

## INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) CHALLENGES ENCOUNTERED IN TEACHING BUSINESS EDUCATION IN RIVERS STATE TERTIARY INSTITUTIONS

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### ABSTRACT

*The study examined the Information and Communication Technology (ICT) challenges encountered in teaching business education in Rivers State tertiary institutions. The research adopted a descriptive survey design. Two research questions and two hypotheses were posed to guide the study. The population for the study was 99 Business Education lecturers and the sample size was 70 Business Education lecturers that was randomly selected from three selected tertiary institutions in Rivers State, namely; Rivers State University of Science and Technology Port Harcourt (RSUST), Ignatius Ajuru University of Education (IAUOE) and Federal College of Education (Technical) Omoku (FCET). The Instrument used for data collection was a structured questionnaire titled "ICT Challenges in Teaching Business Education Questionnaire" (ICTBEQ). The reliability of the research instrument was obtained using test-retest method, the Pearson Product Moment Correlation coefficient of .87 was obtained. The instrument was validated by two experts from the department of business education, Rivers State University of Science and Technology. All 70 copies of the questionnaire were retrieved and analyzed using mean for the research questions and analysis of variance (ANOVA) for the hypothesis at .05 level of significance. The results obtained indicated that business education lecturers are yet to fully apply ICT facilities in teaching and this is as a result of the challenges confronting its application. Thus, it is required that both government and relevant stakeholders must come together to put in place the necessary ICT facilities in order to improve its use in teaching business education.*

**Keywords:** *Information and Communication Technology, Teaching, Business Education*

### INTRODUCTION

Business Education is a field of study in tertiary institutions; intended to provide learning situations for skill acquisition among students who could apply such skills in their occupational choice, managing personal or group businesses, for personal living and for the ultimate growth and development of the economy of the nation. According to Ugwoke (2011), Business education is work-focused, skill-based, result-oriented and technology-based. The American Vocational Association (AVA) in Osuala (2009), views business education as a programme of instruction which consists of two parts: (1) Office Education; a vocational education programme for office careers through initial, refresher and upgrading education leading to employability and advancement in office occupation, and (2) General Business Education; a programme to provide students with information and competencies which are needed by all in managing personal and business affairs and in using the services of the business world. The importance of Business Education cannot be overemphasized,

considering the growing trend in unemployment and the need for our teeming youths to be equipped with necessary skills that would make them self-reliant and sustainable. Thus, Osuala (2009) asserts that the growing need for business knowledge has continued to expand and increase from the era of industrial revolution in western world and indigenization policy. However, Business Education is increasingly needed to fill the gap created by unemployment. It is necessary to increase the skills of undergraduates in our tertiary institutions in the bid to reduce the alarming unemployment rate in the country. Consequently, business education courses in tertiary institutions are organized with different but related curriculum. In the colleges of education it is offered as two options; accounting education and Office Technology and Management (OTM). In the polytechnic, business education is offered as Office Technology and Management (OTM). While in the universities, business education options offered however indicate the diversity of operation in different universities that offers business education. Thus, it can be deduced that the design of business education curriculum in the universities is dependent on institutional goals and objectives as well as the background or affiliation of curriculum designers or depending on the nomenclature of the university involved (Koko, 2010). The options include; Accounting Education, Office Education (Secretarial Education), Management Education, Marketing/Distributive Education and computer Education. The effective/efficient implementation of the business education programme requires competent and skilled lecturers as well as sophisticated methods of delivery. Hence, the need for ICT tools in teaching Business Education is pertinent. Accordingly, Ajuzie (2013) asserts that ICT provides the array of powerful tools that may help in transforming the present isolated, teacher-centred and text-bound classrooms into rich, student-focused, interactive knowledge environment. Information and communication technology (ICT) is imperative and its revolutionary impact on how individual's view the world and exist is paramount. Appah and Emeh (2011) viewed ICT as the combination of computing, telecommunication and video techniques for the purpose of acquiring, processing, storing and disseminating vocal, pictorial, textural and numerical information. Today, the place of ICT` in education and the world in general cannot be under- mined. Modern day businesses are 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-teaching, e-assessment, e-government, e-banking among others. According to Bandele (2006), ICT is a revolution that involves the use of computers, internet and other telecommunication technology in every aspect of human endeavour. Also, Agbatogun, Ajelabi, Oyewusi & Inegbedion (2011) asserts that technology has been a significant tool in almost all human endeavours. Accordingly, Ubulom, Enyiket and Onukwe (2011) assert that the impact of ICT is becoming more pronounced worldwide. Such that rarely is anything mentioned in any area of human endeavours without reference to this type of technology. The success of any programme is a function of the availability of resources to carry-out the programme. ICT is said to help expand access to education, strengthen the relevance of education to the increasingly digital work place, and raise educational quality, among others, helping to make teaching and learning an engaging, active process connected to real life (Ike, Iwu & Chimezie, 2006). Its application in business education is essential as it equips lecturers to smoothly transfer knowledge that would enable its recipients to adapt to the changing world of work. It has been observed that despite the wide spread campaign of e-Education and the proclamation of Rivers State University of Science and Technology (RSUST) as an e-University by the immediate past Vice Chancellor, Professor B. B. Fakae; the delivery method in Business Education in RSUST and its counterpart tertiary institutions Ignatius Ajuru University of Education (IAUOC) and Federal College of Education (Technical), Omoku is still traditional with very minimal application of ICT in teaching. It also involves

the face- to- face approach to teaching and learning where the teacher sees himself as the centre point of teaching (Akude, 2004). Furthermore, it is observed that many lecturers of Business Education are yet to fully employ ICT for teaching even when their competencies in ICT is not in doubt.

### **PURPOSE OF THE STUDY**

The purpose of this study was to investigate the challenges encountered by lecturers of Rivers State tertiary institutions in teaching Business Education.

Specifically the study sought to:

1. Determine the administrative challenges of ICT in teaching business education in Rivers State tertiary institutions.
2. Determine the technical challenges of ICT in teaching business education in Rivers State tertiary institutions.

### **RESEARCH QUESTIONS**

The research questions of this study were as follows:

1. What are the administrative challenges of ICT in the teaching of Business Education in Rivers State tertiary institution?
2. What are the technical challenges of ICT in the teaching of Business Education in Rivers State tertiary institutions?

### **HYPOTHESES**

The following null hypotheses were tested:

**H<sub>01</sub>:** There is no significant difference in the mean responses of the three respondents group on the administrative challenges of ICT in teaching Business Education based on their institutions.

**H<sub>02</sub>:** There is no significant difference in the mean responses of the three respondents group on the technical challenges of ICT in teaching Business Education based on their institutions.

### **METHODOLOGY**

The research designed used in conducting the study was descriptive survey. This design involves the collection of data to objectively describe existing phenomena from a sample. Applying random sampling ; the population for this study consist of 99 lecturers from the department of business education from three selected tertiary institutions in Rivers State, namely, Rivers State University of Science and Technology Port Harcourt (RSUST), Ignatius Ajuru University of Education (IAUOE) and Federal College of Education (Technical) Omoku (FCET) . The sample size for the study was drawn using random sampling to select 70 business education lecturers from the three institutions. The entire questionnaires distributed were retrieved accordingly and the study used both secondary and primary data. The former was extracted from documented facts (review of literatures), while the later was collected using a structured questionnaire titled “ICT Challenges in Teaching Business Education Questionnaire” (ICTBEQ). The instrument provided response to the two research questions with 16 Items; Item 1-7 answering research question one and 8-16 answering research question two in a 5-point rating scale weighted as “Strongly Agree” (SA) – 5 points, “Agree” (A) – 4 points, “Undecided” (U) – 3 points, “Disagree” (D) – 2 points and

“Strongly Disagree” (DS) )– 1 point. To establish the validity of the instrument, the questionnaire was subjected to face validity by two experts from the Department of Business Education and one from Measurement and Evaluation all of Faculty of Technical and Science Education in Rivers State University of Science and Technology. To ensure the consistency of the instrument, the test-retest method of reliability at an interval of 14days was adopted. The Pearson product moment correlation was used to process the result. A reliability coefficient of .87 was obtained. The researchers administered the questionnaires personally to the respondents in the three institutions. Data analysis was done using the mean to analyze the research questions while analysis of variance (ANOVA) was used to test the hypothesis. The mean was obtained by the summation of all responses as assigned to a rating scale in an item divided by the total number of responses:  $5+4+3+2+1/5 = 3.00$ . The mean score of 3.00 and above was accepted, while those below 3.00 were rejected. The decision rule for the f-value is: If the f-calculated is greater than the f-critical, the null hypothesis is rejected but accepted if the f-calculated is less than f-critical at .05 level of significance, this is employed thus;  $f = MSB/MSW$ .

**Table1. Administration and Retrieval of Instrument**

<i>S/N</i>	<i>NAME OF INSTITUTION</i>	<i>NO. ADMINISTERED</i>	<i>NO. RETRIEVED</i>
1	RSUST	11	11
2	IAUOE	31	31
3	FCE(T)	28	28
	<i>TOTAL</i>	70	70

**RESULTS**

**Table 2. Mean Ratings on the administrative challenges of ICT in teaching business education**

<i>S/N</i>	<i>STATEMENTS</i>	<i>RSUST (X1)</i>	<i>IAUOE (X2)</i>	<i>FCE(T) (X3)</i>	<i>TOTAL X1+X2+X3</i>	<i>MEAN</i>	<i>DECISION</i>
1	Bureaucracy in decision making.	3.09	3.43	3.39	9.91	3.30	Accepted
2	Inadequate allocation of ICT facilities.	3.18	2.56	2.75	8.49	2.83	Rejected
3	Poor funding of the programme.	3.36	3.48	3.39	10.23	3.41	Accepted
4	Poor ICT competencies among lecturers.	2.9	3.26	3.39	8.74	2.91	Rejected
5	No adequate provision for training and retraining.	3.18	3.22	2.4	8.8	2.93	Rejected
6	Poor sponsorship by government, school management and stakeholders.	3.09	3.25	3.43	9.77	3.26	Accepted
7	Poor interest in the introduction of ICT.	1.55	1.94	1.71	5.2	1.73	Rejected
	<i>GRAND MEAN</i>					2.91	Rejected

Source: Survey Data, 2015.

The data in Table 2 shows that items 1, 3 and 6 with varying mean scores of 3.30, 3.41, and 3.26 were accepted, while items 2, 4, 5, and 7 with mean values of 2.83, 2.91, 2.93 and 1.73 were rejected. Consequently, the table further revealed a grand mean of 2.91.

**Table 3. Mean ratings on the technical challenges of ICT in the teaching of business education**

S/N	STATEMENTS	RSUST (X1)	IAUOE (X2)	FCE(T) (X3)	TOTAL X1+X2+X3	MEAN	DECISION
8	Poorly equipped ICT centres/laboratories.	3.82	4	3.75	11.57	3.86	Accepted
9	Poor electricity supply affects the use of ICT facilities.	3.5	3.71	2.79	10	3.33	Accepted
10	Absence of technical support staff.	1.8	2.98	2.89	7.67	2.56	Rejected
11	Insufficient time due to workload.	2.09	3.52	3.07	8.68	2.89	Rejected
12	Presence of non ICT compliant/friendly lecture halls.	3.36	3.42	4	10.78	3.59	Accepted
13	Poor maintenance practice.	1.73	3.26	3.71	8.7	2.90	Rejected
14	Poor network connections.	3.91	4	3.82	11.73	3.91	Accepted
15	Absence of educational friendly software's.	1.82	3.06	3.39	8.27	2.76	Rejected
16	Poor security network.	2.27	3.53	3.54	9.34	3.11	Accepted
<i>GRAND MEAN</i>						3.21	Accepted

Source: Survey Data, 2015.

The responses of the respondents in Table 3 indicated that items 8,9,12, 14 and 16 had mean scores of 3.86, 3.33, 3.59, 3.91 and 3.11 and were accepted while items 10, 11, 13 and 15 had varying mean values of 2.56, 2.89, 2.90 and 2.76 and were rejected. However, the grand mean of 3.21 indicates that the technical challenges of ICT in the teaching of business education do not really differ as it relates to the various schools.

### Hypothesis 1

There is no significant difference in the mean responses of the three respondents group on the administrative challenges of ICT in teaching Business Education based on their institutions.

**Table 4. Summary of analysis of variance and test of significance data**

<i>Source of Variance</i>	<i>SS</i>	<i>DF</i>	<i>MS</i>	<i>L/Significance</i>	<i>F-CAL</i>	<i>F-CRIT</i>	<i>Decision</i>
Between Groups	10.4	2	5.2	.05	2.80	3.15	Accepted
Within Groups	124.6	67	1.86				

Table 4 shows that at degree of freedom 2 and 67, the between groups variance score and within group variance score (between groups mean square and within group mean square) are 10.4 and 5.2 respectively. It is also seen that the calculated *f*-ratio is 2.80 and the *f*-critical is 3.15 at .05 level of significance. This therefore, indicates that the null hypothesis is accepted that there is no significant difference in the mean responses of the three respondents on the administrative challenges of ICT in teaching business education.

### Hypothesis 2

There is no significant difference in the mean responses of the three respondents group on the technical challenges of ICT in teaching Business Education based on their institutions.

**Table 5. Summary of analysis of variance and test of significance data**

<i>Source of Variance</i>	<i>SS</i>	<i>DF</i>	<i>MS</i>	<i>L/Significance</i>	<i>F-CAL</i>	<i>F-CRIT</i>	<i>Decision</i>
Between Groups	12.4	2	6.2	.05	2.38	3.15	Accepted
Within Groups	171.6	67	2.6				

Table 5 shows that at degree of freedom 2 and 67, the between groups variance score and within group variance score (between group mean square and within group mean square) are 12.4 and 6.2 respectively. It is also seen that the calculated *f*-ratio is 2.38 and the critical *f*-ratio is 3.15 at .05 level of significance. The result indicates that the hypothesis was accepted that there is no significant difference in the mean responses of the three respondents group on the technical challenges of ICT in teaching Business Education

## DISCUSSION OF FINDINGS

One of the findings of this study was that business education lecturers are yet to be fully equipped with relevant ICT facilities as a result of administrative challenges; this was clearly indicated in table 2 where poor funding of the programme and inadequate allocation of ICT facilities were rated high. However, this could generally be attributed to the challenges (whether administrative or technical) militating against the smooth application of ICT in the teaching of business education which includes poorly equipped ICT labs, poor electricity supply, and poor sponsorship by government/management, poor funding and poor security network as were rated high. This result is in line with Ajuzie, 2013, Okebukola (1990), Egunjobi (2003), Akude & Ajuzie, 2011 that viewed the factors militating against effective use of available ICT resources as inadequate ICT tools, lack of electricity supply and further stressed that ICT infrastructures are lacking and that inadequate or absent of public power supply hamper the use of ICT in schools, in fact the list is endless.

## CONCLUSION

Considering the increasing rate of unemployment in the society, acquisition of basic skills is now imperative in our quest to overcome unemployment and foster self reliance.



Consequently, ICT should be applied in the teaching and learning of Business Education, especially now that ICT is used in virtually all human endeavours; this will enable lecturers and students to share ideas, information and knowledge with colleagues/counterparts across other continents of the world and help to bridge the gap between developed nations and under-developed or developing nation like Nigeria. However, the following conclusions were revealed that;

1. ICT challenges, whether administrative or technical affects the teaching of business education.
2. There is no significant difference in the mean responses of the three respondents group on the administrative challenges of ICT in teaching business education based on their institutions.
3. There is no significant difference in the mean responses of the three respondents group on the technical challenges of ICT in teaching business education based on their institutions.

### RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made;

1. Government at all levels should assist in providing ICT Resources in tertiary institutions.
2. Adequate funding is necessary for tertiary education in general and development of ICT in particular. To this end, government should increase funding for the entire educational sector.
3. Tertiary institution Managers should endeavour to evenly allocate available ICT facilities.
4. Business education managers should look at alternative funding to the programme and make due use of available opportunities.

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