

**ADOPTION OF COMPUTER AND INTERACTIVE WHITE BOARD AS CORRELATES
OF EMPLOYABILITY POTENTIAL OF BUSINESS EDUCATION UNDERGRADUATES
IN TERTIARY INSTITUTIONS IN RIVERS STATE.**

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ABSTRACT

The study analyzed assessed the adoption of computer and interactive white board as correlates of employability potential of business education undergraduates in tertiary institutions in Rivers State. Correlational research design was used to carry out the study. The population of the study consisted of six hundred and sixty-four (664) final-year undergraduates from three tertiary institutions in Rivers State. The sample size consisted of 254 final-year undergraduates from the selected institutions used for the study. The simple random sampling technique was used to select the sample of the study. A researcher-designed Techno-teaching and Employability Potential Questionnaire was used as the instrument for data collection. The researcher's supervisor and two experts from the Department of Business Education validated the instrument. The reliability index of 0.843 was determined through the Cronbach Alpha Reliability Test for data gotten through a pilot-testing approach. Out of 242 copies of the questionnaire administered, 242 copies successfully retrieved were used for further analysis. Pearson's Product Moment Correlation was used to answer the research questions, while Linear Regression Analysis was used to test the hypotheses at the 0.05 level of significance. The results showed that there was a significant relationship between computer adoption and the employability potential of business education undergraduates in tertiary institutions in Rivers State, and there was a significant relationship between interactive whiteboard adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State. It was concluded that computers, interactive whiteboards, adoption in business education have a direct bearing on the employability potential of business education undergraduates in tertiary institutions in Rivers State. One of the recommendations made was that the management of tertiary institutions has a policy on the adoption of computer tools for lecturers in the teaching of business education since it has a direct bearing on the employability of the business education graduates

KEYWORD: Adoption, Computer, Interactive White Board, Employability Potential, Business Education Undergraduates, Tertiary Institutions and Rivers State.

INTRODUCTION

Technology teaching implies the use of technology in education and the empowerment of students with increased access to relevant information as well as facilitating their learning, evaluation, and reflection. Interestingly, the adoption of technology into teaching has had an unprecedented impact on the learning process as a result of the advancement in information technology. The communicative abilities and facilities offered by the computer, the internet, smart phones, social networks, and so on mean that the expectations of lecturers are much higher.

Computer-based instruction is defined as teaching that occurs in electronic mediums, whether via computers, smartboards, or other technology devices (e.g., cellular phones, laptops, and tablet computers) (Madu et al., 2018). Therefore, the adoption of computers in the teaching of business education will expand the professional competencies of the students before and after graduation and enable them to be better prepared for the task required of them in the workplace.

Interactive whiteboard is a technology that transmits computer screens to the whiteboard using a projector and that enables controlling the computer by only touching the whiteboard with a special pen (Gambari et al., 2014). By using this tool, lecturers can display visual images on white boards, which improve the learning process. Students can also use a white board to draw, write, or manipulate images. The use of these instructional technology devices in teaching and learning will attract the students' attention, and they will learn easily. Consequent to the adoption of techno-teaching, business education students are expected to acquire practical knowledge and technical skills in the use of the various technologies that have dominated the 21st-century work environment, as a means of preparing themselves to compete in the 21st-century job market. Corroborating the foregoing, Olakulehin (2017) highlighted that pedagogy through the application of technologies has the advantage of heightening motivation, helping recall previous learning, providing new instructional stimuli, activating the learner's response, providing systematic and steady feedback, facilitating appropriate practice, sequencing learning appropriately, and providing a viable source of information for enhanced learning.

Business education as an aspect of vocational education is a specialized programme of instruction designed to provide students with knowledge, skills, and aptitudes leading to employability and advancement in office occupations and business operations (Akpan&Okiridu, 2018). As such, business education is designed with the primary purpose of upgrading skills or providing students with the necessary skills required for obtaining gainful employment. According to Adizu et al. (2020), the goals of business education include preparing students for specific careers in office occupations and equipping students with the requisite skills for job creation. According to Yorke and Knight (2014), employability potential is a set of achievements – skills, understandings, and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community, and the economy. Within the current economic climate, it is becoming more and more important that business education students can demonstrate employability skills upon graduation.

STATEMENT OF PROBLEM

The adoption of technology in teaching and learning has made the classroom more open, more accessible, and more engaging than ever before, as well as more difficult for lecturers and students to adapt to in a society that shifts from analogue to digital every day. As a result, in the 21st century, classroom activities have become difficult to conduct, international in scope, and dynamic in pace, with lecturers expected to match up with the demands of students who need instant, multi-media answers to their questions. Despite business, education is a vocational and technical programme, most students seem to lack any form of knowledge or exposure to the application of technologies, both inside and outside the classroom, which could have given them an edge in their quest to secure employment after graduation from the university. Many business education graduates, who are unfortunately products of the traditional one-way classroom communication style adopted by most lecturers for instructional delivery, often become unemployable in modern industry and commerce.

RESEARCH OBJECTIVE

- To determine the relationship between computer adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State.
- To examine the relationship between interactive white board adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State.

RESEARCH QUESTIONS

- What is the relationship between computer adoption and the employability potential of business education undergraduates in tertiary institutions in Rivers State?
- What is the relationship between interactive white board adoption and the employability potential of business education undergraduates in tertiary institutions in Rivers State?

RESEARCH HYPOTHESIS

- There is no significant relationship between computer adoption and the employability potential of business education undergraduates in tertiary institutions in Rivers State.
- There is no significant relationship between interactive whiteboard adoption and the employability potential of business education undergraduates in tertiary institutions in Rivers State.

LITERATURE REVIEW

CONCEPT OF BUSINESS EDUCATION

Business education according to Koko (2001) develops students with information and competencies, which are needed by all in managing personal business affairs, and in using the services of the business I sources world. The mission of business education at the college and university level (tertiary institution) is to train the necessary manpower for industry, business and public and private business establishment. Business education program is an umbrella, which shields all business course(s). It is therefore encompassing which includes account, secretarial, marketing and purchasing supply. Aliyu (2011) defined business teachers' education

programme as a preplanned aimed at training and developing business education teachers. The business teachers have the responsibility to help develop the student, influence youths and future student, who desire work, attitude and prepare competent professional business teachers who will do it job (Igboke, 2010).

Malsbary (2017) defined business education as those business programmes and courses taught ordinarily at the secondary school level. Osuala (2009) defined Business education as an essential part of the preparation of youths for live and living. In 2004, Osuala, gave another definition as a programme of instruction which consists of two parts (1) Office education - a vocational programme of office careers through initial, refresher and upgrading education and (2) General business education - a programme to provide students with information and competences which are needed by all in managing personal business affairs and in using the services of the business. Still on the definition of business education, Njoku (2017) defines business education as that facet of educational training that helps the individual to acquire relevant skills needed for living. However Njoku (2017) gave another definition as an educational programme that equips an individual with functional and suitable skills, knowledge, attitude and value that would enable him/her operates in the environment he/she finds himself/herself. It can be seen from the foregoing discussions that as the years go by; the definitions of business education continue to change. This means that business education is not static.

Business education is a programme of study, which offers students who wish to pursue a career in business an opportunity to develop those skills, abilities and understanding that will enable them to enter, perform and progress in a business occupation after graduating from high school or the university (Azuka, 2000). In the same vein, Osuala (2004) sees business education as a programme of instruction, which consist of two points, office education and general business education that provide students with information and experiences, which are needed by all in managing personal business affair and using the services of the business.

CONCEPT OF EMPLOYABILITY POTENTIALS

Employability refers to a new graduate possessing a set of skills and/or competencies that enable him or her to compete and secure employment, whether in formal employment, self-employment or any career. Besides the skills, employability also includes various attributes and experiences obtained through higher level learning where prerequisite knowledge and skills at lower lower levels are important. This thesis focuses on the skills and attributes in relation to the formal employment of HEIs graduates. Barrick and Bush (2017) state that employability comprises attributes besides technical skills (skills required for the accomplishment of a specific task) that makes employees an asset to employers.

According to Hillage and Pollard (2018), employability is about being capable of getting and keeping fulfilling work. In a broader context, employability is the ability of an individual to attain and continuously secure employment sustainably within the labour market and thus realize one's potential. In operationalizing employability are of the view that becoming employed means having a job and being employable means possessing the qualities necessary to maintain a job make a smooth transition from one workplace to another and progress in different workplaces. While employers view employability as the skills looked for in new employees, universities view employability as the skills and attributes demanded of their graduates to enable them to be more employable and abler to cope with.

Bridgstock (2009) categorized employability from two perspectives: the traditional or narrow view, which focuses on generic and discipline-specific skills and the initial employment outcomes, and the broader view of employability, which focuses on a more holistic approach that acknowledges personal characteristics (McQuaid & Lindsay, 2015), disciplinary differences (Barrie, 2006) and placing work in the context of an individual's life and the demands of the labour market. Recently, the concept of employability has become more important due to the changing nature of the graduate labour market. This has been brought about by globalization and the rapid development of technology. With advancements in technology, organizational forms have changed from the division of labour to holistic organizations. Additionally, the nature of work has shifted from specialization to versatility. Employability in the context of holism entails increased demand for skilled workers who have the ability to integrate work with both endogenous (meeting customers' demands, exploring new geographical locations and initiating discovery processes) and exogenous characteristics of the firm (which involves being conscious of changes in the business environment and technology and the ability to absorb multiple cultures).

One aspect of employability is the possession of employability skills. Employability skills are those basic skills necessary for getting, keeping and doing well in a job. According to (Hillage & Pollard, 2018), employability skills comprise knowledge (i.e. what an individual knows, which can be subject knowledge), skills (what is done with the knowledge) and attitudes (how it is done). Subject knowledge is perceived to be an in-depth study and possessing an understanding of a discipline, as well as the skills and personal attributes necessary to perform adequately at the graduate level (Lorraine & Sewell, 2017).

COMPUTER ADOPTION IN BUSINESS EDUCATION

A computer can be seen as an electronic device with great technological value, to the extent that a lot of activities in human society are carried out with it. It should be noted that information technology (IT) that enables the world to become a "global village" through the use of the Internet emerged with the emergence and use of computers. A computer is a vital product of electronic technology that can enhance works for uplifting higher education due to its potential to promote productivity in human activities. Nwachukwu in Amechi and Nwosu (2017) averred that productivity is the output resulting from a given resource input at a given time. Productivity is high when there is an economy of time and energy by performing a task in a short time with less energy. Fortunately, a computer is a technological device that saves time and energy and also produces accurate results (Nwosu & Chijioke, 2006).

The utilization of innovations such as the computer has turned into a vital piece of contemporary life and has directly influenced correspondence, instruction, amusement, and work (Huffman & Huffman, 2012). Therefore, computer education has been perceived as accessible for undergraduates, as it not just guides the learning interaction but also gives undergraduates mentalities that will be needed in their future work lives. Ogbuiyi (2015) characterized computer education as the abilities needed to recover data productively and impart knowledge adequately utilizing computer equipment and programming, in light of an applied comprehension of computer innovation and how it tends to be utilized to achieve explicit undertakings, including a consciousness of its intrinsic limits just as well as its benefits. The usage of computers is versatile, for it is applied in almost every aspect of human activities because of its interesting nature. Nwosu (2013) acknowledged that a computer system, as a vital electronic device with technological value, has certain characteristics: provision of accurate results; possession of high

operational speed (saving of time in operations); high memory capacity for storage of data and information; flexibility in modification of data and information; maintenance of reliability in its operation; ability to handle complex tasks; neat job performance; and wide utilization in human endeavor (i.e. versatility in application). With the aid of the software or program, the computer can perform various and numerous desired tasks.

Nwosu (2013) pointed out that a computer is a device that uses an intellectual map called a program to make decisions, process words, publish, create graphics, choose, copy, move, compare, and perform other non-arithmetic on the many alphabetic, numeric, and other symbols in the desired way. Sadiq, et al. (2013) noted that the computer is useful in human endeavors for it is a machine used for fast generation, calculation, and storage of information, and that its invention serves as a useful assistance to manual labor since it quickens data processing activities or functions. Amechi, and Nwosu (2017) averred that the purpose of computer systems is to speed up problem solving and increase productivity. Nwosu, et al. (2013) asserted that a computer is a kind of electronic device or machine that mankind can use to solve different types of problems much more easily, and it can accept data and instructions and process the data based on the instructions to generate results or output in such a manner that is to be equaled by any other machine known to mankind.

INTERACTIVE WHITEBOARD ADOPTION IN BUSINESS EDUCATION

Interactive whiteboard is a technology that transmits computer screens to the whiteboard by means of a projector and that enables controlling the computer by only touching the whiteboard with a special pen (Gambari, et al., 2014). By using this tool, teachers can display visual images on white boards, which improve the learning process. Students can also use a white board to draw, write, or manipulate images. The use of these instructional technology devices in teaching and learning will attract the students' attention, and they will learn easily. The introduction of the interactive whiteboard might be seen as a means of allowing teachers to resolve some of the problems with technology integration and support interactive teaching methods in whole class situations.

An interactive whiteboard is a large interactive display that connects to a computer and projector. This is highly suitable for students' projects, presentations, and seminars (Ojeaga&Igbinedion, 2012). The use of an interactive whiteboard (IWB) as an instructional tool has a beneficial effect on students' engagement in classroom lessons and leads to improved student behavior. Teachers and students believe that an interactive whiteboard has a high impact on revitalizing the classroom (Yanez and Coyle, 2011; Xu & Moloney, 2011).

According to Gambari, et al. (2014), interactive whiteboards increase teaching time by allowing teachers to present web-based and other resources more efficiently. It reduces the need for note-taking through the capacity to save and print what appears on the board, enabling teachers to save and print what is on the board, including any notes made during the lesson, reducing duplication of effort and facilitating revision. Interactive whiteboards enable students to be more creative in their presentations to their classmates, increasing their self-confidence. IWB allows teachers to share and re-use materials, reducing workloads. Utilizing this technology can be great for any school or learning institution because it streamlines areas that were a challenge before. These whiteboards will not only stimulate learning but will also save on learning materials and inspire performance (Hutt, 2017).

Interactive whiteboards are an electronic version of a dry-wipe board on a computer that enables learners in a virtual classroom to view what an instructor, presenter, or fellow learner writes or draws. It is also called an electronic whiteboard and is used in lecture or classroom environments, and the technology allows you to write or draw on the surface, print off the image, save it to your computer, or distribute it over a network. One can also project a computer screen image onto the surface of the whiteboard and then control the application either by touching the board directly or by using a special pen. The computer image can be annotated or drawn over, and the annotations can be saved to disc or sent by email to others.

Interactive whiteboards are like conventional whiteboards; they can help even technophobic teachers use this medium with ease for presentations from the front of the room. They help broaden the use of e learning because they rapidly demonstrate the potential of alternative modes of delivery. They make it easy for teachers to enhance presentation content by easily integrating a wide range of material into a lesson, such as a picture from the internet, a graph from a spreadsheet, or text from a Microsoft Word file, in addition to student and teacher annotations on these objects. It allows teachers to create easily and rapidly customized learning objects from a range of existing content and adapt them to the needs of the class in real time. They allow learners to absorb information more easily. They allow learners to participate in group discussions by freeing them from note-taking. They allow learners to work collaboratively around a shared task or work area. When fully integrated into a VLB (virtual learning environment) and learning object repository, there is potential for widespread sharing of resources. When used for interactive testing of understanding for the entire class, they can rapidly provide learner feedback (Raymond, 2014).

METHODOLOGY

A correlation research design was used to carry out the study. The population of the study consisted of six hundred and sixty-four (664) final-year undergraduates from three tertiary institutions in Rivers State. The sample size consisted of 254 final-year undergraduates from the selected institutions used for the study. The simple random sampling technique was used to select the sample of the study. A researcher-designed Techno-teaching and Employability Potential Questionnaire was used as the instrument for data collection. The instrument was validated by the researcher's supervisor and two experts from the Department of Business Education. The reliability index of 0.843 was determined through the Cronbach Alpha Reliability Test for data gotten through a pilot-testing approach. Out of 242 copies of the questionnaire administered, 242 copies successfully retrieved were used for further analysis. Pearson's Product Moment Correlation was used to answer the research questions, while Linear Regression Analysis was used to test the hypotheses at the 0.05 level of significance.

RESULTS AND DISCUSSIONS

Research Question One

What is the relationship between computer adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State?

Table 1: Pearson’s Product Moment Correlation analysis on the relationship between Computer Adoption and Employability Potential of Business Education Undergraduates in Tertiary Institutions in Rivers State

Variables	Mean	Std. Dev	n	r	Decision
Computer Adoption	3.08	0.85	241	0.93	Very Strong/ Positive Relationship
Employability Potentials	4.20	0.60			

Source: SPSS Computation, 2022.

Table 1 shows the extent of the relationship between computer adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State. However, the result indicated that the relationship that exist between computer adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State is very strong/positive relationship ($r = 0.93$, $r \leq \pm 0.80$ to ± 1.00). The implication of this result is that the extent of relationship between computer adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State is very strong.

Research Question Two

What is the relationship between interactive whiteboard adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State?

Table 2: Pearson’s Product Moment Correlation Analysis on the Relationship between Interactive Whiteboard Adoption and Employability potential of Business Education Undergraduates in Tertiary Institutions in Rivers State

Variables	Mean	Std. Dev	n	r	Decision
Interactive Whiteboard	3.59	0.86	241	0.50	Moderate/ Positive Relationship
Employability Potentials	3.74	0.90			

Source: SPSS Computation, 2022.

Table 2 shows the extent of the relationship between interactive whiteboard adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State. However, the result indicated that the relationship that exist between interactive whiteboard adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State is moderate/positive relationship ($r = 0.50$, $r \leq \pm 0.40$ to ± 0.59). The implication of this result is that the extent of relationship between interactive whiteboard adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State is moderate.

HYPOTHESES

Research Hypothesis One

There is no significant relationship between computer adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State.

Table 3: Summary of simple linear regression of the relationship between computer adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State

Variables	Coefficients	Std. Error	t	Sig.
(Constant)	3.156	0.334	9.453	0.00
Computer Adoption	0.805	0.021	38.376	0.000*
R	0.926 ^a			
R-squared	0.857			
Adjusted R-squared	0.856			
F-statistic	1472.699			
P-value	0.000 ^b			
Df	248			

a. Dependent Variable: Employability Potentials

b. Independent Variable: Computer Adoption

c. *Items show significant relationship with the dependent variable at the 0.05 level of significance

Source: SPSS Computation, 2022.

The result of table 1 shows that R-value of 0.926 indicates a very strong relationship between computer adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State. The r^2 -value of 0.875 indicated roughly the variation of 87.5% to the relationship between computer adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State. Furthermore, since, F-statistic = 1472.699, $t = 38.376$, at $df = 248$, and $p = 0.000 < 0.05$, hence, null hypothesis one is rejected at the 0.05 level of significance. Therefore, there is significant relationship between computer adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State.

Research Hypothesis Two

There is no significant relationship between interactive whiteboard adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State.

Table 4: Summary of simple linear regression of the relationship between interactive whiteboard adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State

Variables	Coefficients	Std. Error	t	Sig.
(Constant)	3.988	1.015	3.929	0.000
Interactive Whiteboard Adoption	0.763	0.065	11.678	0.000*
R	0.597 ^a			
R-squared	0.357			
Adjusted R-squared	0.357			
F-statistic	136.382			
P-value	0.000 ^b			
Df	248			

a. Dependent Variable: Employability Potentials

b. Independent Variable: Interactive Whiteboard Adoption

c. *Items show significant relationship with the dependent variable at the 0.05 level of significance

Source: Spss Computation, 2022.

The result of table 2 shows that R-value of 0.597 indicates a moderate relationship between interactive whiteboard adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State. The r^2 -value of 0.357 indicated roughly the variation of 35.7% to the relationship between interactive whiteboard adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State. Furthermore, since, F-statistic = 136.382, t = 11.678, at df = 248, and p = 0.000 < 0.05, hence, null hypothesis two is rejected at the 0.05 level of significance. Therefore, there is significant relationship between interactive whiteboard adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State.

DISCUSSIONS OF THE FINDINGS

The results in tables 1 and 3 show that the extent of relationship between computer adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State is very strong. Furthermore, the result indicated that there is significant relationship between computer adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State. This finding is in agreement with the study conducted by Ibelegbu (2013) which revealed that business studies teachers needed all the computer appreciation, word processing, the use of internet and data processing skills identified for effective teaching, which significantly enhanced student's job skills.

The results in tables 2 and 4 show that the extent of relationship between interactive whiteboard adoption and employability potential of business education undergraduates in tertiary

institutions in Rivers State is moderate. The result furthermore indicated that there is significant relationship between interactive whiteboard adoption and employability potential of business education undergraduates in tertiary institutions in Rivers State. This finding is consistent with the study carried out by Nnajofofor and Ejikeme (2020) which revealed that business studies teachers moderately utilized interactive whiteboards for quality teaching of business studies. The findings of the study are contrary to the findings of Nnajofofor and Ejikeme (2020), they revealed that there was no significant difference in the mean responses of business studies teachers on the extent of utilization of multimedia projectors and interactive whiteboards.

CONCLUSION

The study concluded that computer adoption and interactive whiteboards adoption in business education have a direct bearing on the employability potential of business education undergraduates in tertiary institutions in Rivers State. Therefore, business education lecturers, particularly those in Rivers State, should be using these technologies and not limiting themselves to the use of just paper-based sources of information and the traditional approach to business education pedagogy.

RECOMMENDATIONS

- The management of tertiary institutions has a policy on the adoption of computer tools for lecturers in the teaching of business education since it has a direct bearing on the employability of business education graduates.
- The management of tertiary institutions in Rivers State should provide business education lecturers with access to the use of interactive whiteboards in the classroom to improve the employability potential of students.

REFERENCES

- Adizu, N. E., Asuquo, E. E., & Chile, C. P. (2020). Mentoring of beginning business education lecturers for sustainable pedagogical skills development in State Universities in Rivers State. *Global Journal of Management and Business Research: A Administration and Management*, 20(12), 61-67.
- Akpan, U. I., & Okiridu, O.S.F. (2018). Business education program, skills acquisition and business investment potentials for economic diversification in Nigeria. *Rivers Business Education Journal*, 5(1), 17-26.
- Aliyu, M.M (2011). *Business Education in Nigeria: trends and issues*, Zaria. Abu Press
- Amechi, M.C., & Nwosu, F.C. (2017). Technological value of computer in handling contemporary issues in engineering. *Journal of Resourcefulness and Distinction*, 14(1), 290 – 298.
- Barrick, R., & Bush, L. (2017). They are trained, but are they employable. *Vocational Education Journal*, 62(5), 29-31.
- Barrie, S. (2006). Understanding what we mean by the generic attributes of graduates. *Higher Education*, 51(2), 215–241.
- Bridgstock, R. (2009). The graduate attributes we have overlooked: Enhancing graduate employability through career management skills. *Higher Education Research and Development*, 28(1), 31–44.
- Gambari, I. A., Balogun, S. A., & Alfa, A. S. (2014). Efficacy of interactive whiteboard on psychomotor skills achievement of students in Isometric and Orthographic projection. *Contemporary Educational Technology*, 5(4), 316-330.
- Hillage, J., & Pollard, E. (2018). *Employability: Developing a framework for policy analysis*. Department for Education and Employment Publishers.
- Hutt, M. (2017). Benefits of interactive whiteboard in the classroom. *International Letters of Social and Humanistic Sciences*, 62(2), 27-33.
- Ibelegbu, N. A. (2013). *Information and communication skills needed by business studies teachers in junior Secondary schools in Adamawa State*. Published Dissertation. University of Nigeria Press.
- Igboke, S. A. (2010). *Business education: Principles and methods*. Jones Communication Publishers
- Koko, M. N. (2001). *Teaching business: Methods and procedures*. Best hand Publishers.
- Lorraine, D. P. & Sewell, and P. (2017). The key to employability: Developing a practical model of graduate employability, Centre for employability, university of Central Lancashire, Preston. *UK Education and Training*, 49(4), 277-289.

- Madu, A. U., Ibrahim Vand, I. & Chagwa, S. M. (2018). Availability and utilization of ICT for information retrieval by undergraduate students in Ramat Library, University of Maiduguri: A case study. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)* 23(5), 35-42.
- Malsbary, B. J. (2017). Human resource management corporate performance and employee wellbeing: building the worker in HRM. *Journal of Industrial Relations*, 45(2), 127-137.
- Njoku, C. U. (2017). Business education and value orientation for national economic empowerment and development. *Business Education Journal*, 3(4), 1-2.
- Nnajofofor F.N., & Ejikeme C.E., (2020). Teachers' utilization of instructional technology for quality teaching of business studies in secondary schools in Enugu State. *European Journal of Education Studies*, 7(1), 207-226.
- Nwosu, F. C. (2013). Matching towards electronics and information technology for an improved economy in Nigeria. *International Journal of Research and Advancement in Engineering Science*, 3(3), 52 - 58.
- Nwosu, F. C., Ezeilo, C. J. & Chijioko, A. I. (2013). Effective utilization of the internet for advancement of education in Nigerian tertiary institutions. *African Journal of Engineering Research and Development*, 6(2), 32- 38.
- Nwosu, F.C. & Chijioko, A. I. (2006). Ogbuiyi, D. C. (2015). Influence of computer literacy on students in three university libraries in Southwestern. *International Research Journal of Interdisciplinary & Multidisciplinary Studies (IRJIMS)*, 1(1), 97 – 102
Enhancing the productivity of government workers using computer system. *Multidisciplinary Journal of Research Development*, 2(3), 137 - 141.
- Ogbuiyi, D. C. (2015). Influence of computer literacy on students in three university libraries in Southwestern. *International Research Journal of Interdisciplinary & Multidisciplinary Studies (IRJIMS)*, 1(1), 97 – 102
- Ojeaga, I. J. I., & Igbinedion, V. I. I. (2012). Potentials of e learning as a study tool in business education in Nigerian schools. *International Education Studies*, 5(5), 218-225.
- Olakulehin, F.K. (2017). Information and Communication technologies in teacher training and professional development in Nigeria. *Turkish Journal of Distance Education TOJDE*, 8(1), 133-142.
- Osuala, E. C. (2004). *A handbook on vocational technical education for Nigeria*. Pacific Publishers.
- Osuala, E. C. (2004). *Principles and methods of business and computer education*. Cheston Agency.
- Osuala, E. C. (2009). *Business and computer education*. Cheston Agency Publisher.
- Raymond, A. B. (2012). *A First course in computer training*. Academic Press.

Yanez, L., & Coyle, Y. (2011). Children's perceptions of learning with an interactive whiteboard.
ELT, 65(4), 446-457.