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Investigation of Student-Teachers Readiness and Attitude Towards Utilization of ICT in Studying Business Education in Delta State, Nigeria

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ABSTRACT

Student-teachers' readiness and attitude towards utilization of information and communication technology in studying business education in colleges of education in Delta State was investigated in this study. Descriptive survey research design was employed in the study. Population for the study entailed 1, 318 NCE business education student-teachers from two out of the four colleges of education in Delta State. Sample size of this study constituted 659 NCE business education student-teachers from two colleges of education in Delta State, which was selected at 50% using the proportionate stratified random sampling. Mean scores and standard deviation were used to analyze data in this study and all hypotheses were tested on an alpha level (α) of 0.05 significance using t-test. The findings revealed that student-teachers showcased strong readiness and positive attitudes towards utilization of the information and communication technology in studying business education in COEs in Delta State. However, the findings revealed that the student-teachers did not possess the requisite skills in different aspects of computer packages towards utilization of the information and communication technology in studying business education in COEs in Delta State. From these findings, recommendations were proffered and among them included that: the various institutional leadership in the colleges of education such as the Provosts, Deans and Head of Departments (HODs), should support students' readiness and preparedness towards the use of ICT in studying business education at the colleges of education. This can be achieved through ICT facility provisions, adequate funding, infrastructural development and private sector support and encouragements.

INTRODUCTION

The world has become a global village in which human interactions, relationships, communications, and businesses are highly influenced by information and communication technology (ICT). Even in the education industry or sector, information and communication technology (ICT) has been infused into administrative practices, research, and teaching and learning processes. Today, using ICT in teaching and learning situations in the various school systems is a common practice for European countries, which has widely and extensively spread into African countries, including the Nigerian education system. In business education, the use of ICT to boost teaching and promote students' learning has also been highly accepted and encouraged. This situation is owing to the fact that the Federal Republic of Nigeria (FRN, 2013) has accepted the integration of ICT in various education systems in Nigeria, including the colleges of education. According to the FRN (2013:57), "educational support services will be developed to facilitate the implementation of educational policy, attainment of policy goals and the promotion of effectiveness of educational system". The Federal Republic of Nigeria (FRN, 2013) further attested that in all teacher-training awarding programs issuing Nigerian Certificate in Education (NCE) and Degree certificate, ICT would be properly integrated into the system (pg. 44). In furtherance, ICT facilities and infrastructure, radio and television educational broadcasting, hardware and software laboratories, and Networking services shall be provided, including colleges of education that offers business education courses. Given the above policy statement by the Federal Republic of Nigeria (2013), it is therefore expected that the use of ICT facilities should be highly integrated and incorporated into every school system, including the colleges of education which are known for teacher preparation.

Colleges of education are teacher education institutions that train would-be teachers known as the student-teacher. They are a citadel of learning and higher education institutions established with several motives of producing servicing teachers for the secondary education sector (Federal Republic of Nigeria, FRN, 2013, pg.43). In this wise, student-teachers, especially in business education at the colleges of education, are expected to undertake and pass through several courses both in theory and practice. All the courses undertaken during the learning processes are expected to lead the students towards the achievement of educational goals and objectives, which can be visible through the effective utilization of ICT. The Federal Republic of Nigeria (FRN, 2013) further noted that the use of ICT in studying business education in the colleges of education, therefore, is an enabling way of developing a sound, intelligent learning society in the country, also a way of developing the competent workforce through practical life skills acquisition which is relevant to the world of work (pg.v). Kwacha (2007) affirmed that in all educational systems, the use of ICT is

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highly encouraged and approved by several authorities in order to inculcate into learners' abilities and skills that will enable them to operate effectively in the labor market. However, ICT networking tools and gadgets should be used for promoting different teaching methodologies for the appropriate dissemination of knowledge. Invariably, in business education, the use of ICT in studying business education will expose students to the integral aspect of business education which encompasses education for office occupation, accounting practices, shorthand, marketing, commerce, economic understanding, and entrepreneurship which is necessary for human capital development. Inije, Utoware, and Kren-Ikidi (2013) attested that in the colleges of education, business education courses is studied under accounting education, secretarial education, or office technology management, among others. As such, for business education students to maintain technological leadership, they should be equipped with ICT competencies in order to function and operate efficiently in the world of work. Therefore, in order to meet up with the ideals of human capital development, the Federal Government created a roadmap for the Nigerian education sector through the incorporation of ICT into the education system as a special education support service is inclusive (FRN, 2013).

The information and communication technology (ICT) can therefore be described as any device that is used for acquiring, sorting, processing, storing, and dissemination of information, whether textual, numeric, graph, etc., using the computer and other communication gadgets. Ajaero (2016) stated that information and communication technology is a term representing communication devices and applications such as radio, television, cellular phones, computer networks, computer hardware, and software satellite systems. Jinnah et al.(2015) also stated that ICT includes all internet, mobile equipment, etc., and software resources which have become powerful tools for educational change and reform. The different components of ICT, when adequately used, expand access to education raise the quality of education by making teaching,learning,appealing, and active process connected to real life. According to Bandele (2016), ICT has provided windows of opportunities for educational institutions to use information and technology in every teaching and learning situation. Its benefits in education are enormous. ICT has continued to play important roles in teaching and learning, although it has its pros and cons. According to Daramola (2014), ICT prepares students for a workplace where computers, the internet, and related technologies are becoming more and more ubiquitous It also expands access to education through remote learning resources. Yusuf et al. (2013) maintained that information and communication technology could boost any educational institution's efficiency and effectiveness in order to support them in achieving their goals and objectives. Yusuf et al. (2013) further noted that ICT provides quicker and easier access to more

extensive and current information its users, which is also useful in all research work. Besides these pros, Yunus et al. (2013) observed that the use of computer technology has its cons which make students become addicted to it in such a way that it negatively affects their reading skills. However, before the introduction of ICT in a respiratory of knowledge with students remains passive, but the tide had changed the whole process, students can now learn on their own with a little guidance from the teacher. Kiadese (2012) break ICT into three components, they are:

1. Information channels such as worldwide web (www) online database, electronic documents, management and accounting system, internet etc.

2. Communication channels such as e-mails, electronic discussions groups, electronic conference and the use of cell phones etc.

3. Hardware and software used to generate, prepare, transmit and store data such as computers, television, etc., in education, ICT are information carriers designed specially to fulfill the objectives in a teaching-learning situation.

The Federal Republic of Nigeria (FRN, 2013) indicated that the goals of incorporating ICT in education include;

i. assisting teachers in the facilitation of the teaching and learning process

ii. inculcating into students problem-solving, critical thinking, and innovative skills

iii. boosting lifelong education

iv. enabling teachers and educators to impact different teaching methodologies for promoting learning

v. improving research and development in educational institutions

vi. widening access to educational instructions anywhere, time, and any place.

The advantages of the information and communication on student teachers studying business education are enormous that the ICT as electronic resources aids students' research by providing them with the necessary online information and materials necessary to support and improve their learning (Shavinina, 2001). Citing instances, such ICT tools like the computer-internet, electronic typewriter, video or films, and online materials impacts positively in the teaching and learning of business education process. New ICT tools like social media, computer files transfers, virtual conferences, multimedia products, offline, web-based learning formats, and teleconferencing can be utilized to make positive impacts in business education. The various ICT facilities used in the -learning process, which can also be utilized in business education, include multimedia, digital, and computerized equipment (Bandele, 2006; Bryers, 2004 & Ofodu, 2007).

Ajayi and Ekundayo (2010) identified the following benefits of using ICT in teaching and learning business education.

- It facilitates effective teaching and learning process. ICT provides productive teaching and learning, which

increases people's creative and intellectual resources, especially in today's information society.

- It provides a wide range of learning materials. This implies that a teacher can meet the needs of students with different learning styles.

Onwuka and Koko (2010), also highlight the following benefits of ICT in the learning process. They are;

- It serves as a private tutor

- It provides rapid and accurate feedback to students, which contributes to positive motivation

- It promotes high order thinking and better problem-solving strategies

- It provides educational services and outside classroom learning for both teachers and students.

Given all the aforementioned benefits attached to the utilization of ICT in the teaching and learning process, yet infusion of ICT in studying business education in colleges of education highly depends really on students' and teachers' readiness and attitude toward utilization of ICT in studying their courses.

Attitudes, as defined in the Oxford popular School Dictionary (2002), is a way of thinking or behaving toward teaching and learning. It refers to the ways and manners students behave towards the whole process. It could be seen as the readiness or dispositions to act or react in a certain way. This statement is justified in the works of Bitner and Bitner (2002), which indicated that it is the preparedness and interest of the students and teachers overutilization of something like ICT, which is integrated into the curriculum. Once teachers and students develop skills and interests for instance, in ICT, they begin to find new ways of incorporating technology into the teaching and learning process (Bitner & Bitner, 2002). Readiness towards the use of ICT, as defined by Dada (2006) refers to the degree to which a country is prepared to get involved or participate and benefit from electronic activities using ICT in their education system. In the present study, readiness can be described as student-teachers willingness without hesitation to utilize ICT in studying business education Student-teachers' business education readiness towards utilization of ICT may be measured by a number of indicators which includes their willingness, preparedness, exposure, ability to use various software applications, experience, and expertise.

Moreover, business education student-teachers' attitude towards utilization of ICT may be measured by a number of indicators, including their thoughts, reactions, interest, habits, feelings, excitements, and confidence. In Delta State, the use of ICT in studying business education at the colleges of education is a thing that is yet to be actualized. This is so because the system is yet to internalize the use of ICT in teaching, and the conventional method of teaching is predominantly in teaching business education in the classroom. Many lecturers still depend on the old traditional or conventional method of teaching given this present technological age. In describing the conventional method of teaching, this involves a traditional teaching method where a teacher explains the steps verbally to working a problem, along with writing the steps on the chalk or whiteboard. It is a more or less teacher-centered and teacher-focused approach to learning whereby students observe and take notes during the process of learning. In conventional teaching, the resources that are used in this classroom setting are mostly paper, pencil, and textbooks. This method is synonymous with teacher-centered instruction, and students' remain passive in learning (Daramola, 2014). The conventional method likens a learner's mind to a blank state, unlike the use of ICT, which is more integrated and allows active participation of student-teachers in the learning process. Ajayi and Ekundayo (2009), observing the Nigerian schools, stated that many teachers still rely heavily on the traditional or conventional method of "chalk and talk" rather than the use of ICT in the teaching and learning activities. Ajayi and Ekundayo (2009), citing Okebukola, opined that in the Nigerian public schools, the use of computer technology had not been their practice; however, the situation has been challenging, which created difficulties in delivering instructions in the classroom. This is an indication that the students are still lagging behind in the trend of changes in the world. This presupposes that there is the tendency for both teachers and students to be denied the opportunities which ICT offers in the teaching-learning activities (Ajayi & Ekundayo, 2009). Additionally, Ajayi and Ekundayo (2009) further attested that in this recent time, teaching and learning have gone beyond the teacher standing in front of a group of pupils and disseminating information to them without the students' adequate participation. Any classroom teacher with adequate and professional skills in ICT utilization will definitely have his students perform better in classroom learning. With the emergences of Information and Communication Technology on teaching business education courses in colleges of education, teaching and learning have changed from traditional chalkboard to electronic learning requiring such skills as internet browsing, Microsoft word, powerpoint, Microsoft excel and teleconferencing gadgets from teachers and students (Ajayi & Ekundayo, 2009). However, in most countries of the world, the use of ICT has been internalized in their education system, just as cited by the Kothmale Community Radio Internet in Sri Lanka, Meenakshi (2013), and Open University of the United Kingdom (UKOU). This is also in line with the observations of the Indira Gandhi National Open University, which identified that ICT is used for the dissemination of information.

From all foregoing discussions, the researchers therefore wonder what could have been responsible for the current ugly situation of students-teachers utilization of ICT in colleges of education in Delta State. Whether the students are actually ready and possess the right attitude and skills towards the utilization of ICT in studying business education. This has been the thrust of this study. Nevertheless, for effective utilization of ICT in studying business education, both the student-teachers, including lecturers must be prepared and have a positive

attitude towards its utilization. Several studies have been carried out on students' attitude and readiness towards the use of ICT in most subject areas, but in business education programs at the colleges of education in Delta State, this is yet to be certain or propagated. Termit and Samli (2014), in their work on teacher readiness on ICT integration in teaching and learning, investigated the knowledge level, attitudes towards the usage of ICT in teaching and learning in secondary schools in Malaysia. The result revealed that teacher's level knowledge on ICT is moderate, and their attitudes are positive towards the use of ICT in teaching and learning in the classrooms, which is like those of the study conducted by Rosnaini and Mohd (2010) were only a few groups of teachers were ready to use ICT for teaching and learning. This is also at variance with the studies of Lau and Yeoh (2008), Melo (2007), Samuel and Zaidum (2007), which revealed that the majority of the respondents have a positive attitude towards the use of ICT in teaching and learning. Edmunds et al. (2012), in their study on student's attitude towards the use of ICT on course study, work and social activities: a technological model approach gave their confirmation on student's readiness and attitudes towards the use of ICT. Their study reported that students are ready to use ICT for course work (study) and work context. For example, Edmunds et al. (2012) observed that the use of ICT:

i. increases performance (at work or for learning)

ii. allows for more production time (work or study)

iii. makes the work learning easier

iv.. learning and cover materials are more quickly through the use of ICT/cover materials more quickly at work.

Educational institutions cannot, therefore, improve either the academic achievements of their students without sufficient preparedness of teachers to use ICT in teaching. Teachers must be prepared to use ICT to teach if students must be able to successfully use some new innovations to live and work successfully in an increasingly complex and information-driven society (Borrinston, 2007). The efficient and effective use of ICT in the teaching and learning of business education can improve students' learning experiences by inculcating in them great potentials that will enable them to operate efficiently within the world of work outside the school (Jawarneh, El-Hersh & Khazaiah, 2007).

Teacher's preparedness towards the use of ICT in the teaching and learning process actually plays an important role in the teaching and learning process. Teachers are the agents of change and so play a critical role in the success of teaching and learning in business education programs (Buntal et al., 2010). If student-teachers could show readiness possess the rightful attitudes and skills towards utilizing ICT in studying business education in Delta State COEs, this will make positive impacts that will lead to high academic achievement. Therefore, upon this background, the present study sought to investigate student-teachers readiness and attitude towards utilization

of the information and communication technologies in studying business education in colleges of education (COEs) in Delta State.

The use of information and communication technologies in education holds great potential and special packages for the student-teachers training at the colleges of education in Delta State. Given the great benefits incurred in studying business education using ICT, the use of ICT in teaching and learning of various subjects in the COEs in Delta State has not been internalized, far reached, and fully infused in the system. This situation of the student-teachers inadequacies in utilizing ICT resources or tools in studying business education which seems to be currently responsible for the poor learning outcomes and low performances of students' in academic activities in business education with its damned consequences, has kept both the researcher and most of the education stakeholders worried. The student-teachers in order to utilize ICT in studying business education must show readiness, develop interest and possess the right attitudes and skills towards utilizing ICT in studying business education in the COEs in Delta State. In this regard, the student-teacher ability to utilize ICT in business education is dependent on their readiness and attitude. Exploring student-teachers readiness and attitude towards utilization of ICT, especially in Delta State, is crucial and paramount to effective studying of business education for their professional growth and development. The study, therefore, fills the gap in the literature by describing student-teachers readiness and attitude towards utilization of the information and communication technologies in studying business education in the (COEs).

This study aimed at assessing student-teachers' readiness, including their attitude towards utilization of the information and communication technologies in studying business education in colleges of education (COEs) in Delta State. Specifically, the objectives of this study were to ascertain:

1. The student-teachers readiness towards utilization of the information and communication technology in studying business education in COEs in Delta State.

2. The student-teachers attitude towards utilization of the information and communication technology in studying business education in COEs in Delta State.

3. The skills possessed by the student-teachers in different aspects of computer packages towards utilization of the information and communication technology studying in the COEs.

These three research questions guided this study:

1. How is student-teachers readiness towards utilization of the information and communication technology in studying business education in COEs in Delta State?

2. What are the student-teachers attitudes towards utilization of the information and communication technology in studying business education in COEs in Delta State?

3. What are the skills possessed by the student-teachers in different aspects of computer packages towards

utilization of the information and communication technology in studying business education in COEs in Delta State?

The null hypotheses formulated were tested at a significance alpha level (α) of 0.05:

1. There is no significant difference in the mean ratings of student-teachers of College of Education, Agbor and Federal College of Education (Technical) Asaba on their readiness towards utilization of the information and communication technology in studying business education in COEs in Delta State.

2. There is no significant difference in the mean ratings of student-teachers of College of Education, Agbor and Federal College of Education (Technical) Asaba on their attitude towards utilization of the information and communication technology in studying business education in COEs in Delta State.

3. There is no significant difference in the mean ratings of student-teachers of College of Education, Agbor and Federal College of Education (Technical) Asaba on the skills they possessed in different aspects of computer packages towards utilization of the information and communication technology in studying business education in COEs in Delta State.

Theoretical Model

Three theoretical frameworks or models informed the present study and they are as follows:

i. The Dual-Coding Theory

ii. Theory of Planned Behaviour (TPB)

iii. Unified Theory of Acceptance and Use of Technology (UTAUT)

The dual-coding theory was propounded by a psychologist, Allan Urho Paivio in the year 1971. Paivio used the theory to initiate an idea that teaching-learning does not only dwell on use of words (language) but should dwell on the formation of mental images which aids in teaching and learning. Formation of mental images, according to the theorist (Paivio, 1971) can be acquired through the picture superiority effect, just like the use of ICT in teaching and learning. Based on Paivio's theory, pictures have advantages over words because they can stick to the memory, thereby promoting a dual coding process of visual and verbal information that can be used to represent information. Both visual and verbal codes can be used when recalling information (Paivio, 1971). This theory has informed the present study based on the emphasis placed on the use of ICT in education. Therefore, the utilization of ICT will enable student-teachers in the COEs to develop interest and attention in studying business education, thereby enabling students to experience the true picture and reality lessons presented in the business education classroom.

Another theory is the Theory of Planned Behaviour (TPB) developed in 1985 by Icek Ajzen, a social psychologist. The theory as identified in the works of Rapheal (2017) has been used to predict and explain a wide range of ICT behaviors and intentions states that behavioral achievement depends on both motivation (intention) and ability (behavioral control). Thus, an individual with positive attitudes about ICT will always be willing and prepared to use ICT. This model could be used by teachers who have embraced the use of technology in their day-to-day undertaking. The willingness to use technology coupled with the current trend of using ICTs among peers for the teaching and learning process could make student-teachers start using technology. The theory of planned behavior, therefore, informs the use of ICTs in the teaching and learning process among students-teachers. This model could be used by student-teachers who have embraced the use of technology in their day-to-day undertaking. The willingness to use technology coupled with the current trend of using ICTs among peers for the teaching and learning process could make student-teachers start using technology. The theory of planned behavior, therefore, informs the use of ICTs in studying business education in COEs by student-teachers who must showcase their readiness, preparedness, willingness, positive attitude, and skills towards its utilization.

Lastly discussed theory is the Unified Theory of Acceptance and Use of Technology (UTAUT) was developed by V. Venkatesh, M.G Moris, G.B Davis, and F.D. Davis in 2003. UTAUT identifies four independent variables that affect the adoption of new technology namely, performance expectancy, effort expectancy, social influence, and facilitation conditions. UTAUT identifies four independent variables that affect the adoption of new technology namely, performance expectancy, effort expectancy, social influence, and facilitation conditions (Vankatesh et al, 2003; Karim et al., 2022). Just as in this present study, when the student-teachers should show positive attitude likewise their support, readiness, willingness, prepared and become skillful in the use of ICT, only then could ICT be effectively utilized in studying business education in the COEs. Therefore, the UTAUT and the other previous theories have informed this present study based on their encouragements in the use of ICT in teaching-learning and education.

METHODS
Research Design

The study employed the descriptive survey research design (Chowdhury et al., 2022). In employing this design, the researcher conducted a field investigation using a research instrument (that is, questionnaire) in order to gather information from a group of a sample of a large population of NCE student-teachers in Delta State. Information retrieved from these respondents were analyzed measured, and generalization were drawn from the results. This design which suits the present study, as opined by Nworgu (2015) demands that the researcher collects data and describes them in a systematic manner of the characteristics, features or facts about a given population. Studies of such nature are interested in describing certain variables in relation to the population of the study and the generalization is drawn. The population of the study entailed 1,318 NCE

business education student-teachers from two out of the four colleges of education in Delta State. Breakdown of the population entails 513 business education student-teachers from Federal College of Education (Technical) Asaba and 805 business education student-teachers from College of Education, Agbor, Delta State. The sample size of this study, constituted 659 NCE business education student-teachers from two colleges of education in Delta State, which was selected at 50% using the proportionate stratified random sampling technique. In selecting the sample from the two COEs, fifty percent of the population was worked out for each COE. An instrument for data collection was a researcher's self-developed 34-item questionnaire tagged: "Student- Teachers Readiness and Attitude towards Utilization of ICT Questionnaire (STRAUICTQ)" was constructed based on the purpose of the study and research questions. This instrument was organized into three clusters and measured on a 4 point scale. Each cluster represented one of the research questions. The questionnaire was validated by some specialists from the Faculty of Education, Nnamdi Azikiwe University, Awka, Anambra State. Two of these specialists came from the Business Education Department and the other one a Measurement and Evaluation expert from Education Foundations Department, Faculty of Education, Nnamdi Azikiwe University, Awka, Anambra State. These experts who validated the research instrument determined the face and content validity of the instrument. Corrections were made on some of the items, and these corrections were incorporated in the research instrument before its final administration to the respondents.

The reliability of the research instrument was determined through a single administration of the research instrument on a sample of 40 NCE business education student-teachers from two colleges of education in Anambra State. The area was not part of the study area, but Anambra State shared boundaries with Delta State, and the administrative practices in colleges of education were similar. However, score obtained after the pilot test was computed using Cronbach Alpha statistics which yielded an internal consistency reliability value of 0.76. This figure showed that the instrument was reliable and trustworthy to conduct the study. Information was retrieved from the respondents through a personal, hand delivery contact with the help of four research assistants. These research assistants were students from the business education department from the two COEs that were sampled in the study. The research assistants who were communicated about the purpose of the study were also instructed and given directives on how to retrieve information from their colleagues (that is, fellow students). Moreover, the researcher and the research assistants took permission from the head of the department of business education before administering the questionnaire to the student-teachers in their various institutions. An on-the-spot method was used to retrieve all the copies of the questionnaire, in that case, both the researcher and research assistants waited for the respondents to fill out the questionnaire and retrieved them immediately. Exercise of distributing the questionnaire to the respondents took a period of two weeks. Six hundred and fifty-nine (659) questionnaires were distributed to the NCE business education student-teachers in which they were all retrieved, and the rate of return was at 100%.

Data Analysis
Mean scores and standard deviation were used to analyze data. The decision rule for taking decisions on the items on the instrument was benchmarked at 2.50. Any mean score that rated at 2.50 and above was considered to be in agreement with the statement and therefore was accepted. Any mean score that rated at 2.49 and below was considered to be in disagreement with the statement and therefore was not accepted. The hypotheses were tested at an alpha (α) level of 0.05 significance using t-test statistics to determine the statistical differences in the mean ratings from the responses of the principals in public and private secondary schools in Anambra State. The t-test was used to test hypotheses 1 to 3. The decision rule was based upon the premise that wherever the p-value obtained or calculated value is greater than or equal to the alpha 0.05 level of significance, the null hypothesis - H0 is not rejected (accepted). Otherwise, wherever an obtained or calculated p-value is less than the alpha 0.05 level of significance, such null hypothesis - H0 is rejected.

RESULTS
Analysis of the result from Table 1 showed that all the items from 1to12 of the student-teachers responses from COE, Agbor, and FCE (T) Asaba rated above the acceptable mean score of 2.50. The section means of both the student-teachers' responses from COE, Agbor, and FCE (T) Asaba of 2.91 and 3.02 respectively is an indication that the student-teachers reacted positively to all the items showing strong readiness towards utilization of the information and communication technology in studying business education in COEs in Delta State. They were ready and willing to utilize the information and communication technology in studying business education in COEs in Delta State.

Analysis of the result from the table 2showed that all the items from 13, 14, 16, 17, and 19 to 25 of the student-teachers responses from COE, Agbor, and FCE (T) Asaba rated above the acceptable mean score of 2.50, in agreement with the statements. Only items 15 and 18 rated below 2.50 of the acceptable mean score. The section means of both the student-teachers' responses from COE, Agbor, and FCE (T) Asaba of 2.89 and 2.96 respectively is an indication that the student-teachers reacted positively to the majority of the items showing a positive attitude towards utilization of the information and communication technology in studying business education in COEs in Delta State.

Table 1: Mean Scores and SD of Respondents concerning Student-Teachers Readiness towards Utilization of the Information and Communication Technology in Studying Business Education in COEs in Delta State

S/N	Please indicate your readiness towards utilization of ICT in studying business education in your institution	COE Agbor			FCE (T) Asaba		
		X	STD	DECISION	X	STD	DECISION
1	I am willing to use various ICT software applications in studying business education	2.97	0.96	Agree	3.09	0.99	Agree
2	I am ready to use various ICT hardware to study business education	3.04	0.96	Agree	3.07	0.98	Agree
3	I am highly supportive to keep abreast with current information in studying business education using various ICT materials	2.86	0.97	Agree	3.07	1.10	Agree
4	I am prepared to make myself available using ICT in studying business education	3.07	0.86	Agree	3.25	0.94	Agree
5	I cannot hesitate to utilize ICT whenever they are used to support teaching in business education	3.12	0.80	Agree	3.28	0.86	Agree
6	I willing to acquire the skills that will enable me to effectively utilize ICT in studying business education	2.96	1.01	Agree	3.04	1.00	Agree
7	I am prepared to improve my expertise using ICT to study business education	2.80	1.06	Agree	2.88	1.09	Agree
8	I am willing to chat with and access business education information from different websites in the internet	2.78	1.00	Agree	2.93	1.10	Agree
9	I am prepared to download and store information that will improve my studies in business education using ICT	2.76	1.06	Agree	2.85	1.10	Agree
10	I am ready to chat or discuss with my colleagues in business education using ICT tools	2.85	1.06	Agree	2.87	1.06	Agree
11	I have the ability of using various software applications in studying business education	2.88	0.96	Agree	3.07	1.07	Agree
12	I am prepared to receive teaching in business education using ICT	2.88	1.06	Agree	2.90	1.06	Agree
	Section Mean and Standard Deviation	2.91	0.98	Agree	3.02	1.03	Agree

Table 2: Mean Scores and SD of Respondents concerning Student-Teachers Attitude towards Utilization of the Information and Communication Technology in Studying Business Education in COEs in Delta State

S/N	I feel comfortable with the idea of using different ICT tools in studying business education	COE Agbor			FCE (T) Asaba		
		X	STD	DECISION	X	STD	DECISION
13	I feel exhausted or frustrated whenever I am to research information using any ICT gadget	2.80	1.05	Agree	2.89	1.08	Agree
14	I think using ICT to study business education will assist me in achieving good grades and high performances in business education courses	3.08	0.95	Agree	3.13	0.93	Agree
15	I am excited to learn more using ICT facilities than from books	2.41	1.12	Disagree	2.50	1.12	Disagree
16	I feel uncomfortable using the computer to search information for my assignments because I still prefer doing my assignment using only information from the textbook	3.20	0.83	Agree	3.29	0.80	Agree
17	I react positively to the lesson whenever any ICT tools is been utilized to teach any course in business education	2.74	1.01	Agree	2.94	1.12	Agree
18	My contact with using some of the ICT electronic tools has positively changed my pattern of studying business education because it exposes me to learning realities	2.12	1.03	Agree	2.16	1.10	Agree
19	I am always interested in using the ICT as search engines for most of my assignments	2.83	1.09	Disagree	2.86	1.07	Disagree
20	I have a positive feeling and believe that using ICT in business education classes will improve my learning	3.18	0.94	Agree	3.24	0.90	Agree
21	I enjoy business education lessons that is presented using ICT equipment	3.05	0.93	Agree	3.12	0.96	Agree

22	Using ICT to present lessons in the classroom captivates/captures my interest in studying business education	2.96	1.02	Agree	3.02	1.00	Agree
23	I strongly believe, also confident that the use of ICT would stimulate creativity in me	3.17	0.87	Agree	3.21	0.89	Agree
24	Using ICT to present lessons in the classroom captivates/captures my interest in studying business education	3.11	0.99	Agree	3.16	0.99	Agree
25	I strongly believe, also confident that the use of ICT would stimulate creativity in me	2.95	1.02	Agree	2.96	1.08	Agree
			0.99	Agree	2.96	1.00	
	Section Mean and Standard Deviation	2.89					

Analysis of the result presented in Table 3, showed that only item 30 of the student-teachers responses from COE, Agbor, and FCE (T) Asaba rated above the acceptable mean score of 2.50, in agreement with the statement. All other items from 26 to 29 and 31 to 34 rated below 2.50 of the acceptable mean score. The section means of both the student-teachers' responses from COE, Agbor, and FCE (T) Asaba of 2.31 and 2.32 respectively is an indication that the student-teachers reacted negatively to the majority of the items showing that they did not possess the requisite skills in different aspects of computer packages towards utilization of the information and communication technology in studying business education in COEs in Delta State. This result further showed that the student-teachers' ICT skills had not been fully developed.

Table 3: Mean Scores and SD of Respondents concerning the Skills possessed by the Student-Teachers in different aspects of Computer Packages towards Utilization of the Information and Communication Technology in Studying Business Education in COEs in Delta State, N = 659

S/N	Please indicate skills you possessed in different aspects of computer packages towards utilizing the ICT in studying business education in your institution	COE Agbor			FCE (T) Asaba		
		X	STD	DECISION	X	STD	DECISION
26	Skills in basic computer functions such as booting or turning up a computer system, closing and saving files, etc using the computer with its components effectively	2.10	1.07	Disagree	2.11	1.08	Disagree
27	Ability to make presentations in the classroom using ICT device like projectors	2.16	1.08	Disagree	2.13	1.07	Disagree
28	Skills in operating different software applications through the computer like MS-word processor, spread sheets, PowerPoint, graphics and drawing, databases and data entry, Desktop publishing, video production and editing, etc	2.24	1.00	Disagree	2.05	1.10	Disagree
29	Internet browsing, accessing including e-mailing skills	2.32	1.04	Disagree	2.24	1.10	Disagree
30	Skills in operation ICT multimedia device like television set, radio, DVD cassette player, etc	2.78	1.02	Agree	2.93	1.12	Agree
31	Internet browsing, accessing including e-mailing skills	2.44	1.08	Disagree	2.35	1.11	Disagree
32	Use of publisher to create student's publications	2.51	1.00	Agree	2.88	1.11	Agree
33	Ability to print materials downloaded from the internet without external support	2.13	1.11	Disagree	2.10	1.09	Disagree
34	Operating systems skills (that is, Window Operating Systems & others)	2.13	1.10	Disagree	2.12	1.09	Disagree
	Section Mean and Standard Deviation	2.31	1.06	Disagree	2.32	1.1	Disagree

Hypotheses Testing

H01: There is no significant difference in the mean ratings of student-teachers of College of Education, Agbor, and Federal College of Education (Technical) Asaba on their readiness towards utilization of the information and communication technology in studying business education in COEs in Delta State.

The result in Table 4 indicates that the calculated t-test value is 1.465 and a p-value .143 with the degree of freedom (df) 657 at alpha level 5%. P-value of .143 was obtained and this is greater than the alpha level .05, then the tested null hypothesis is retained. Hence, no significant difference in the mean ratings of student-teachers of College of Education, Agbor, and Federal College of Education (Technical) Asaba on their readiness towards utilization of the information and communication technology in studying business education in COEs in Delta State.

H02: There is no significant difference in the mean ratings of student-teachers of College of Education, Agbor,

and Federal College of Education (Technical) Asaba on their attitude towards utilization of the information and communication technology in studying business education in COEs in Delta State.

The result in Table 5 indicates that the calculated t-test value is 0.898 and a p-value .370 with the degree of freedom (df) 657 at alpha level 5%. P-value of .370 obtained is greater than the alpha level .05, and then the tested null hypothesis is retained. Hence, no significant difference in the mean ratings of student-teachers of College of Education, Agbor, and Federal College of Education (Technical) Asaba on their attitude towards utilization of the information and communication technology in studying business education in COEs in Delta State.

H03: There is no significant difference in the mean ratings of student-teachers of College of Education,

Agbor and Federal College of Education (Technical) Asaba on the skills they possessed in different aspects of computer packages towards utilization of the information and communication technology in studying business education in COEs in Delta State.

The result in Table 6 indicates that the calculated t-test value is 0.132 and a p-critical value .895 with the degree of freedom (df) 657 at alpha level 5%. P-value of .895 obtained is greater than the alpha level value .05, and then the tested null hypothesis is retained. Hence, no significant difference in the mean ratings of student-teachers of College of Education, Agbor, and Federal College of Education (Technical) Asaba on the skills they possessed in different aspects of computer packages towards utilization of the information and communication technology in studying business education in COEs in Delta State.

Table 4: t-test of independent sample on no significant difference in the mean ratings of student-teachers of College of Education, Agbor and Federal College of Education (Technical) Asaba on their readiness towards utilization of the information and communication technology in studying business education in COEs in Delta State

Schools	N	Mean	Std. Dev.	t-cal.	Df	p-value	Decision
COEAgbor	402	34.97	11.41	1.465	657	.143	Not Sig.
FCE(T) Asaba	257	36.33	11.96				

Table 5: t-test of independent sample on no significant difference in the mean ratings of student-teachers of College of Education, Agbor and Federal College of Education (Technical) Asaba on their attitude towards utilization of the information and communication technology in studying business education in COEs in Delta State

Schools	N	Mean	Std. Dev.	t-cal.	df	p-value	Decision
COEAgbor	402	37.59	12.24	.898	657	.370	Not Sig.
FCE(T) Asaba	257	38.47	12.38				

Table 6: t-test of independent sample on no significant difference in the mean ratings of student-teachers of College of Education, Agbor and Federal College of Education (Technical) Asaba on the skills they possessed in different aspects of computer packages towards utilization of the information and communication technology in studying business education in COEs in Delta State

Schools	N	Mean	Std. Dev.	t-cal.	df	p-value	Decision
COEAgbor	402	37.59	12.24	0.132	657	.895	Not Sig.
FCE(T) Asaba	357	20.82	12.38				

Discussion

It was found in the study that the student-teachers showed strong readiness towards utilization of the information and communication technology in studying business education in COEs in Delta State. They were ready and willing to utilize the information and communication technology in studying business education in COEs in Delta State. The hypothesis tested indicated that there is no significant difference in the mean ratings of student-teachers of College of Education, Agbor, and Federal College of Education (Technical) Asaba on their readiness towards utilization of the information and communication technology in studying business education in COEs in Delta State. The finding indicated further that the student-teachers were willing to use various ICT software applications in studying business education. They were ready to use various ICT hardwires in studying business education and were highly supportive

of keeping abreast with current information in studying business education using various ICT materials. The student-teachers were prepared to make themselves available using ICT in studying business education. They cannot hesitate to utilize ICT whenever they are used to support teaching in business education; and they were willing to acquire the skills that will enable me to effectively utilize ICT in studying business education. The student-teachers were prepared to improve their expertise using ICT to study business education and were also willing to chat with and access business education information from different websites on the internet. They were prepared to download and store information that will improve their studies in business education using ICT and ready to chat or discuss with their colleagues in business education using ICT tools. The student-teachers had the ability use various software applications in studying business education and were prepared to receive

teaching in business education using ICT. This finding agrees with the findings of Edmunds, Thorpe and Conole (2012), which found that students' were ready to use ICT in learning. Termit and Samli (2014) also confirmed that teacher's knowledge level on ICT is moderate, and their attitudes are positive towards the use of ICT in teaching and learning in the classrooms

The present study discovered through one of the findings that the student-teachers showcased a positive attitude towards utilization of the information and communication technology in studying business education in COEs in Delta State. The hypothesis tested indicated that there is no significant difference in the mean ratings of student-teachers of College of Education, Agbor, and Federal College of Education (Technical) Asaba on their attitude towards utilization of the information and communication technology in studying business education in COEs in Delta State. This result included that the student-teachers felt comfortable with the idea of using different ICT tools in studying business education and were also excited about using the computer in studying business education. They neither felt exhausted or frustrated whenever information are searched using any ICT gadget, nor were they lazy using the computer to search information for my assignments. Rather, the student-teachers thought using ICT to study business education will assist them in achieving good grades and high performances in business education courses; and they were excited to learn more using ICT facilities than from books. They reacted positively to the lesson whenever ICT tools were been utilized to teach any course in business education. Also, their contact with using some of the ICT tools has positively changed their pattern of studying business education; and they are always interested in using the ICT as search engines for most of my assignments. Furthermore, the student-teachers have a positive feeling and believe that using ICT in business education classes will improve their learning; and they enjoy business education lessons that are presented using ICT equipment. Using ICT to present lessons in the classroom captivates/captures their interest in studying business education.

It was also discover through the finding of this study that the student-teachers did not possess the requisite skills in different aspects of computer packages towards utilization of the information and communication technology in studying business education in COEs in Delta State. The hypothesis tested indicated that there is no significant difference in the mean ratings of student-teachers of College of Education, Agbor and Federal College of Education (Technical) Asaba on the skills they possessed in different aspects of computer packages towards utilization of the information and communication technology in studying business education in COEs in Delta State. The result further revealed that the student-teachers' ICT skills had not been fully developed, in as much as they displayed strong readiness and positive attitude towards studying

with ICT in business education. The finding further indicated the student-teachers did not possess skills in basic computer functions such as booting or turning up a computer system, closing and saving files, etc. using the computer with its components effectively. They did not possess the ability to make presentations in the classroom using ICT devices like projectors; and likewise the skills in operating different software applications like MS-word processor, spreadsheets, PowerPoint, graphics and drawing, databases and data entry, Desktop publishing, video production, and editing, etc. The student-teachers neither possess the internet browsing, accessing including e-mailing skills, nor skills of video conferencing in studying business education. Further finding showed that the student-teachers did not possess the skills for using publisher to create student's publications, or the ability to print materials downloaded from the internet without external support, and Operating systems skills (that is, Window Operating Systems & others). This finding does not corroborate with the finding of Edmunds, Thorpe & Conole (2012) gave their confirmation on student's readiness and attitudes towards the use of ICT in course study, work, and social activities. However, to become able to utilize ICT efficiently in studying business education, the student-teacher must work on their skills. All the findings of this study, therefore, are tilting towards effective integration and incorporation of ICT into studying business education for improving student-teachers learning opportunities.

CONCLUSION

The information and communication technology stimulates students' interest in studying business education, although the student-teachers are expected to showcase strong readiness, positive attitude and rightful skills towards the use of ICT. However, from the findings of this study, it could be concluded that the student-teachers showcased strong readiness and positive attitudes towards utilization of the information and communication technology in studying business education in COEs in Delta State. On the contrary, the student-teachers did not possess the requisite skills in different aspects of computer packages towards utilization of the information and communication technology in studying business education in COEs in Delta State. The student-teachers' ICT skills have not been fully developed because of their lack of skills and exposure to the use of ICT tools and materials in the COEs. In addition, since the use of ICT has not been fully incorporated in studying business education in the COEs, this situation would have been responsible for the inadequacies of student-teachers skills and ICT facilities provisions that will expose student-teachers to the utilization of most of these facilities. All these findings call for adequate attention to be given towards studying business education using ICT for the achievement of educational goals and instructional objectives in the colleges of education. Therefore, recommendations have been proffered.

Recommendations

From the findings of this study, the following recommendations have been made:

1. The various institutional leadership in the colleges of education, such as the Provosts, Deans, and Head of Departments (HODs), should support students' readiness and preparedness towards the use of ICT in studying business education at the colleges of education. This can be achieved through ICT facility provisions, adequate funding, infrastructural development, and private sector support and encouragement.

2. The Federal and State Governments, National Commissions for Colleges of Education (NCCE) monitoring and coordinating the activities of the COEs and institutional leadership should encourage student-teachers positive attitude towards using ICT in studying business education at the COEs. This can be actualized through effective implementation of ICT policy and the teaching of computer courses improved in the colleges of education using effective means and strategies.

3. Student-teachers ICT skills should be highly improved in order to enhance their studying business education in the COEs. However, the Federal and State Governments, in conjunction with the National Commissions for Colleges of Education (NCCE) should improve student-teachers skills towards utilization of ICT in studying business education also through adequate financial support, manpower training, and retraining programs organized for both students' and academic staff, and infrastructural development.

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