EXTENT OF UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGY FACILITIES BY BUSINESS EDUCATORS IN TERTIARY INSTITUTIONS IN IMO STATE

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Abstract
The utilization of ICT facilities in teaching and learning has gained wide acceptance across the globe. This study determined the extent of utilization of information and communication technology facilities for teaching by business educators in tertiary institutions in Imo State. Two research questions guided the study and two null hypotheses were tested at 0.05 level of significance. The study adopted descriptive survey research design. The population of the study consisted of 99 business educators in the four tertiary institutions that offer the programme in Imo state. The entire population was used as sample because of the manageable size. A structured validated questionnaire on a five point scale with 21 items was used for data collection. Cronbanch Alpha coefficient formula was used to determine the inter-item consistency of the instrument which yielded an overall reliability coefficient index value of 0.73. Mean, standard deviation and z-test statistics were used for data analysis. The findings of the study revealed that business educators were making use of the ICT facilities at moderate extents. It was also discovered that gender has significant influence on the extent business educators utilize ICT facilities in teaching and learning. Based on the findings, it was recommended among others that Association of Business Educators of Nigerian (ABEN) should organize seminars, workshops to train and retrain business educators on how to effectively utilize ICT facilities in teaching and learning.

Keywords: Utilization, ICT facilities and Business

Educators **Introduction**

Information Communication and Technology (ICT) facilities are recognized as the most powerful tools available to the growing needs of the business teacher all

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over the world to re-evaluate the very nature of what and how to teach. Ukor, Agwazie and Ayemhenre (2014) stated that the utilization of ICT is quite alluring, not only because of its cost advantage over the traditional classroom instruction method but also for its convenience, standardized delivery, and self paced learning. According to Eke and Oladeyo (2011), ICT is the electronic means of capturing, processing, storing and disseminating information. Ezenwafor (2012) explained that ICT is an educational revolution which involves the use of computers, internet, telecommunication equipment, communication satellites, radio, telephones, tape recorders, compact discs (CDs) and floppy discs for collecting, processing, and disseminating educational information in various forms. Thus, ICT has been growing rapidly and affecting virtually every aspect of society generally, and business education in particular.

According to Utoware (2013) business education is an aspect of vocational technical education which is used as a comprehensive term referring to those aspects of educational processes involving the study of technologies, acquisition of practical skills, attitudes and knowledge relating to occupation in various sectors of economic and social life. Business education is the delivery of instruction in business skills necessary for persons who are preparing to enter the labour force or who need training or retraining on the technology for personal use irrespective of gender. The goal of business education is to give training and impart the necessary skills to individuals who shall be economically self- reliant. The Federal Republic of Nigeria (FRN, 2004) outlined the objectives of business education at the tertiary level include (a).To develop a mature understanding of the general nature of business (b) To provide the needed background for teaching in business subjects, (c)To provide training for leadership in business and (d)To provide training in specialized phases of business activity. To achieve the above objectives, business educators should integrate and use ICT in order to meet the expectations and needs of the next generation.

There are a variety of ICT facilities that can be used by business educators in teaching and learning. They include computers, power point presentation tool, internet, scanners, interactive whiteboard, bulletin board, flash drive, mobile or smart phone, video conferencing, overhead projectors and laptops among others. The gains derivable from the utilization of these facilities in teaching and learning are innumerable. They have been found very useful in the areas of facilitating quick and easy access to a wide range of information, enhancing teacher‘s professional knowledge, skills and capabilities, and in ensuring proper planning and preparation for effective teaching and learning in business education programme. In this study utilization of ICT facilities refers to the application and integration of the facilities in instruction by business educators.

Business educators according to Okoli (2012) are professional teachers who impart knowledge necessary for effective performance in the business field. Okoli noted that business educators are required to adapt their teaching to the use of ICT facilities in classroom as the e-teacher. Business educators have a challenge to stay

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current in the utilization of technology and its devices. The Federal Republic of Nigeria, FRN, (2004) stated that business educators are required to be regularly exposed to innovations in their field such as the use of ICT facilities in order to be professionally competent.

Review of Literature

Literature on utilization of ICT facilities in business education programme was reviewed under power poit presentation and interactive white board as follows:

Power Point Presentation

Power-point presentation is an innovation in education which enables business educators to prepare and make presentations to their students during instruction and beyond. The term power point is a slide show presentation program developed by Microsoft. Power point is commonly used as a digital aid when presenting topics to an audience. It is similar to a word processor, except that it is geared toward creating presentations rather than document. It is a program that allows teachers including business educators to present their lessons in a more dynamic way than simply lecturing and writing on the blackboard. It provides business educators' the ability to equip their presentations with different types of media including images, sounds and animations. This enhances students' abilities to retain what they are being taught, especially those who are visual learners. Power point presentation was developed to improve learning by providing the means to develop presentations that are more structured and interesting to the audience.

The quality of power point presentation depends on the lecturer (Haudari, 2011). The lecturer should have enough knowledge and ability to prepare power point presentation in terms of not only the physical structure but also the content. The power point presentation could turn into typical teacher centered instruction if the instructor does not encourage student participation by either asking questions, or having the students well engaged in class activities. Acikalin and Yucel (2011) opined that experiences and the lecturer's level of knowledge in using the technology might affect the students' attitudes towards the use of power point presentation in class. Erdemir (2011) reported that recent studies on the effect of power point presentation and the traditional lectures on students' academic achievement showed that the use of power point presentation in instruction enhanced students' academic achievement than traditional lectures. Erdemir also revealed that students' attitude towards power point presentation was statistically significant. Teachers can focus on the class and interacting with the students instead of writing on a board because the text and the entire presentation is already there in the form of a power point file. When one clicks to the Microsoft power point environment, a dialog box appears on the screen of the computer showing the title bar, menu bar, toolbar, task pane, slide tab, outline tab, status bar, and note pane. When these tools emerge, one can go on to create new presentation. Power-point presentation therefore, allow business educators to capture

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the interest of students' and keep them interested, design students' work and curriculum materials among others.

Interactive White Board

Interactive White Board (IWB) sometimes referred to as electronic white boards or Smart boards were originally developed for office settings and are relatively a new addition to education. The IWB devices are connected to a computer, which in turn are connected to a multi-media projector. As Robert (2009) noted, IWB is a large display that connects a computer and a projector that projects onto the board's surface. Users control the computer with a pen, finger, stylus, or other device. The board is typically mounted to a wall floor stand. Nwokocha and Onwuchekwe (2014) reported that when lecturers are giving proper constant technical and pedagogical IWB training, they are likely to be better equipped to transform the teaching learning situation. Business educators today are challenged to utilize IWB in their instructional delivery in a manner that would enhance students' learning and achievement. Appropriate use of IWB by business educators in the classroom can help equip future business educators with the necessary knowledge and skills to use it effectively in the classroom (Schuck & Kearney, 2007). IWBs are used to reinforce current didactic teaching practices as teacher can use them as a black board replacement. As pedagogical tools, they promote creative teaching and motivate students into absorbing information. Teaching with IWB allows business educators to accommodate different learning styles.

Bell in Nwokocha and Onwuchekwa (2013) noted that IWB is an effective medium for teacher input to the whole class and for reviewing the lesson. With IWB, the teacher is able to present from the front and is better positioned to observe students, thereby making the students to focus on the lecture. In some classrooms, IWBs have replaced traditional flipcharts. Even where traditional boards are used, the IWBs often supplement them by connecting to a school network digital video distribution system. Roberts (2009) also found that interactive white board supports interaction and conversation in the classroom and helps in the presentation of new learning. Onwuachu (2013) listed some benefits of IWBs to include,

1. The software supplied with the IWB will usually allow the teacher to keep notes and annotations as an electronic file for later distribution either on paper or through electronic formats.
2. Some IWBs allow teachers to record their instruction as digital video files and post the materials for review by students at a later time. This can be a very effective instructional strategy for students who benefit from repetition, who need to see the material presented again, for students who are absent from school, for struggling learners, and for review of examinations. Brief instruction can be recorded for review by students. They will see the exact presentation that occurred in the classroom with

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the teacher's audio input which can help to transform instruction and learning.

3. IWBs allow lecturers to accommodate different learning styles.
4. Visual learners benefits from a clear view of what is happening on the board,

Despite government efforts and the benefits of ICT utilization for educational purposes, it appears that the teaching and learning with ICT in tertiary institutions in Nigeria is very poor as many teachers and students are still not fully ICT literate and compliant. Institutions may acquire ICT resources to a satisfactory level, but their utilization to achieve educational objectives may not be automatically guaranteed. It is observed that most business educators, especially at the tertiary level are still using the traditional chalk board methods of lesson delivery. This is a threatening condition which would in no small way hamper the achievement of business education objectives in the institutions

Similarly, there is a growing feeling that the utilization of these ICT facilities by business educators is influenced by gender. It seems that male business educators are more interested in the use of electronic facilities in teaching than their female counterparts. In Nigeria and other African countries in general, women show less interest in the use of electronic gadgets than men. Rupere (2006) observed that women are less involved in e- learning activities than their male counterparts in rural Zimbabwe.

Statement of the Problem

Business education programme is facing challenges posed by the outburst of Information and Communication Technology (ICTs) worldwide. Moursund (2009) observed that relatively little has been achieved in the programme in spite of government efforts and the significant impact of ICT tools like IWB on students' academic achievement when compared with the traditional methods of instruction. For business education graduates to be relevant in the teaching profession, they must possess relevant skills and competencies required especially in the use of ICT facilities in teaching. This implies that business educators who train the undergraduates must be versatile in the use of ICT facilities in classroom instruction to make their students learn and be conversant with them.

Ukor, Agwazie and Ayemhenre (2014) reported that business educators in colleges of education in Delta State almost never utilized ICT tools in teaching. They were constrained by lack of the requisite skills, funds, infrastructure, power and management support. This report support the earlier findings of Ekeh and Oladayo (2011) which indicated that low extent of teachers' application of ICT facilities was found in both public and private secondary schools in Port Harcourt, and the extent of utilization of ICT facilities by students is low in the public schools. The researchers also observed that most business education students in tertiary institution in Imo State,

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after graduations are found roaming the streets without self or paid employment. Even when they secure paid employment, many find it difficult to satisfy their employers.

This unsatisfactory state of affair create worry in the mind of the researchers as whether the graduates were not adequately prepared and exposed to the use of ICT facilities which dominate the modern world of work. This equally raises the question as to what extent do business educators in tertiary institutions who teach students that are expected to work in the various modern businesses as office managers and in the classroom as business educators, utilize ICT facilities in teaching and learning? This is the problem that this study was set to solve.

Purpose of the Study

The main purpose of this study was to determine the extent of utilization of ICT facilities by business educators in tertiary institutions in Imo State. Specifically, the study determined the extent business educators utilize:

1. Power- point presentation in teaching of business education in tertiary institutions in Imo State.
2. Interactive white board in teaching of business education in tertiary institutions in Imo State.

Research Questions

The following research questions guided the study: To what extent do business educators utilize;

1. Power-point presentations in teaching of business education in tertiary institutions in Imo State?
2. Interactive white board in teaching of business education in tertiary institutions in Imo State?

Hypotheses

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

1. There is no significant difference in the mean ratings of male and female business educators on the extent of utilization of power-point presentation in teaching in tertiary institutions in Imo State.
2. There is no significant difference in the mean ratings of male and female business educators on the extent of utilization of Interactive White Board in teaching in tertiary institutions in Imo State based on gender.

Method

The study adopted descriptive survey research design. The population comprised 99 business educators from four tertiary institutions in the state offering the programme namely, Alvan Ikoku federal college of education, Owerri, Federal Polytechnic, Nekede, Imo state university, Owerri and Imo state polytechnic, Umuagwo.The instrument for data collection was a structured questionnaire, titled: Questionnaire on Information and communication technology (ICT) utilization in business education (QICTUBE). The instrument consists of two parts, A and B with

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21 items and was structured on a five point rating scale with response categories of Very Great Extent (VGE), Great Extent(GE), Moderate Extent (ME), Low Extent (LE) and Very Low Extent (VLE). The instrument was validated by three experts, two in Business Education unit and one from Educational Foundation unit all in the Faculty of education, Nnamdi Azikiwe University, Awka.

The instrument was pilot-tested to determine its reliability. This was conducted using twelve business educators from Federal College of Education, (Technical), Umunze, Anambra State, who were not part of the study. Cronbanch Alpha coefficient formula was used to determine the inter-item consistency of the instrument which yielded a reliability coefficient of 0.69 and 0.84 for sections A and B respectively and an overall index value of 0.73. Data were collected with the help of three research assistants who were briefed on the purpose of the study. Copies of the questionnaire were distributed face to face to the respondents on the first visit with little briefs on how to complete them. After one week interval, the researcher went back and collected the completed questionnaire. Out of 99 copies of the questionnaire administered, 70 copies represent71percen were adequately completed and returned and were finally used analysis. Data collected were analyzed using mean to answer the research questions. The standard deviation of each item determined the spread of the scores about the mean. Decision on the research questions were based on the cluster mean in relation to real limits of numbers shown below:

Keys		Ratings	Boundary limits
Very Great Extent	(VGE)	5	4.50 – 5.00
High Extent	(HE)	4	3.50 – 4.49
Moderate Extent	(ME)	3	2.50 – 3.49
Low Extent	(LE)	2	1.50 – 2.49
Very Low Extent	(VLE)	1	0.05 – 1.49

z-test was used to test the null hypotheses at 0.05 level of significance. A null hypothesis was not rejected where the calculated z-value was less than the critical z-value but rejected where the calculated z-value was equal or greater than the critical z-value at 0.05 level of significance.

Results

Table 1

Mean and standard deviation on the extent business educators utilize power point presentation in teaching of business education

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S/N	Power Point Presentation	X	SD	Remarks
1	I use power point to create presentation containing text, art, animation, audio and video elements	3.36	1.01	Moderate Extent
2	I use power point to capture the students' attention and keep them interested	3.33	1.04	Moderate Extent
3	I use power point during creative writing classes	2.71	1.31	Moderate Extent
4	I use power point to present information or instruction to an entire class	3.17	0.99	Moderate Extent
5	I use power point to create graphically enhanced information and instructions for learning centers	2.944	1.01	Moderate Extent
6	I use power point to create tutorials, reviews or quizzes for individual student's work and curriculum materials	2.84	1.04	Moderate Extent
7	I use power point to choose from a variety of presentation types, design and layout	2.80	0.91	Moderate Extent
8	I use power point to create original designs and layouts as well as change colors and color schemes in pre-selected designs	2.74	1.08	Moderate Extent
9	I use power point to add, delete and rearrange slides within a presentation	3.39	1.02	Moderate Extent
10	I use power point to insert web art, scan images slides within a presentation	3.16	1.01	Moderate Extent
11	I use power point to create charts and graphics	3.16	1.02	Moderate Extent
12	I use power point to incorporate sounds and videos	2.93	0.99	Moderate Extent
13	I use power point to add hyperlinks	2.77	1.12	Moderate Extent
14	I use power point to save work in html	2.87	1.15	Moderate Extent
	Cluster Mean	**3.01**		**Moderate Extent**

Data contained in Table 1shows that business educators utilize PowerPoint presentation in teaching in all the areas as itemized at moderate extents. This was confirmed with the cluster mean of 3.05. The standard deviation for all the items is within the same range showing closeness of the respondents' opinion.

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Table 2
Mean and standard deviation on the extent business educators utilize interactive white board in teaching of business education.

S/N	Interactive White Board Utilization		SD	Remarks
15	I use interactive white board to download pictures and video clips from the internet and teach a set of lessons	3.14	1.01	Moderate Extent Moderate Extent
16	I use interactive white board to highlight text and then save them to be printed out	3.03	1.03	Moderate Extent
17	I use interactive white board to demonstrate the content available on a website in a teacher – directed activity	3.06	1.03	Moderate Extent
18	I use interactive white board to show educational videos and pictures to the whole lecture theater	3.16	0.88	Moderate Extent
19	I use interactive white board to add annotations	3.84	0.93	Moderate Extent
20	I use interactive white board to show case students projects and presentation virtual field trips	3.01	1.08	Moderate Extent
21	I use interactive white board torecord lessons that can be used to substitute teachers.	3.31	1.04	Great Extent
	Cluster Mean	**3.08**		**Moderate Extent**

Table 2 show that out of the seven items rated, interactive white board was utilized in teaching in six areas at moderate extents. Only item 21 was rated at a great extent. This was confirmed with the cluster mean of 3.08 that indicates moderate extent. The standard deviation score are within the same range showing closeness in the respondents‘ opinion.

Table 3
Summary of z - test Analysis of the mean ratings between male and female business educators on the extent of utilization of power point presentation in teaching

Gender	No of subject		SD	Df	Level of significance	z - cal	z-crit	Decision
Males	35	49.99	13.36	68	0.05	2.46	1.96	Significant
Females	35	38.76	14.56					

Table 3 shows that the calculated z-value of 2.46 is greater than the z-critical value of1.960 at 0.05 alpha level and df of 68. This implies that there is a significant difference in the mean rating of the male and female business educators on the extent of utilization of power-point presentation in teaching of business education. The hypothesis was rejected on the basis of this result.

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Table 4
z -test analysis of the mean ratings between male and female business educators on the extent of utilization of interactive white board in teaching

Gender	No of subjects		SD	Df	Level of significance	z-cal	z-cri	Decision
Males	35	23.67	6.67					
				68	0.05	2.72	1.960	Significant
Females	35	19.24	6.97					

Table 4 shows that z-calculated value of 2.72 is greater than the z-critical value (1.960), at 0.05 level of significance and df of 68. Based on this result, the null hypothesis was rejected. This implies that there is a significant difference on the extent male and female business educators utilize interactive white board in their teaching.

Discussion of Findings

The findings of the study revealed that business educators utilize power point presentation at moderate extents in their teaching in tertiary institutions in Imo State. This implies that lecturers do not use the PPP at a high level and do not expose their students adequately in the use of power point presentations in teaching them during training. This also implies that the student on graduation will not possess adequate knowledge and skills in the utilization of power point presentation for both office work and classroom presentations as teachers. Students taught with power point presentations are likely to secure employment in the modern world of work and will perform better in their jobs than others taught with traditional tools and methods of instruction. No wonder the high level of unemployment and poor performance of the business graduates in establishments or classrooms that require modern facilities.

The findings also revealed that there is a significant difference in the mean rating of male and female business educators on the extent of utilization of power point presentation in teaching. This shows that gender has a great influence in the business educators‘ utilization of Power point presentation in teaching. This is in line with Rupere (2006) who reported that males are more interested in the use of e-learning facilities that their female counterparts in Zimbabwe, an African country like Nigeria..

This study also revealed that business educators utilize interactive white board at moderate extent in teaching. Although these interactive white boards are utilized but the extent of utilization is not adequate to achieve effective learning amongst students. These students are equally to be effected in performance after graduation as teachers. Business educators should utilize of IWB appropriately in the classroom to equip students with the necessary knowledge and skills that will enable them to use it effectively in the classrooms as future educators as noted by Schuck and Kearney (2007).

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The findings also show a significant difference in the mean ratings of male and female business educators on their extent of utilization of Interactive white board in teaching. This is also in line with Rupere (2006) report that women are less interested in e- learning activities than their male counterparts in rural Zimbabwe.

The findings have implications for management of institutions and departments to organize trainings for business educators to develop interest for constant use of ICT in teaching their students and acquisition of skills in its utilization in classrooms. This is to ensure the production of student who on graduation will possess adequate knowledge and skills in the utilization of ICT facilities for both office work and classroom presentations as teachers.

Conclusion

Based on the findings of the study, it was concluded that business education lecturers utilize power point presentation and interactive white board in teaching students to moderate extents. Gender has a significance influence on the extent business educators utilize PPP and IWB in teaching in tertiary institutions in Imo State. Constant utilization of ICT facilities in teaching business education is a prerequisite for producing highly efficient business education graduates with knowledge and skills relevant for effective performance in modern world of work, where these facilities have replaced the traditional methods of job performances.

Recommendations

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

1. State and Federal governments should also assist by providing funds and equipment for the training and retraining of business educators for effective utilization of ICT facilities in tertiary institutions in Imo State.
2. Government should increase funding in its budgetary allocation to tertiary institutions to fully take care of supply and maintenance of ICT facilities for teaching and learning.
3. Business educators should endeavour to avail themselves the opportunity of making use of ICT facilities in teaching and learning.
4. Professional bodies such as Association of Business Educators of Nigeria (ABEN) should organize seminars, workshops to acquaint business educators on how to effectively utilize ICT facilities for teaching and learning.

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