in Colleges of Education?
2. To what extent do lecturers utilize ICT resources for instructional delivery in business education programmes in universities in Colleges of Education?
3. To what extent do students perceive ICT resources utilization contribute to business education programmes in universities in Colleges of Education?
4. To what extent do lecturers perceive ICT resources utilization contribute to business education programmes in universities in Colleges of Education?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

1. Lecturers and students do not differ significantly in their mean ratings on the extent of utilization of ICT resources in business education programmes Colleges of Education;
2. Lecturers and students do not differ significantly in their mean ratings on the extent ICT resources utilization contributes to business education programmes in Colleges of Education

Method

This study utilized descriptive survey design. The chosen area for this study is Colleges of Education Ebonyi State. The population for this study consisted of 175 (13 lecturers and 162 students) of business education from Colleges of Education. There is no sample since the population was manageable. The instrument for data collection in this study was a questionnaire. The instrument was subjected to face validation to project supervisor and one expert in Business Education. The instrument was administered personally by the researcher with the help of non-academic staff and the course Reps we used for the study. Descriptive and inferential statistics were adopted for data analysis. Mean and standard deviation were used to analyze data to answer the research questions and determine the closeness of the respondents mean.

Results

Research Questions One: To what extent do lecturers utilize ICT resources in instructional delivery in business education programmes in Colleges of Education?

Items 1-14 on the questionnaire were designed to get information from the respondents on the research question. The results are shown in table 1 below

Table 1: Mean Responses on Extent Lecturers Utilize ICT Resources in Instructional Delivery in Business Education Programmes

S/N	Items on utilization of ICT resources	x	SD	Remark
1	Power point to plan for teaching	2.04	1.12	Small Extent
2	Over head projector for delivering lectures	2.00	0.77	Small Extent
3	Internet to search for course materials for teaching	3.46	0.96	Moderate Extent
4	E-mail to assess students work/assignment	2.65	1.10	Moderate Extent
5	Internet for tutorials	2.05	1.09	Small Extent
6	Playlist aggregated objects and collection	2.38	1.01	Small Extent
7	Annotation on audio visual with story player, etc	2.31	1.25	Small Extent
8	Animations in flash to others listed	2.40	1.24	Small Extent
9	Facsimile for lecturer-student classroom interaction	2.38	1.07	Small Extent
10	Multimedia facilities in classroom management and control	2.42	0.96	Small Extent
11	Film strip application as business education teaching aid	2.36	1.13	Small Extent
12	Multimedia projectors	2.32	1.16	Small Extent
13	Interactive whiteboards	3.09	1.07	Moderate Extent
14	Electronic organizer for information processing	2.48	0.87	Small Extent
Cluster Mean		2.45	1.06	Small Extent

Data in Table 1 show that only three out of the fourteen ICT resources listed (No 3, 4 and 13) with mean ratings of 3.46, 2.65 and 3.09 are moderately utilized by lecturers in business education. The remaining eleven ICT resources with mean ratings ranging from 2.00 to 2.48 are utilized to a small extent in business education in the Colleges of Education. The standard deviation for all the items ranges between 0.77-1.25 this implies that the respondents were far apart in their opinion.

Research Questions Two: To what extent do students utilize ICT resources in instructional delivery in business education programmes in Colleges of Education??
Items 1-10 on the questionnaire were designed to get information from the respondents on the research question. The results are shown in table 2 below

Table 2: Mean Responses on students Utilize ICT Resources in Instructional Delivery in Business Education Programmes

S/N	Items on Utilization of ICT Resources	x	SD	Remark
1	Word processor for typing assignment	3.84	0.72	Great Extent
2	Spreadsheet for accounting calculations	1.06	0.63	Very Small Extent
3	PowerPoint for presentation	1.24	0.60	Very Small Extent
4	E-mail for submitting assignment and communication with lecturers	2.84	0.87	Moderate Extent
5	Software for learning keyboarding	3.54	0.71	Great Extent
6	Overhead projector for presentation and micro teaching	1.26	0.67	Very Small Extent
7	Multimedia projector for presentation and micro teaching	1.28	0.66	Very Small Extent
8	Social media for tutorial and communication	3.56	0.57	Great Extent
9	Internet to search for course materials	3.75	0.77	Great extent
10	Interactive whiteboard for presentation	1.04	0.65	Very Small Extent
	Cluster Mean	2.34	0.69	Moderate Extent

Data in Table 2 show that only four out of the ten ICT resources listed (No 1, 5, 8 and 9) with mean ratings of 3.84, 3.54, 3.56 and 3.75 are utilized by students in business education to a great extent. Five ICT resources with mean ratings ranging from 1.04 to 1.28 are utilized at a very small extent in business education while one item (No 4) is utilized at a moderate extent by students in business education in the Colleges of Education. The standard deviations for all the items are within the same range showing that the respondents were homogeneous in their opinion.

Research Question Three: To what extent do lecturers perceive ICT resources utilization contribute to business education programmes in universities in Colleges of Education?

Analysis of data in respect of research question 3 is presented in Table 3

Table 3: Mean Rating and Standard Deviation of Students' Perceptions on the Extent to which ICT Resources Contribute to Business Education Programmes

S/N	Items on lecturers' perception on contribution of ICT resources	x	SD	Remark
1	Enhances productivity in business education	4.26	0.87	Great Extent
2	Improves teaching effectiveness	4.07	0.68	Great Extent
3	Increases productivity and professional growth of lecturers	4.06	0.58	Great Extent
4	Promotes effective evaluation in business education	4.24	0.34	Great Extent
5	Facilitates decision making and problem solving	3.92	0.62	Great Extent
6	Facilitates collaborative efforts for quality assurance	4.24	0.69	Great Extent
7	Promotes creativity among lecturers and students	3.92	0.79	Great Extent
8	Improves employability potentials of students	4.15	0.78	Great Extent
9	Enhances the administration in the programme	3.96	0.84	Great Extent
10	Enhances the quality of research	3.86	0.82	Great Extent
11	Enhances global competitiveness of the graduates	4.15	0.75	Great Extent
12	Enhances students' practical skills acquisition	4.02	0.67	Great Extent
Cluster Mean		4.07	0.70	Great Extent

Data in Table 3 show that all the twelve items listed with mean ratings ranging from 3.86-4.26 with a cluster mean of 4.07. This shows that the lecturers are of the opinion that utilization of ICT contributes to business education programme to a great extent. The standard deviations for all the items are within the same range showing that the respondents were homogeneous in their opinions.

Research Question Four: To what extent do students perceive ICT resources utilization contribute to business education programmes in universities in Colleges of Education? Analysis of data in respect of research question 3 is presented in Table 4

Table 4: Mean Rating and Standard Deviation of Students' Perceptions on the Extent to which ICT Resources Contribute to Business Education Programmes

S/N	Items on student's perception on contribution of ICT resources	x	SD	Remark
1	Enhances productivity in business education	3.59	0.86	Great Extent
2	Improves teaching effectiveness	4.06	0.68	Great Extent
3	Increases productivity and professional growth of lecturers	4.00	0.57	Great Extent
4	Promotes effective evaluation in business education	3.99	0.34	Great Extent
5	Facilitates decision making and problem solving	3.92	0.62	Great Extent
6	Facilitates collaborative efforts for quality assurance	4.13	0.69	Great Extent
7	Promotes creativity among lecturers and students	3.92	0.79	Great Extent
8	Improves employability potentials of students	4.14	0.77	Great Extent
9	Enhances the administration in the programme	3.96	0.84	Great Extent
10	Enhances the quality of research	3.86	0.81	Great Extent
11	Enhances global competitiveness of the graduates	4.14	0.75	Great Extent
12	Enhances students' practical skills acquisition	4.01	0.67	Great Extent
Cluster Mean		3.98	0.69	Great Extent

Result in Table 4 show that all the twelve items listed with mean ratings ranging from 3.59- 4.14 with a cluster mean of 3.98. This shows that the students are of the opinion that utilization of ICT contributes to quality of business education programme to a great extent. The standard deviations for all the items are within the same range showing that the respondents were homogeneous in their opinions

Hypotheses

Lecturers and students do not differ significantly in their mean ratings on the extent of utilization of ICT resources in business education programmes in universities in South-West Nigeria. Data analysis for null hypothesis 2 is presented in Table 5.

Table 5: Summary of z-test analysis for the difference between the mean ratings of lecturers and students on the extent they utilize ICT resources in business education

Gender	N	Mean	SD	DF	Z-cal.	Z-crit.	Remarks
Lecturers	13	38.08	10.96	173	2.68	1.96	S
Students	162	37.64	10.81				

Result in Table 5 show a calculated z-value of 2.68 which is greater than z-critical value of 1.96 at 173 degree of freedom and 0.05 level of significance. This means that respondents differ significantly in their mean ratings on the extent they utilize ICT resources in business education in colleges of education. The null hypothesis was, therefore, not upheld. Lecturers and students do not differ significantly in their mean ratings on the extent ICT resources utilization contributes to business education programmes in Colleges of Education

Table 6: Summary of z-test analysis of the difference between the mean ratings of lecturers and students on the extent ICT resources utilization contributes to business education

Gender	N	Mean	SD	DF	Z-cal.	Z-crit.	Remarks
Lecturers	13	38.08	10.96	173	2.68	1.96	S
Students	162	37.64	10.81				

Result in Table 6 show a calculated z-value of 0.54 which is less than z-critical value of 1.96 at 173 degree of freedom and 0.05 level of significance. This means that respondents did not differ significantly in their mean ratings on the extent ICT utilization contributes to quality of business education programme in colleges of education. The null hypothesis was, therefore, upheld.

Discussion

Findings of the study showed that business education students and lecturers in Colleges of Education utilize ICT resources at a small extent as shown by cluster mean. This finding is in consonance with that of Okeke, Ezenwafor and Umoru (2023) which stated that university lecturers' utilization of ICT facilities for quality instructional delivery is

significantly low. Also, finding of Akuegwe, Ntukidem, Ntukidem and Jaja (2021) revealed that extent of ICT utilization for students' learning in Nigerian tertiary institutions is low. The finding also agreed with the report of Okolocha and Nwadiani (2015) that ICT resources are rarely utilized for teaching business education courses in both Colleges of Education and Universities in South-South Nigeria.

Findings of the study showed that business education students in Colleges of Education utilize ICT resources at a small extent. This finding buttressed the assertion of Okeke (2018) that although all tertiary institutions have made ICT literacy compulsory for lecturers and students, many institutions appear not to reap the potential of ICT on students learning. Meanwhile, students' and lecturers' moderate utilization of some ICT resources could be as a result of their self provision and private use of some of the ICT resources for learning, teaching and research. Supporting this, Akpan (2018) reported that majority of university students now have their personal laptop connected to the internet through the use of their personal modems with which they can access information, communicate quickly with both students and colleagues and also keep track of students records. Based on the findings low utilization of ICT resources could also be attributed to low level of ICT literacy among tertiary institution lecturers, poor funding by government, limited availability of ICT resources, epileptic power supply, time constraint and management attitude.

Findings of the study indicated that ICT resources utilization contribute to business education programmes in Colleges of Education at great extent as perceived by students and lecturers. This finding is in consonance with the finding of Fetherson in Tella (2021) that integration of ICT into curriculum package for teaching and learning yielded a positive result for both lecturers and students. Similarly, this result confirms the intention of government for integrating ICT into the curriculum of tertiary institution because it enhances teaching and learning in different ways. ICT based teaching and learning makes teaching easy and learning interesting. ICT provides activity-based learning whereby students fully involve in teaching/learning process (Tella, 2021). In this technological era, the role of ICT in enhancing teaching and learning cannot be overemphasized which is reflected in the respondents' mean rating on extent ICT contributes to business education.

Findings of the study indicated that ICT resources utilization contribute to business education programmes in Colleges of Education at great extent as perceived by students. This finding agrees with the findings of Ezeani and Akpotohwo (2018) that the role of ICT facilities in the teaching and learning of accounting education is of great extent. This result confirms the intention of government for integrating ICT into the curriculum of tertiary institution because it enhances teaching and learning in different ways. ICT based teaching and learning makes teaching easy and learning interesting. ICT provides activity-based learning whereby putting students fully involve in teaching/learning process (Tella, 2021). In this technological era, the role of ICT in enhancing teaching and learning cannot be overemphasized which is reflected in the respondents' mean rating on extent ICT contributes to business education.

Conclusion

Based on the findings of this study, it is concluded that the extent of utilization of ICT resources by students and lecturers is low because they lack relevant competencies for utilizing ICT resources. The fact that the minimal utilization was perceived by both lecturers and students to contribute to business education programmes of universities in South-West Nigeria. This means that if the lecturers and students adequately possess competencies for utilizing the resources, the quality of both the programmes and product will greatly improve.

Implications of the Study

The findings in this research work revealed that ICT resources utilization by students and lecturers was at a small extent, meaning that qualitative teaching and learning in Business Education programme of universities and Colleges of Education is not guaranteed. The graduates can hardly be adequately equipped with relevant ICT skills and knowledge for success in employment and competitiveness in the global workplace of the current technological era.

Besides, the state of our educational sector is nothing to be proud of due to low budgetary allocation to the sector which is less than 10 percent. This has led to inadequate provision of instructional facilities which ought to promote qualitative delivery of instruction, knowledge and skills to the students. Regrettably, the Nigerian budgetary allocation over the last five decades has been abysmally low and has become a serious source of concern. Despite the fact that UNESCO has recommended that countries devote at least 26% of their annual budgets to education. This underscores the importance attached to education in developing and transforming a society.

Lastly, the intention of the Federal and State Government was to provide facilities that would promote ICT use and knowledge across all levels of education. Although this is laudable, there is no evidence yet of workable, legally approved ICT framework for the sector. In these circumstances, implementation processes would definitely be lopsided, and governed by nepotism, tribalism, and political undertones.

Recommendations

Based on the findings, conclusions and implications of this study, the following recommendations are made:

1. Colleges of Education management should make the environment conducive by providing ICT resources for business education programme to boost students and lecturer's utilization for quality teaching and learning.
2. Colleges of Education management should engage, encourage and sponsor their business education lecturers and laboratory technologist for re-training programmes to update their ICT knowledge, skills and competencies to effectively utilize the resources for quality instructional delivery in their programme.
3. School management should enter into partnership with ICT manufacturing organizations to assist in improving the supply of the resources for their academic

- programmes towards qualitative teaching and learning process.
4. Management of Colleges of Education should develop sustainable preventive and corrective maintenance culture by servicing and repairing the available ICT resources for optimal utilization by lecturers and students.
 5. Government at the Federal and State levels should prioritize the funding of education sector to meet up with the recommendation of UNESCO and ensure adequate procurement of ICT resources for effective educational activities in universities.
 6. Government should make stringent policies to enforce and strengthen utilization of ICT resources to support learning and other programmes of universities to meet global standard of the 21st century.

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