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EVALUATION OF ICT COMPETENCY OF BUSINESS EDUCATION LECTURERS IN SOUTH-WEST NIGERIA

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ABSTRACT

The need to ensure qualitative teaching and learning in business education necessitated this study on evaluating ICT competency of Business Education lecturers in South-West Nigeria. One research question guided the study while three null hypotheses were tested. Descriptive survey design was adopted for the study. Population was 550 lecturers and students and the sample size was 302. A validated questionnaire containing 24 items was used for data collection. The reliability coefficients of the two sections of the instrument were 0.85 using Cronbach's Alpha Reliability Coefficient. Arithmetic mean and standard deviation were used to analyze the data relative to the research questions while Z-test was adopted to test the null hypotheses at 0.05 level of significance. It was found that extent of ICT competencies of lecturers was low. It was further found that gender did not significantly influence the mean rating of respondents on the three areas covered but status and institution ownership did. It was recommended among others that management of the universities should support lecturers of business education by engaging them in retraining programmes to enhance their competences for effective utilization of ICT resources in order to equip the graduates with relevant competences for the 21th century global labour market.

KEYWORDS: ICT, Business Education, Competency, Quality teaching and learning.

1.0 INTRODUCTION

Information and Communication Technologies (ICTs) have become key tools and have a revolutionary impact on how people see and live in the world. ICT encompasses a combination of technologies for collecting, storing, processing, communicating and delivering of information related to teaching and learning processes (Johnson, 2007). It has become so important that every country, organization or institution no matter how highly or lowly placed want to identify and embrace it. In education, it involves the application of digital equipment to all aspects of teaching and learning. The place of ICTs in education and the world in general cannot be ignored. Modern day business 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-medicine, e-banking and e-education among others. All these make use of electronic devices to conduct business practices on-line. These new opportunities pose enormous challenges to business education lecturers and society at large. ICT has a wider spectrum of application with enormous relevance to universities teaching and learning activities. Today's introduction of ICT into teaching and learning is a good development with tremendous potentials for qualitative teaching on tertiary education in general and business education in particular. Supporting this, the Federal Ministry of Education (2011a) affirmed 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.

Business education is a broad-based programme having a composite of courses in general education, basic education, business administration and management plus office education. It is the total activity which is planned, organized and developed in favour of the preparation of the youths to function as an economic citizen, a consumer and producer. The specific purposes of business education is to equip its beneficiaries with vocational competence, personal-use values, adaptability to occupational change, consumer competence, social economic competence and building a foundation for advanced study. It is a multi disciplinary programme that encompasses Accounting, Secretarial Studies/Office Technology and Management (OTM) and Marketing/Distributive education (Esene, 2012). Business education prepares beneficiaries for business administration and management, Book-keeping and Accounting, marketing and distributive education, office and secretarial education, entrepreneurial education as well as allied courses designed to develop personal-use skills needed for business success and survival in the global village. These require the use of laboratories adequately equipped with information and communication technology resources for engaging the trainees in practical skills acquisition demanded by the global world labour market. The trend in the kinds of skills required in the labour market, which are technologically inclined, has drawn the attention of many universities to integrate ICTs into their teaching and learning to strive for excellence. ICT is viewed as not only crucial for the teaching and learning process but also for professional advancement of academicians. This suggests that universities business lecturers need to upgrade their competencies in order to adequately prepare their students for the world of work. Every business education lecturer is required to have a thorough mastery of the skills, competencies and knowledge required for teaching effectiveness. Lecturers need to acquire the skills to confront the challenges of the emerging technologies in order to fit into the industrial and information society of this global era.

Criticisms abound about the extent to which the graduates satisfy the demands of employers in different organization in Nigeria and in the globe. Aginam (2007) specifically asserted that the levels at which lecturers utilize ICT facilities in Nigerian Universities are less than five percent. Appropriate use of ICT can catalyze the paradigmatic shift from teacher-centered pedagogy to a more effective learner–centered pedagogy. The focus of Nigerian universities should not be limited to training teachers on how to use ICT but should also include acquisition of competencies and expertise required in using ICT to teach a curriculum that is suited to preparing students for the 21st century world of communication and work. Bamiro and Liverpool (2002) and Akuegwu et al. (2002), posited that lecturers can only transfer ideas and skills to their students if they are masters of their trades.

Competencies in the views of Vathanophas and Thai-ngam (2007) are the certain characteristics or abilities of an individual that enable him/her to perform appropriate specific actions. It represents the capability that an individual brings to the job and when the responsibilities of the job to produce the desired results require the demonstration of specific actions, the individual draws from inner resources for the capability to respond. In the same context, Azemikhah (2012) stressed that competency is a quality that needs to be developed by the learner both conceptually and physically. Competence is the ability to perform work activities to the standards required in employment. It embodies the ability to transfer skills and knowledge to work situation within the occupational area (Folorunso, 2006). According to Commission on Information and Communication Technology (2012) competency is the knowledge, skills, ability or characteristics associated with high performance on a job and it can help to distinguish high performance from average and low performance. ICT competence as used in this study therefore, refers to the knowledge, skill and ability of a business education lecturer in a university to make use of the various ICT tools such as e-mail, facsimile, internet, world wide web, Intranets, extranets, online databases and other networking technologies for qualitative teaching delivery. Skill does not depend solely upon a person's fundamental, innate capacities but must be developed through training, practice and experience an individual acquired. Skills is the ability to do something well, usually as a result of experience and training. It is a particular ability that involves special training and experience. Experience gained when knowledge acquired from a training programme is put into practice.

UNESCO (2007) identified Teacher's ICT knowledge and skills to cover word processing, internet, file navigation, e-mail, presentation packages, spreadsheets, database and SIS Curriculum manager. A word processing application can be used in a computer to create, save, modify and print all kinds of documents- letters, reports, worksheets, agenda and much more. Some of the things needed for acquiring computer/word processing skills are computer, improved typing skills; learn to use Mozilla Firefox and Internet Explorer, Review browser and software e-mail programs. Web usage and Internet browsing skill is ability to boot computer system and surf information, use search engines and hyperlinks navigation, open e-mail account for submission of assignment, downloading and saving learning materials from the internet or personal study and future use. It is also about ability to do conference calls and share knowledge with other students, skills in exchanging information with the lecturers, using internet for assignment, research and knowledge update in business education courses, e-mail document attachment and uploading, updating personal records in the students portal at the universities websites, and carrying out registration of courses and

lodging complaints at the college website. It is about skills in anti-virus installation, ability to log-on to window and retrieve learning materials (Wikipedia, 2012).

Computer application usage skills are skills needed for the use of Microsoft office (Ms-Word, excel and Corel draw) to work on the computer, skills in inserting tables, graphs, bullets and symbols inside documents, skills in editing and formatting documents, ability to use windows icons for carrying out editing of documents, skills in saving documents in different formats such as PDF, RMTL, etc, skills in the utilizations of formulas in excel operation, skills in using graphs for presentation of information, and skills in making graphic designed or do illustrations (UNESCO, 2007).

Okoye (2012) explained that database is a skill that organizes collection of data for one or more purposes, usually in digital form. It refers both to the way its users view it, and to the logical and physical materialization of its data, content, in files, computer memory, and computer data storage. This definition is very general, and is independent of the technology used. However, not every collection of data is a database, the term database implies that the data is managed to some level of quality (measured in terms of accuracy, availability, usability, and resilience) and this in turn often implies the use of a general-purpose Database management system (DBMS). A general-purpose DBMS is typically a complex software system that meets many usage requirements, and the databases that it maintains are often large and complex. The utilization of databases is now spread to such a wide degree that virtually every technology and product relies on databases and DBMSs for its development and commercialization, or even may have such embedded in it. Also, organizations and companies, from small to large, heavily depend on databases for their operations. The term database is correctly applied to the data and their containing data structures, and not to the DBMS which is a software system used to manage the database. The structure of a database is generally too complex to be handled without its DBMS, and any attempt to do otherwise is very likely to result in database corruption.

Chukwumezie (2005) narrated some networking skills to include use of file server, connect log on, retrieve a program or document, save a document to a specified location, share files with others on a network, knowledge of area network, including network access rights, security passwords, file server and zone, connect to internet, knowledge of connecting to the internet or an online service using the computer and modem. Organization for Economic Co-operation and Development (2005) outlined the required ICT competencies in education which revolves around electronic learning to include:

i. Web-supplemented courses focus on classroom-based teaching but include elements such as putting a course outline and lecture notes online, use of e-mail and links to online resources.
ii. Web-dependent courses require students to use the Internet for key elements of the programme such as online discussions, assessment, or online project/collaborative work, but without significant reduction in classroom time.
iii. In mixed mode courses, the e-learning element begins to replace classroom time. Online discussions, assessment, or project/collaborative work replace some face-to-face teaching and learning. But significant campus attendance remains part of the mix.

iv. In fully online courses, students can follow courses offered by a university in one city from another town, country or time zone.

According to Menwa in Owa (2005) some Internet networking skills include: E-mail, Newsgroup/Tele collaborating, Computer aided telephoning, World Wide Web (www), Surfing the net, Internet Relay Chat, File Sharing and Topic Sharing, Corporate lease access, Video Conferencing, Public Voice Messaging, Radio Paging, Mobile Telephone System, Internet Addressing and Host Addresses. He also expressed that the web can access many forms of internal information. It has a single protocol that allows hypertext documents to be transferred quickly between web browsers and servers. The protocol is called hypertext protocol (http) and some of internet features are: real time information retrieval and transfer; global access; interactive; surfing the net.

Owa (2005) enumerated telecommunication competencies to include: log-on, e-mail, Internet, upload, modem, download, log-off, world wide web, tele-conferencing, baud rate, and information high way. Tinio (2011) also explained that teleconferencing refers to interactive electronic communication among people located at two or more different places. According to Akinola (2005) media skills involves multimedia system, which is an exciting mix of graphics, texts animation and photographs on the computer system. It combines movies, sound and animated graphics to achieve products. With components like sound card, speakers and CD drive on the system the personal computer is turned into a music box, a film editing system, a radio box and a television system respectively. The teacher can use computer as an instructional material by drawing equipment such as filling cabinet, photocopying machine for the students to see and practice on.

Desktop publishing skill can be used for the creation of documents using page layout software on a personal computer. The term has been used for publishing at all levels, from small-circulation documents such as local newsletters to books, magazines and newspapers. However the term implies a more professional-looking end result, with a more complex layout, than word processing (Okoye, 2012). There are two types of pages in desktop publishing, electronic pages and virtual paper pages to be printed on physical paper pages. All computerized documents are technically electronic, which are limited in size only by computer memory or computer data storage space. Education has the role of preparing student for adult life, and therefore it must provide student with those skills necessary to join a society where technology-related competencies, which are part of the set of the so-called '21st century competencies', is increasingly becoming an integral part of the goals of compulsory education, this implies that in a knowledge economy driven by technology, people who do not master this competencies may suffer from a new form of digital divide that affect their capacity to fully integrate the knowledge economy and society. Therefore, business education lecturers are required to posses all these information and communication skills for their effectiveness in information dissemination, record management and general work flow. Teachers who succeed in making use of ICT in their work processes do not only contribute to improved learning outcomes in their students, but also benefit personally from enhanced work productivity.

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. If ICT resources are adequately provided for business education in tertiary institutions and optimally utilized by competent lecturers, quality teaching and learning in the programme will be guaranteed. However, studies by the Federal Ministry of Education (2011a) revealed that most teachers still lack the knowledge and skills to use ICT facilities for curriculum instruction; this has been attributed to reasons such as: inadequacy of ICT facilities for the teeming population of teachers and students who need them, other reasons are poor and inadequate infrastructural support such as erratic electricity power supply, poor internet services, low bandwidth and poor maintenance of ICT facilities among others. The resultant effect of these inadequacies is low capacity of teachers to deliver the curriculum which has been largely responsible for low learning achievement and production of poor quality outputs from schools. The extent this reflects the situation in business education programmes in South-West universities is not clearly known. This requires a study to inform and direct remedial actions by relevant stakeholders hence the imperativeness of this study.

Purpose of the Study

The purpose of this study is to determine the extent Business education lecturers possess ICT competencies for quality teaching and learning in business education programme of universities in South-West Nigeria.

Research Question

The following research question guided the study:

To what extent do lecturers possess ICT competences for quality teaching and learning in business education programme of Universities in South-West Nigeria?

Hypotheses

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

1. Male and female respondents do not differ significantly in their mean ratings on the extent lecturers possess ICT competences for quality teaching and learning in business education programme in Universities in South-West Nigeria.
2. Lecturers and students do not differ significantly in their mean ratings on the extent lecturers possess ICT competencies for quality teaching and learning in business education programme in Universities in South-West Nigeria.
3. Respondents do not differ significantly in their mean ratings on the extent lecturers possess ICT competencies for quality teaching and learning in business education programme in universities in South-West Nigeria based on institution ownership (federal/state).

2.0 METHOD

Descriptive survey research design was adopted for the study. The population for this study consists of 550 (52 lecturers and 498 final year students) of business education from all Universities in South-West Nigeria. The choice of final year students is based on the fact that they have being in university system for more than three academic sessions and can easily form an opinion on any issue relating to their course of study. Sample for the study was 302 (52 lectures and 250 final year

students) of business education from universities in the area of study. All the lecturers were used because of the size while stratified random sampling technique was used to select 50 percent of the students from each university that offers business education programme in the South-West Nigeria (Ekiti, Lagos and Ogun states). Instrument used for data collection was a validated five point rating scale questionnaire with a total of 11 items according to the research questions guiding the study. The reliability of the instrument was established through the use of Cronbach's Alpha Reliability Coefficient and reliability coefficients of 0.82 was obtained. Arithmetic mean was used to analyze data while the standard deviation was used to ascertain the homogeneity or otherwise of the respondents' rating. Z-test was used to analyze data in respect of the hypotheses at 0.05 level of significance. A null hypothesis was accepted where the calculated z-value is less than the z-critical value but not accepted where the calculated z-value is equal to or greater than the z-critical value.

3.0 RESULTS

Research Question

To what extent do lecturers possess relevant ICT competencies for quality teaching and learning of business education programme in universities in south-west Nigeria?

Table 1

Respondents' Mean Rating and Standard Deviation on Extent Business Education Lecturers Possess ICT Competencies

$N = 302$

S/N	Items on lecturers possession of ICT competencies	Lecturers		Students		Average		Remark
		Mean	SD	Mean	SD	Mean	SD	
1	Power point to plan for teaching	3.05	1.07	3.10	0.93	**3.09**	**0.94**	Moderate Extent
2	Over head projector for delivering lectures	2.00	0.77	2.20	0.77	**2.10**	**0.77**	Low Extent
3	E-mail to assess students work/assignment	2.65	1.10	2.66	1.06	**2.66**	**1.06**	Moderate Extent
4	Internet for tutorials	2.75	1.09	2.78	1.09	**2.77**	**1.09**	Moderate Extent
5	Annotation on audio visual with my story player, etc	1.34	0.56	1.36	0.53	**1.35**	**0.54**	Very Low Extent
6	Animations in flash to others listed	2.40	1.24	2.42	1.26	**2.42**	**1.25**	Low Extent
7	Facsimile for lecturer-student classroom interaction	2.38	1.07	2.35	1.06	**2.35**	**1.06**	Low Extent
8	Multimedia facilities in classroom management and control	1.38	0.49	1.40	0.49	**1.39**	**0.49**	Very Low Extent
9	Film strip application as business education teaching aid	1.48	0.61	1.44	0.59	**1.44**	**0.59**	Very Low Extent
10	Tele-video conferencing in business	2.32	1.1	2.40	1.0	**2.36**	**1.04**	Low

	education		6		3			Extent
11	Electronic organizer for information processing	2.04	1.12	2.08	1.07	**2.06**	**1.08**	Low Extent
	Cluster mean					**2.18**		**Low Extent**

Data in Table 3 show that only three out of the eleven items on lecturers' ICT competencies listed (1, 3 and 4) with mean ratings of 3.09, 2.66 and 2.77 are of moderate extent while the remaining eight with mean ratings ranging from 1.35 to 2.06 are either of low or very low extent for quality teaching and learning in business education in the universities. The standard deviations for all the items range between 0.49-1.08 this implies that the respondents were far apart in their opinions.

Null Hypothesis 1

Male and female respondents do not differ significantly in their mean ratings on the extent lecturers possess ICT competences for quality teaching and learning in business education programme in universities in south west Nigeria.

Table 2

Z-Test Analysis of the Difference between Male and Female Mean Rating on the Extent of ICT Competencies Possessed By Lecturers

Gender	N	Mean	SD	z-cal.	Alpha Sig.	Df	z-crit.	Remark
Male	151	26.58	2.48	0.79	0.05	299	1.96	NS
Female	150	26.80	2.52					

Data in Table 2 indicate that at the alpha level of 0.05, the calculated z-value is 0.79 which is less than the critical z-value of 1.96. This means that gender has no significant influence on the respondents' opinion on the extent to which lecturers possess ICT competences for quality teaching and learning in business education programme in universities in south west Nigeria. The null hypothesis was upheld.

Hypothesis 2

Lecturers and students do not differ significantly in their mean ratings on the extent lecturers possess ICT competencies for quality teaching and learning in business education programme in universities in south west Nigeria.

Table 3: Z-Test Analysis of the Difference between Lecturers and Students' Mean Rating on the Extent of ICT Competencies Possessed By Lecturers

Status	N	Mean	SD	z-cal	Alpha sig.	DF	z-crit	Remark
Lecturers	52	27.50	2.45	2.08	0.05	299	1.96	S
Students	249	26.73	2.51					

Data in Table 3 indicate that at the alpha level of 0.05, the calculated z-value is 2.08 which is greater than the critical z-value of 1.96. This means that status has significant influence on the

respondents' opinion on the extent to which lecturers possess ICT competences for quality teaching and learning in business education programme Nigeria. Therefore, the null hypothesis was rejected.

Hypothesis 3

Respondents do not differ significantly in their mean ratings on the extent lecturers possess ICT competencies for quality teaching and learning in business education programme in universities in south west Nigeria based on institution ownership (federal/state).

Table 4

Z-Test Analysis of the Difference between the Mean Rating of Federal and State Owned Institutions Respondents on the Extent of ICT Competencies Possessed By Lecturers

Institutions ownership	N	Mean	SD	z-cal	Alpha Sig.	Df	z-crit	Remark
Federal	56	27.71	2.60	2.56	0.05	299	1.96	Sig.
State	245	26.71	2.48					

Data in Table 3 indicate that at the alpha level of 0.05, the calculated z-value is 2.56 which is greater than the critical z-value of 1.96. This means that institution ownership has significant influence on the respondents' opinion. Therefore, the null hypothesis was rejected.

4.0 DISCUSSION

Findings of the study show that business education lecturers in universities in South-West Nigeria possess ICT competencies at a low extent. This finding is in consonance with the findings of Emeasoba (2014) that office Technology management (OTM) lecturers in Anambra and Enugu states possess computer operation, networking, telecommunication and media competencies to a low extent. This finding is supported by the works of Yussuf (2005) and Ololube (2006) that teachers' demonstration of proficiency in ICT utilization in Nigeria is below expectation and access to ICT resources like internet and computer is mostly limited in campuses of various higher institutions. This report was corroborated by Nworgu (2006) that number of ICT courses offered was inadequate due to inadequate infrastructure and resources which and as a result, teachers on graduation lack knowledge and competencies for ICT utilization in institutions due to proficiency demonstrated by their tutors at low level. However, the finding is at variance with the view of Ogonia (2008) and Buabeng-Andoh (2012) which stated that business studies teachers and other teachers possess ICT competencies moderately in computer operation than other networking aspect of ICT. Also, it is in contrast to Daniel (2002) that overwhelming majority of teachers in Europe possess ICT competencies to plan and teach their lesson more efficiently and effectively. This finding revealed that the few ICT competencies possessed by lecturers might be as a result of personal efforts in the acquisition and private usage of some ICT resources like computer, internet facility and other computer peripherals. This is in consonance with the view of Akpan (2014) that majority of the university lecturers now have their personal laptops connected to the internet through the use of their personal modem. Meanwhile, lack of ICT competencies by lecturers might be as a result of non availability of ICT resources due to poor funding of tertiary institutions as well as inadequate training and development of lecturers in ICT in tertiary institutions. This statement is in agreement with Agbepue (2016) that there is lack of proper funding for vocational education of which business education is inclusive. Furthermore, findings of the study indicated that male and

female respondents do not differ significantly in their mean rating on lecturers' possession of ICT competencies for quality teaching and learning in business education. This finding is in consonance with Okolocha and Ile (2012), Emeasoba (2014) and Akpan (2014) that no significant difference existed between the opinion of male and female respondents on the ICT competencies possess by lecturers. Also in a related study, Soffer and Raban (2016), Dholakia et al. (2003) discovered a significant difference in ICT competencies between male and female teachers. This was supported by the work of Dholakia et al. (2003) that there was low level of ICT competencies among female teachers. Omenyi et al. (2007) attributed this finding to the societal role expectation of the African women which place a lot of restrictions on them. The study further indicated that status significantly influenced the respondents' mean ratings on the extent lecturers' possess ICT competencies for quality teaching in business education in the area of study. This supports the position of Bupo and Ndinechi (2015) that significant difference existed in the mean rating of business education students in Anambra state tertiary institutions in their computer competence level based on the type of institution. Also, this finding is in agreement with Owa (2005) that there is a significant difference in the opinion of respondents on teachers' possession of computer operation competencies base on status. The study also revealed that institution ownership significantly influenced the respondents' mean rating on the extent lecturers' possession of ICT competencies for quality teaching in business education. This finding is in consonance with the research report of Ezenwafor et al. (2016) that institution ownership has significant influence on the extent ICTs adoption improve teaching and learning of business education. This could be due to the fact that institutions owned by the Federal government have access to better funding than state owned institutions. The finding is also, in agreement with that of Bupo and Ndinechi (2015) that significant difference existed in the mean rating of business education students in Anambra state tertiary institutions in their computer competence level based on the type of institution.

5.0 CONCLUSION

It is concluded that due to low level possession of ICT competencies by business education lecturers the graduates can hardly be adequately equipped for success in employment and competitiveness in the global workplace of the current era.

6.0 RECOMMENDATIONS

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

1. Universities 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 assurance in their programme
2. University management should make ICT resources adequately available for business education programme to enable their utilization by lecturers and students for quality teaching and learning.
3. Universities management should enter into partnership with ICT manufacturing organizations to assist in improving the supply of the resources for their academic programmes towards quality assurance.

4. Management of universities should develop sustainable preventive and corrective maintenance culture by servicing and repairing the available ICT resources for optimal utilization by lecturers and students.

REFERENCES

Agbepue, S. (2016).The role of vocational education and information technology towards poverty reduction and inhibiting factors to poverty alleviation. *JORIND* (9) June, 2011. Available at *www.Transcampus.Org/Journals*. 30th, January, 2016.

Aginam, E. (2007). *Nigerian higher education has less 5% ICT applications*. Available at http://www.vanguardngr.com/articles/html on 11/2/2007.

Akinola, P.I. (2005). *The challenges of reform: ICT in business education*. Business Education Book of Readings. 1 (5), 7-15.

Akpan, C.P. (2014). ICT competence and Lecturers' Job efficacy in Universities in Cross River State, Nigeria. *International Journal of Humanities and Social Science*. 4 (10), 259 – 266.

Akuegwu, B.A, Nwiue, F. D, and Agba, A.M.O. (2008). Quality assurance in teaching and learning in Cross River State higher institutions: Management applications for UBE teacher production. *Nigeria Journal of Curriculum Studies* (Sp. Ed). 355-367.

Azemikhah, H. (2012). *The 21st century, the competency era and competency theory. 2005* Open Learning Institute of TAFE. Available at http://www.avetra.org.au/ABSTRACTS2006/PA%200058.pdf. June 30th.

Bamiro, O. and Liverpool, S. (2002). ICT and university administration: The Ibadan and Jos examples. *The University Administrator*. 1(4), 29-39.

Bolt lee, C. and Foster, S. (2003). The core competency framework: A new element in continuing call for Accounting Education Change in the United States. *Accounting Education Journal.* 12 (1), 33-47.

Buabeng-Andoh, C. (2012). An exploration of teachers skills perceptions and practices of ICT in teaching and learning in the Ghanaian second cycle schools. *Contemporary Education Technology*. 3 (1), 36-49. 2012 .Available at http://www. Cedtech. Net/articles1/313.pdf. July 10th.

Bupo, G.O. and Ndinechi, G.I. (2015). Business education students' utilization of e-learning in Anambra state tertiary institutions. *International Journal of Scientific Research and Innovative Technology*. 2 (4), 17-20.

Chukwumezie, F.U. (2005). Appraisal of information and communication technology competencies required of senior secondary school business education graduates. *Business Education Journal*. 5(1), 127-130.

Commission on Information and Communication Technology (2012).*National ICT competency standard for teachers in Nigeria*. Available at http://www.ncc.gov.ph/nics/files/Nics- Teachers. June 30th 2012.

Daniel, J. (2002). *Foreword: Information and communication technologies in teacher education: A planning guide*. A Division of Higher Education. UNESCO.

Dholakia, R. R. Dlolakia, N. and Kshertri, N. (2003). *Gender and internet usage*. In H. Bidgol (Ed.). The internet encyclopedia, New York: Wiley.

Emeasoba, N.C. (2014). Assessment of information and communication technology competencies possessed by office technology and management lecturers in tertiary institutions in Anambra and Enugu States. *International Journal of Education and Research.* 2 (6), 461-465.

Esene, R.A (2012).*Methods of teaching vocational business subjects*. Royal Pace Publications. Agbor.

Ezenwafor, J.I., Mbaezue, N.C. and Obi, M.N. (2016). "Extent ICTs adoption improve teaching and learning of business education in south-east Nigeria.*Ideal Journal of Education and Policy Studies.* 2(5), 147-153.

Federal Ministry of Education. (2011a). *The state of education in Nigeria: Beyond access*. Fed Inspectorate Services, Abuja.

Folorunso, I. O (2006). Effects and solutions to inadequacy of instructional equipment for secretarial studies in our tertiary institutions. *COEDAG Journal of Business Education, 1(1),* 1-6. 4(2&3), 10-16, 2006.

Johnson, O.A (2007). *Enhancing quality in higher education through information and communication technology in Nigeria*.In J. B. Babalola, G. O. Akpa, A. O. Ayeni & S. O. Adedeji (Eds.).Access, equity and quality in higher education. NAEAP Publication. Lagos.

Nworgu, B.G. (2006). *Educational research: basic issues and methodology.* Wisdom publishers. Ibadan.

Ogonnia, I.F. (2008). *Information and communication technology skills possessed by business studies teachers in secondary schools in Enugu Education zones, Enugu State*. Unpublished thesis submitted to the Department of Technology and Vocational Education, Enugu State University of Science and Technology, Enugu.

Okoli, B. E. (2010). A case for entrenchment of ICT literacy in the business education programme. *Journal of Vocational and Adult Education.* 7(1), 82-87.

Okolocha, C.C. and Ile, C.M. (2012). *Business educators' familiarity with the utilization of hi-tech tools in the preparation of graduates for modern business/marketing in Nigeria*. Available at http;//www.research world.com/vol.13/ issue2/vol3…issue2…/ paper-01.pdf August 27th 2012.

Okorie, J.U. (2001). *Developing Nigeria's workforce*.Page Environs Publishers. Calabar.

Okoro, I.F and Ursula, O. I. (2012). The teacher and skills acquisition at basic education from the perspective of cake making in home economics. *International Journal of the Common Wealth Research and Capacity Education Initiative* (IJCWRCEI) 3 (3).

Okoye, O.O. (2012). *Computer basics*. Golden Eagle Publisher. Enugu.

Ololube, N. P. (2006). Appraising the relationship between ICT usage and integration and the standard of teacher education programs in a developing economy. *International Journal of Education and Development using Information and Communication Technology*. (IJEDICT). 2 (3), 70 – 85.

Omenyi, A., Agu, N.N. and Odimegwu, C. O. (2007). Increasing Teacher Efficiency through ICT usage in Tertiary Education. *Nigerian Journal of Educational Administration and Planning* (NAEAP). 7 (2), 107-119.

Organization of Economic Co-operation and Development (OECD) (2005). E-learning in tertiary education. *Policy Brief*,1(1), 1- 8.

Owa, F. (2005). *Information and communication technology skills required by business education lecturers and students in colleges of education in Delta State*. Unpublished thesis submitted to the Department of Vocational Education, University of Nigeria. Nsukka.

Soffer, T. and Raban, Y. (2016). Gender and ICT's implication for policy and strategy. *E-Living Consortium*,2003. Available at http:/www.eurecon.de/e-living.com./6…/1.pdf. . Retrieved on July 31, 2016.

Tinio, L.V. (2011). ICT in education. Available athttp://www.en.wikibooks.org/wiki/ICT-in-Education. August 31st.

UNESCO (2007). *Manual for pilot testing the use of indicators to assess impact of ICT use in education.* Available at http://www.unescobkk.org/education/ICT/resources. October 1st, 2011.

Vathanophas, V. and Thai-ngam, J. (2007). Competency requirements for effective job performance in the public sector. *Contemporary Management Research,* 3(3), (1), 45-70.

Wikipedia Free Encyclopedia, *Quality classroom delivery*. Available at http://www.wikipideaonlineecyclopidea.com 2012.*in education*

Yusuf, M.O. (2005). An investigation into Teachers' self efficiency in implementing computer education in Nigerian secondary schools. *Meridia Middle School Computer Technologies Journal.* 8 (2).

