

**EXTENT OF UTILIZATION OF INTERNET TECHNOLOGIES BY TEACHERS
OF BUSINESS SUBJECTS IN SENIOR SECONDARY SCHOOLS IN OGIDI
EDUCATIONAL ZONE OF ANAMBRA STATE.**

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Abstract

The study examined the extent of utilization of internet technologies by teachers of business subjects in senior secondary schools in Ogidi educational zone of Anambra State. The study adopted survey research design and was guided by one research question and one null hypothesis. The population comprised eighty six (86) business subject teachers in Ogidi Educational zone of Anambra State, The Instrument for data collection was a structured questionnaire containing 12 items and structured on a four point response scale, Mean and standard deviation were used to analyse data relating to the research question while t- test statistic was used to test the null hypothesis at .05 level of significance. The findings indicate that internet technologies was considered to be utilized at a low extent in teaching business subjects in secondary schools in Ogidi zone of Anambra State. Based on the findings of the study, it was recommended among others that teachers of business subjects, as well as other teachers should be encouraged to advance their qualification in their respective subject areas. The government should provide incentives that motivate teachers to go for further studies. Such incentive should come in form of immediate promotion or regularization of any teacher who obtain additional qualification in their relevant areas.

Keywords: utilization, internet, teachers, and business subjects.

Introduction

Education is a prerequisite for today's knowledge-based economy. The production and use of new knowledge required a more educated population. Information and Communication Technology (ICT) is playing a major role in the acquisition and diffusion of knowledge

which are fundamental aspects of the education process. The impact of ICT on education is enormous. Information and communication technology are potentially powerful enabling tools for educational change and reform. When used appropriately, different ICT gadgets help expand access to education, strengthen the relevance of education to the increasingly digital workplace, and raise educational quality by helping to make teaching and learning an engaging active process that is connected to real life.

Internet according to Kling (2000) is a new broadcast that can be used in any part of the world in a synchronized way, online or offline, get together text, sound video and provide services like E-mail, data transfer, video conferencing etc. It is used in teaching and it is becoming more usual and common tool in present and distance teaching.

The use of internet facilitates research works assignments and projects in business education. In the area of research it provides opportunities for scholars to communicate with one another through E-mail, mailing list and new groups chat rooms. These resources enable communication between scholars as they can post research, assignment, books or journal list references to online materials (Yusuf & Onansanya, 2004). The Internet by its nature provides access to a wide variety of data in many different formats produced by people of widely varying interests and goals from many sources located around the world (Partridge, 2001). Internet also support teaching methodology in the area of group work, assignment, project Association of African University (A.A.U, 2000). According to Obinniyi and Soreyewun (2001), Anissimov (2011) the following were list of internet innovations:

Video conferencing: This is a set of interactive telecommunication technology which allows two or more locations to interact via two-way video and audio transmissions simultaneously. Anssimov (2011) defines video conferencing as a communications technology that integrates video and voice to connect remote users with each other as if they were in the same room.

In secondary school classroom, video conferencing technology could be linked to cameras, computers and whiteboards. It is very suitable for distance and self-paced education. With the use of video conferencing in secondary school, the barrier of traditional method of learning is removed and this goes a long way to favour the goal of inclusive education. This is possible because video conferencing integrates video and audio to connect users anywhere in the world as if they were in the same classroom.

YouTube is an online public communication site. The site allows for registered users to upload and have available for the public their video for viewing. In that case, the teachers of business education and students who desire to use YouTube have to register online which is usually free. The teacher thereafter prepares the desired lessons including videos and upload online for the students to read. Anyone who goes to the site can view the lessons and videos that are posted on this site. The students also have the opportunities of having access to other relevant literature worldwide.

Facebook: is a social utility that connects people with friends and others who work, study and live around them. People use Facebook to keep up with friends, upload an unlimited number of photos, share links and videos, and learn more about the people they meet.

Blogging: allow students and teachers to post their thoughts, ideas, and comments on a website. Blogging allows students and instructors to share their thoughts and comments on the thoughts of others which could create an interactive learning environment. Blogs are usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. Entries are commonly displayed in reverse-chronological maintain or add content to a blog. Many blogs provide commentary or news on a particular subjects; others function as more personal online diaries.

A typical blog combines text, images and links to other blogs, Web pages, and other media related to its topic. Blog can also be used as a verb; demanding readers to leave comments in an interactive format is an important part of many blogs. Most blogs are primarily textual, although some focus on art (art blog), photographs (photo blog), videos (video blogging), music (MP3 blog), and audio (podcasting). Micro blogging is another type of blogging, featuring very short posts (Wikipedia, 2019).

Blogs can be used by teachers to communicate with their students. By posting topical issues and allowing students to react to the issue by posting their comments, the teacher can evaluate the students understanding. This can be done through online provided the students and the teachers are connected to the internet.

Webcams: The development of webcams and webcasting has facilitated the creation of virtual classrooms and Virtual learning environment. Virtual classrooms supported by such technology are becoming more and more popular, especially since they are contributing as a main solution to solving problems with travel expenses. Virtual classrooms with such technology also provide the benefits of being easy to set up.

Screen Casting: According to Wikipedia (2019) Screen casting is a recent trend in e-learning. There are many screen casting tools available that allow users to share their screens directly from their browser and make the video available online so that the viewers can stream the video directly.

The advantage of such tools is that it gives the presenter the ability to show his ideas and flow of thoughts rather than simply explain them, which may be more confusing when delivered via simple text instructions. With the combination of video and audio, the expert can mimic the one-on-one experience of the classroom and deliver clear, complete instructions. From the learner's point of view this provides the ability to pause and rewind and gives the learners the advantage of moving at their own pace, something a classroom cannot always offer.

Computer-aided assessment: (CAA) according to Lambert (2004) is a common term used for online assessment, although there are synonyms such as computerized tests (Alessi & Trollip, 2001), online testing (Maurice & Day, 2004), computer - assisted assessment (Conole & Warburton, 2005), online examinations (Khare & Lambert, 2008), electronic assessment (Sangi, 2008), online evaluation (Nelson, 1998), computer-administered tests (Waring, 1999) and computer-based testing (participants in this research).

According to Lambert (2004), students are presented with a variety of questions online to which they respond and which are marked electronically. The results are sent to a database where they can be stored and accessed by lecturers or presented back to the student immediately. Facilities such as detailed feedback and the ability to take a test a number of times are available in some systems (Maurice & Day, 2004).

Maurice and Day (2004) listed the advantages of CAA over manual assessment as follows:

- a. Online assessments are available on demand.
- b. Marking (grading) of assessments for large numbers of students is more efficient when done by automate means.
- c. Feedback to students can be delivered instantly.
- d. A large variety of questions can be develop over time to form a question bank. Questions can be randomly generated per assessment, using a generalized algorithm.

Maurice and Day (2004) listed the disadvantage as:

- a. Some types of questions cannot be marked automatically.
- b. Data security is problematic; in some cases, the identity of the test taker cannot be determined with certainty.
- c. Students with poor IT skills or who dislike the delivery method may be disadvantaged.
- d. Students need facilities where they can access the technology to take the assessment. This is not a problem in contact-learning, where institutions have computer laboratories, but can be a factor in the case of isolated learners doing distance-education.
- e. Accessibility for the physically challenged must be considered, since many online assessment tools have limited features for the disabled.

Internet: Is web - based collaboration among members of the same group in educational system, internet aids collaboration among staff and students of the same department, faculty or institution (Obanyi & Siroyewum, 2007). It serves as a repository of academic materials and knowledge available for use by members of the same academic group. In internet, collaboration is faster and cost effective with the removal of cost associated with internet connectivity.

Virtual Classroom: refers to institution in a learning environment where teacher and student are separated by line or space or both and the teacher provides course content through course management applications, multimedia resources, the internet, video

conferencing etc students enrolled in the virtual classroom have opportunities for immediate teacher feedback.

In Nigeria, the National Policy on Education of the Federal Republic of Nigeria, noted that the prominent role of ICT in advancing knowledge and skill necessary for effective functioning in the modern world, was the reason that ICT was integrated into education in Nigeria (FRN, 2016). With this statement, the Anambra State Government recognizes the need to harness ICT for educational development, and have partnered with other private sectors such as Technology Distribution (TD), Microsoft, School Net Nigeria Education Trust Fund (ETF), initiated secondary school connectivity and education programme. In 2010, former state governor Peter Obi provided computers, laptops, printers, telephones and other internet connectivities to all the Public Secondary Schools as a way of fostering ICT – driven education in Anambra State, since effective utilization of their technologies by teachers of business subjects depend on the availability.

Business subject consist of courses that provide skills that helps students in office occupations. Business subjects also provide orientation and basic skills with which to start a life of work for those who may not undergo further training. The Federal Republic of Nigeria (2016) defined business subjects as that aspect of subjects which leads to the acquisition of practical and applied skills as well as basic scientific knowledge to practical tasks in order to create wealth, improve human capacity, reduce labour, prolong life and improve general human welfare. One of the objectives of business subjects is to help students to have intelligent understanding of the increasing complexity of technology. Business subjects therefore has to align itself with this emergent information and communication technology that provides teachers and students access to vast stores of knowledge beyond the school, as well as with multi-media tool to add to their store of knowledge. Teachers of business subjects in senior secondary schools are expected to utilize internet technologies in classroom instruction processes. They are expected to use e-learning technologies to support instruction and enable secondary school students use technology as an important tool to meet their learning needs. The extent to which internet technologies are employed to teaching-learning process can be influenced by qualification.

Teacher's qualification refers to the academic and professional qualification that enables a person to become a registered teacher at all levels of education. It also entails the acquisition of relevant knowledge, skills and competence and creativity needed for quality productive engagement in the teaching profession (Etiubon & Benson, 2014). Darling-Hammond (2007) defined a well-qualified teacher as one who is fully certified and holds the equivalent of a major in the field being taught. Therefore, business subject teachers are teachers who are trained and equipped to respond to growing changing societal challenges in the areas of commerce. They should be able to inculcate in the learners knowledge and skills needed for active, productive, lifelong career opportunities in business.

However, observation shows that the extent at which teachers of business subjects in senior secondary schools in Anambra State utilized internet technologies is not well known. It is against this background that this study is carried out to determine the extent of utilization

of internet technologies by teachers of business subjects in senior secondary schools in Anambra State.

Statement of the Problem

The call to embrace e-learning technologies in teaching and learning has continued to receive stakeholders' attention. This is because there is need to instil and engender efficiency and effectiveness in the implementation of curriculum for business education. Federal Ministry of Education and the Anambra State Government spent a large financial resources in providing these e-learning technologies such as internet facilities to aid in the teaching and learning at the Secondary Schools' levels. It appears the teachers in the Secondary Schools do not still utilize these internet technologies in their teaching which will be as a result of inadequacy of computer skills. Adejemo, Adedola and Adedola (2013) noted that teachers' inability to utilize learning technologies due to inadequate computer skills of users has hampered the implementation of e-learning technologies in Nigeria Secondary Schools.

Moreover, there seems to be shortage of research information as to the extent of utilization of internet technologies by teachers of business subjects in Senior Secondary Schools in Nigeria, especially in Anambra State. It is on the strength of these issues that the study is out to find out the extent of utilization of internet technologies in teaching of business subjects in Senior Secondary Schools in Anambra State.

Research Question

1. To what extent do teachers of business subjects in senior secondary schools in Ogidi Education Zone of Anambra State utilize internet technologies in teaching of business subjects?

Hypothesis

1. There is no significant difference in the mean ratings of business subject teachers in the Senior Secondary Schools in Ogidi Education Zone of Anambra State on the extent of utilization of Internet technologies in teaching of business subjects based on qualification.

Method

The study adopted a descriptive survey design, which aimed at investigating the extent of utilization of internet technologies by teachers of business subjects in the secondary schools in Ogidi Education Zone of Anambra State. Descriptive survey research design was adopted because it is directed towards people, their opinions, attitude and behaviour. Nwogu (2006) states that descriptive survey design is concerned with collecting data from a sample of a population in order to describe conditions or relationships that exist. The design is chosen since the data from opinions of the secondary school teachers were collected from and used to justify the extent of availability, utilization and factors hindering utilization of e-learning technologies in Ogidi Education Zone of Anambra State.

Research Question

To what extent do teachers of business subjects in senior secondary schools in Ogidi Education Zone of Anambra State utilize internet technologies in teaching of business subjects?

Table 1: Mean rating and standard deviation of respondents on the extent of utilization of internet technologies for teaching of business subjects (N = 82)

SN	Internet technologies	Mean	Std. Deviation	Remarks
1	Use of YouTube to prepare lesson and post online for students to read	1.0484	0.9822	Very Low Extent
2	Use of wiki to share information online	1.3871	1.2328	Very Low Extent
3	Use of podcasting to support outside classroom learning	0.1290	2.2865	Very Low Extent
4	Use of blogger to communicate with their students	1.0645	2.0994	Very Low Extent
5	Use of E-mail to send students report	3.2419	1.2104	Moderate Extent
6	Use of Google to search relevant book for students	4.0323	1.0469	High Extent
7	Use of Facebook to give student assignment	2.0806	1.1205	Low Extent
8	Use of yahoo messenger to engage students thought on a topic under study	0.8226	1.2350	Very Low Extent
9	Instruction to students to use the Internet for collaborative work	4.9839	0.2843	Very High Extent
10	Use of Web-CT to create courses online to complement face-to-face instruction	0.9806	1.1058	Very Low Extent
11	Use of WhatsApp to follow up student's process	2.2323	1.3053	Low Extent
12	Use e-dictionaries and thesaurus to defines/find meanings of words and their opposites	1.0645	1.0994	Very Low Extent
	Cumulative Mean Response	1.9223		Low Extent

The results on Table 1 answers research question one of the study. The table showed the extent of internet technologies utilization in teaching business subjects in Ogidi Education Zone of Anambra State. Result on Table 1 showed that blackboard learning system to create groups of students for collaborative work (4.9839) is utilised at very high extent. The mean score of 4.0323 showed that high extent of utilisation of Google to search relevant book for students, while e-mail to send students report has a mean score of 3.2419 which suggests that e-mails are used at moderate extent.

Moreover, internet facilities such as Facebook to give student assignment (2.0806), and WhatsApp to follow up student's process (2.2323) are utilised at a low extent. Majority of the internet facilities which include YouTube to prepare lesson and post online for students to read (1.0484), wiki to share information online (1.3871), podcasting to support outside classroom learning (0.1290), blogger to communicate with their students (1.0645), yahoo messenger to engage students thought on a topic under study (0.8226), Web-CT to create

courses online to complement face-to-face instruction (0.9806), and e-dictionaries and thesaurus to defines/find meanings of words and their opposites (1.0645).

The overall extent of utilisation of internet technologies as depicted by the cumulative mean response showed a score of 1.9223, which suggests a low extent of utilisation in teaching business subjects at the secondary schools in Ogidi Education Zone of Anambra State.

Hypothesis

There is no significant difference in the mean ratings of business subject teachers in the Senior Secondary Schools in Ogidi Education Zone of Anambra State on the extent of utilization of Internet technologies in teaching of business subjects based on qualification.

Table 2: Result of the t-test for equality of means of high qualified and low qualified business subject teachers on the extent of utilization of internet technologies in teaching.

	N	Mean	Standard Deviation	T	Df	Sig.	Decision
Low Teacher qualification	27	2.5229	1.5165	2.558	80	.028	Rejected
High Teacher Qualification	55	2.9421	1.0111				

NB: Equal variances assumed

The mean value for the low teacher qualification group was 2.5223 and that of the high teacher qualification were 2.9421 for the teachers' response to the extent of utilization of internet technologies. The standard deviations were 1.5165 and 1.0111, respectively. The t-value was 2.558 with a probability (sign) value of .028. Since the p.value was less than .05 level, the study rejected the null hypothesis, and concluded that there is significant difference in the mean ratings of business subject teachers in the Senior Secondary Schools in Ogidi Education Zone of Anambra State on the extent of utilization of Internet technologies in teaching of business subjects based on qualification. This means that high qualified teacher made more effective utilisation of the internet than the low qualified business subject teachers in Ogidi Education Zone of Anambra State.

Conclusion

The study found that teachers of business subjects in Ogidi Education Zone of Anambra State utilized the available internet technologies in teaching business subjects at a low extent . It therefore conclude that availability is the determinant of extent of utilization of internet technologies in secondary schools. It also concludes that teachers' level of teaching qualification influence extent of utilization of e-learning technologies by business subject teachers

Recommendations

1. Secondary school administrators should sponsor the re-training of business subject teachers on the utilization on internet technologies in education so as to enhance their teaching skills.

2. More so, the teachers of business subjects, as well as other subject teachers should be encouraged to advance their qualification in their respective subject areas. The government should provide incentives that motivate teachers to go for further studies. Such motivation should come in the form of immediate promotion or regularization of any teacher who obtains additional qualification in his relevant areas.

References

- Anissimov, M. (2011). *What is video conferencing?* Retrieved on February 28, 2011, from <http://www.wisegeek.com/what-is-video-conferencing.htm>
- Alessi, S.M. & Trollip, S.R. (2001). *Multimedia for learning methods and development*. Masschusetts: Allyn & Becon.
- Conole, G. & Warburton, B. (2005). A review of computer-assisted assessment. *ALT-J, Research in Learning Technology*. 13(1), 17-31
- Darling-Hammond, L.(2007). Teacher quality and students' achievement. A review of State Policy Evidence. *Journal of Education Policy Analysis*,8(1),263-271.
- Federal Republic of Nigeria (FRN 2016). *Natioal Policy on Education*. Lagos:NERDC Press
- Kling, R. (2000). Learning about information technologies and social change: The contribution of social informatics, *The Information Society*, 16, 217-232
- Lambert, G. (2004). What is Computer Aided Assessment and how can I use it in my teaching. *Learning and Teaching Unit Briefing Paper*. Canterbury Christ Church University college. Retrieved from www.canterbury.ac.uk
- Maurice, S.A., & Day R.L. (2004). Online Testing Technology: Important Lessons Learned. *International Journal of Engaging Education*, 20(1):000-000
- Obinniyi, A.A. & Soreyewun, M.B. (2007). Intranet Implementation; a tool for web based collaboration and learning. Proceedings of the 21st National Conference of Nigeria. *Computer Society*, 13(18), 79-89.
- Wikipedi,(2019). Elearning.Retrievingfrom:<http://en.wikipedia.org/wiki/e-learning>.