

UTILIZATION OF ICT IN BUSINESS TEACHER EDUCATION PROGRAMME FOR QUALITY ASSURANCE IN GOVERNMENT TERTIARY INSTITUTIONS IN ENUGU STATE, NIGERIA

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Abstract

The study was designed to determine the utilization of ICT tools/facilities in the teaching of business teacher education programme for quality assurance in Enugu State. Two research questions were developed for the study with one null hypothesis that was tested at 0.05 level of significance. The Questionnaire was used for data collection. The study covered five institutions that offered business education programmes. The population of the study was 100, no sample was drawn. A 20 - item structured questionnaire was the instrument used for data collection. The mean and standard deviation were used for answering research questions and t-test was used to test the hypothesis at 0.05 level of significance. The findings of the study identified 20 facilities/tools that can be utilized in teaching business teacher education programme to ensure quality of its graduates. However, the findings showed that, all the 20 identified facilities were below the cut-off point of 3.50, indicating that the items were moderately utilized. Some recommendations are made that ICT tools/ facilities for teaching students should be made available by federal and state governments to assist the institutions of learning.

Introduction Information and communication technologies (ICTs) are becoming important and necessary instruments in education and training. The use of ICT in education has opened new teaching methods and access to education. Howell and Lundall (2000) defined information and communication technology as all forms of technology used to create, store, process and use information in its various forms (data, voice, image, multimedia presentation) and which enables, facilitates and supports communication, more so, it includes the convergence of micro-electronics, computers and telecommunications which make it possible for data, text and video to be transmitted anywhere in the world where digital signals can be received.

Technology refers to the tool of the teacher's work and can be defined in a very narrow sense of hardware and machines or in the very broad sense of theory and knowledge (Mesthene in Osuala, 2009). Education on the other hand, refers to the general processes of learning that occur as a result of a wide variety of experiences from formal instruction to information instruction. Technology presently enables the learners to participate in different environments. The utilization of technology in business education teacher programme should be taught as one component of a total, systematic change model and not as something

in itself, that can significantly solve all educational problems. Teaching students to understand technology and cope with it, will enable the learners meet the challenges about industry by reading, and listening to experts in the field. UNESCO (2002) defined information and communication technology as the combination of information technology with other related technologies for communication technology. These technologies can be used as a driving force to promote and enhance teaching and learning of business education courses in tertiary institutions. These ICT tools/facilities include tape recorders video cassettes, computers, overhead projectors, slide projectors printers, scanners, digital cameras and electronic chalkboards, television, radio, internet, and mobile/smart phones among others.

Business education is an aspect of vocational education which is offered at institutions of higher learning and prepares learners for career in business. It is an educational programme that equips an individual with functional and saleable skills, knowledge, attitude and value that would enable the individual operate in the environment he finds himself (Etonyeaku, 2009). Osuala (2004) defined business education as a programme of instruction which consists of two parts:

- Office education: a vocational education programme for office career through initial refresher and upgrading education leading to employability and advancement in office occupation, and
- General business education- a programme to provide students with information and competencies which are needed by all in managing personal business affairs and in using the services of the business world. Business education in addition to general education is also a study of technologies and related sciences and the acquisition of skills, attitudes, understanding and knowledge, leading to occupations in various sectors of economic and social life. It has the capacity to develop learners that will respond to current societal issues, such as education for improving basic computational skills, eliminating occupational stereotyping, assisting people with special needs and helping the ordinary consumers to function effectively in the private enterprise.

Business education provides quality education. Quality according to UNESCO- IIEP (2006) is proper performance according to standards of interventions that are known to be safe, affordable to the society and have the ability to produce an impact. It is also a set of activities that are carried out to set standards and to monitor and improve performance. Wikipedia (2009) referred quality assurance as planned and systematic production processes that provide confidence in products suitability for the intended purpose. Ede and Olaitan (2010) stated that quality teaching and learning ensures that candidates possess the knowledge, skills and competencies that are appropriate for their areas of responsibility. The relevant attitude, skills, competencies and values in business education are imparted to learners using instructional methods by teachers. The importance of teachers and the roles played in education process by them are not only central to basic education but to socio-

economic and sustainable development of the society. A teacher by whatever definition or standard, is the manager of knowledge and he occupies a central role in developing ideas, nurturing critical thinking and thrust for knowledge in learners. Egbule in Etonyeaku (2010) confirmed that the teacher is the foundation upon which growth and development in any society hinges.

Quality business teacher education is a vital programme of service delivery in the economic vision of the millennium development goals of the 21st century. It can also deliver its current societal technologies expectations in educational national development if the teachers knowledge among others are technology based. Ekpeyoung in Etonyeaku (2010) posited that a teacher of business education needs to complete his preparation for his job and keep abreast of the changes in his work place. A quality business education teacher is required to be well prepared and well informed, possess the skill, knowledge, attitude desired of all educated persons and the technical competencies required in the areas of business education. Ugeh and Akpotohwo (2010) stated that business education teachers should be trained in the relevant ICT competencies, knowledge and attitude in using ICT as a teaching and learning strategy.

Objectives of Business Teacher Education as specified by National Commission for Colleges of Education

The objectives of business teacher education include the following:

- to prepare teachers of business subjects who can serve at junior and senior secondary school levels;
- to provide business teachers with the preparation necessary for them to teach the general, vocational and pre-vocational business education
- to provide the business teachers with understanding of principles and skills of business administration and other management science programme skills
- to provide the business teacher with general education that will enable him to relate more effectively to the environment in which he lives.

Business teacher education is a pedagogical and business competencies necessary for teaching business attitudes, concepts, skill and knowledge. The business teacher education programme is aimed at educating teachers who will teach business subjects; produce teachers who are motivated, possess good knowledge of the subject matter and can perform the role expectation to develop business education.

Statement of the Problem

Business teacher education programme is facing the challenges posed by information and communication technology in the sense that for the business teacher to be relevant in the teaching, must possess the relevant and employable skills and competencies required in the workplace in this information age.

Thus, it becomes imperative that business education teacher must be versatile in the use of ICT facilities in the classroom instruction and office work. Unfortunately, most business

educators after graduation can neither be self employed nor secure paid employment, nor secure paid employment as a result of not being well prepared, well informed, possess the requisite skills, knowledge and attitude desired for world of work.

Purpose of the Study

The purpose of the study was to determine the extent of utilization and application of ICTs in the teaching of business teacher education programme in tertiary institutions in Enugu State. Specifically, the study sought to:

1. Identify those ICT tools/facilities that can be employed in teaching of business teacher education programme to ensure quality of its graduates
2. ascertain the extent of utilization of these tools/facilities for teaching business teacher education programme to ensure quality of business education teachers (business educator).

Research Questions

The following research questions guided the study.

1. What are those ICT tools/facilities that can be employed in the teaching of business teacher education to ensure quality of its graduates?
2. To what extent are the ICT tools/facilities utilized in the teaching of business teacher education to ensure quality to its graduates?

Hypothesis

One null hypothesis was formulated and tested at 0.05 level of significance.

There is no significant difference in the mean ratings of female lecturers and male lecturers on the utilization of ICT tools for teaching business teacher education programme.

Method

Descriptive survey research design was adopted for this study. Survey design was used because the opinions of the respondents were sought. Osuala (2004) stated that when a survey centers on individuals and their opinions, beliefs, motivation and behaviour, the survey research method is the most appropriate. The study was carried out in Enugu State of Nigeria.

Area of the Study

The study was carried out in Enugu State. The state had five higher institutions that offer business education programme.

Population

The population for the study comprised 100 respondents in the area that offers business education in Enugu State. The population was made up of 35 male lecturers and 65 female

lecturers. The population size was very small and manageable since the respondents could be reached.

Method of Data Collection

The instrument for data collection was a 20 item structured questionnaire designed by the researcher after literature review. The instrument was structured on a modified 5 point Likert-type response scale of Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (D), and Strongly Disagree (SD) while the extent of the utilization had scale response of Very Highly Utilization (VHU), Highly Utilized (HU), Utilized (U), Moderately Utilized (MU), and Not Utilized (NU), with assigned weighted values of 5, 4, 3, 2 and 1 respectively. A pilot study was carried out on 25 respondents in tertiary institutions in Anambra State that offer business education programme. Three research experts in the Department of Vocational Teacher Education (Business Education Unit) University of Nigeria, Nsukka face validated the instrument. Cronbach alpha was used to determine the internal consistency of the items, with a coefficient of 0.75, this indicated high reliability of the instrument.

Method of Data Analysis

The research questions were analysed using mean and standard deviation. A criterion mean of 3.5 was used and t-test statistic was used to test the hypothesis at 0.05 level of significance. Where the calculated t-test value at 0.05 level of significance was less than the table t-value for the given degree of freedom (df) the null hypothesis was accepted, otherwise rejected.

Table 1: Mean and standard deviation of respondents' ratings on the ICT tools/facilities that can be utilized in teaching of business teacher education to ensure quality of its graduates

N = 100			
S/No.	ICT tools for Teaching Business Teacher Education	X	SD
1.	Tape Recorder (Audio Cassette Tapes)	4.60	0.40
2	Video Cassettes Recorder (Video Tapes)	3.87	1.06
3	Computer (Laptops)	4.80	0.54
4	Overhead Projector	3.54	0.62
5	Electronic Mail	3.62	0.59
6	World Wide Web (www)	3.89	0.88
7	Applications Softwares (eg. Auto CAD)	4.33	0.70
8	Video Conferencing	4.11	0.42
9	Mobile/Smart Phones	4.31	0.71
10	Radio	3.50	0.80
11	Television	3.51	0.58
12	Slide Projectors	4.07	0.89
13	Facsimile	4.07	0.88
14	Computer (Desktops/Printers)	4.60	0.55
15	Electronic Chalkboards	4.13	0.63
16	Scanners	4.18	0.80

17	Digital Cameras	3.84	1.04	Agreed
18	Internet and Local Area Network	3.99	1.32	Agreed
19	Video and Audio Conference Equipment	4.62	0.58	Agreed
20	Technology Magazine	4.40	0.78	Agreed
Grand mean		4.15	0.74	

Table 1 showed that the 20 items in the table had a mean range of 3.50 4.80, which was above the minimum required mean of 3.5. This indicated that Business education Lecturers agreed that all the 20 ICT tools/facilities can be utilized in the teaching of business education programme. The grand standard deviation of 0.74 indicated a relatively close opinion of Lecturers on the fact that ICT tools/facilities can be utilized in teaching of business teacher education programme.

Table 2: Mean ratings and t-test analysis of the responses of lecturers of business education on the extent of utilization of ICT tools/ facilities for teaching business education to ensure quality of its graduates

N ₁ = 35, N ₂ = 65										
S/No.	Extent of ICT Utilization	X ₁	SD ₁	X ₂	SD ₂	X ₃	SD ₃	t-cal	t-tab	Decision
1.	Tape Recorder (audio cassettes)	3.4	0.69	3.33	.59	3.24	0.64	1.24	1.96	NS
2	Video cassette recorder	1.99	0.54	3.09	.42	2.54	0.48	-.1	1.96	NS
3	Computer- Laptops	3.38	0.77	3.37	.63	3.38	0.70	1.10	1.96	NS
4	Overhead projectors	3.00	0.70	2.88	.64	2.94	0.67	.89	1.96	NS
5	Electronic mail (e-mail)	3.44	0.43	3.26	.68	3.35	0.56	-1.03	1.96	NS
6	World wide web	3.01	0.79	3.08	.71	3.05	0.75	-.91	1.96	NS
7	Application of software	1.92	0.71	1.89	.95	1.91	0.83	-.93	1.96	NS
8	Video conferencing	2.55	0.62	2.66	.82	2.61	0.72	-1.28	1.96	NS
9	Mobile/smart phones	2.77	0.54	2.56	.81	2.67	0.68	.40	1.96	NS
10	Radio	1.55	0.90	1.76	.90	1.66	0.90	-.94	1.96	NS
11	Television	2.09	0.52	3.43	.52	2.76	0.52	-.61	1.96	NS
12	Slide projectors	2.65	0.68	2.77	.54	2.71	0.61	-.91	1.96	NS
13	Facsimile	1.76	0.90	1.92	.68	1.84	0.79	-.92	1.96	NS
14	Computer (Desktops/printers)	3.15	0.77	3.25	.73	3.2	0.75	.63	1.96	NS
15	Scanners	2.98	0.56	3.13	.60	3.06	0.58	.46	1.96	NS
16	Digital cameras	1.98	0.96	2.05	.68	2.02	0.82	-.95	1.96	NS
17	Internet and local area network	3.10	0.78	3.4	.69	3.08	0.74	.77	1.96	NS
18	Video and audio conferencing	2.10	0.53	2.05	.68	2.08	0.61	.79	1.96	NS
19	Technology magazine	2.56	0.81	2.66	.82	2.61	0.82	.56	1.96	NS
20	Electronic chalkboard	3.41	0.77	3.30	.90	3.36	0.84	-1.46	1.96	NS

Key: NS = Not Significant, X_g- Pull mean, X₁= Male Lecturers, X₂ Female Lecturers

The data presented in Table 2 revealed that the mean values ranged from 1.55 to 3.44. This range was below the cut-off point of 3.50. This indicated that all the twenty ICT tools/facilities in Table 2 were not utilized at all for teaching business education in tertiary institutions in Enugu State. The facilities in the table had their standard deviations ranged from 0.42 to 0.96. This indicated that the respondents were close to one another in their opinions and also not too far from the mean.

The table also revealed that each of the tools/facilities had its calculated t-value, less than table value of 1.96. The implication of this is that there was no significant difference in

the mean ratings of the responses of male and female business teacher education Lecturers on the extent of utilization of ICT facilities to ensure quality of its products.

Discussion of Results

From the findings of the study, it was found out that the twenty ICT tools/facilities can be utilized in teaching of business teacher education programme in tertiary institutions in Enugu State. This is in line with the findings of Ugeh and Akpotohwo (2010) that ICT can help to develop competencies and business educators should be trained in the relevant ICT competencies and knowledge and with attractive benefits. Although some lecturers use some of the ICT facilities but not extensively. The rate of usage as sound in the study cannot encourage effective and adequate teaching and learning. Only few of the identified ICT facilities are used, a kind of scenario that cannot deliver the expected transformation of information technology that will produce quality graduates in business education.

It was also found that the respondents agreed that the ICT tools/facilities identified were not utilized in teaching in tertiary institutions. Chinien (2003) stated that there are some limitation in the school that would want to adopt the application of ICT for teaching and these limitation will consequently affect the level of utilization as a result of low bandwidth from internet service providers, and high cost of equipment, poor internet connections and infrastructure to house these facilities/tools and lack of skills on the part of the users. ICT when frequently and appropriately used enhances interaction, presentation of ideas, simulation of discoveries and challenging thinking (Okoro, 2008). The findings also were in line with Idialu (2007) that Vocational Education Programme, which business education is an aspect of it, are designed for people who can profit by it and progress by it and to accomplish these outcomes, quality must be the watch word.

Conclusion

Based on the findings of the study, the following conclusions were made:

The business teachers in tertiary institutions offering business education programme are not effectively making use of ICT tools in teaching. Again, as the lecturers do not use most of the ICT facilities in teaching students, both the teachers and students might not have good mastery of modern ICT facilities.

In the course of teaching for the quality of its graduates to be high, the training environment should be a replica of where the individuals will eventually work.

Recommendations

Based on the findings of the study and the conclusion reached, following recommendations were made:

1. Provisions should be made for in-service training and retraining of teacher to equip them with ICT skills that will enable the teachers to perform their work optimally.
2. ICT tools/facilities for teaching students should be made available and in sufficient

- quality by relevant federal and state governments to assist the institutions of learning
3. Business Education teachers should also endeavour to avail themselves the opportunity of making use of available ICT tools/facilities.

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