ASSESSMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) COMPETENCY LEVEL OF BUSINESS EDUCATORS IN UNIVERSITIES IN KWARA STATE

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A THESIS SUBMITTED TO THE DEPARTMENT OF BUSINESS AND ENTREPRENUERSHIP EDUCATION, COLLEGE OF EDUCATION, KWARA STATE UNIVERSITY, MALETE IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE (M.Sc Ed) IN BUSINESS EDUCATION

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DECLARATION

I declare that the work in this Thesis titled assessment of information and communication technoloy (ICT) competency level of business educators in universities in Kwara State has been carried out by Olaitan Ayinde MAGAJI in the Department of Business and Entrepreneurship Education. The information derived from literature has been duly acknowledged in the text and a list of references provided. No part of the thesis was previously presented for another degree or diploma at this or any other institution.

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CERTIFICATION

This Thesis "Assessment of Information and Communication Technology (ICT) Competency Level of Business Educators in Universities in Kwara State, by Olaitan Ayinde MAGAJI meets the regulations governing the award of the degree of Master of Science (M.Sc.Ed) Business Education, Kwara State University, Malete, and is approved for its contributions to knowledge and literary presentation.

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DEDICATION

This research work is dedicated to my parents, Alhaji and Alhaja Ayinde A Magaji

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ABSTRACT

The study was conducted to assess information and communication technology (ICT) competency level of business educators in universities in Kwara state. To guide the study, four purposes, four research questions, and four hypotheses were developed. A descriptive survey design was adopted for the study. The entire 249 300level and 400level students of business education from the three universities in Kwara state formed the population and sample of the study. A structured questionnaire containing 40 items was used to elicit responses from the respondents and generate data for the study. The instrument was face-validated by three experts, and pilot tested to determine the internal consistency of the instrument and reliability coefficient of 0.86 was obtained. The data collected were analysed using mean and standard deviation to answer the research questions while t-test was used to test the null hypotheses at the level of signifance of 0.05. Presentation and analysis of data were made by the use of tables. The result revealed that business educators were highly competent in using word processing, internet, multimedia system and data processing skills identified. There was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using word processing to teach business education courses. There was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using internet to teach business education courses. There was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using multimedia system to teach business education courses. There was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using data processing to teach business education courses. Based on the findings of the study, the researcher therefore recommended that there should be constant training and workshop for lecturers teaching business education courses so as to always refresh their knowledge on the use of wood processing, internet, multimedia system and data processing since they already possessed the skills. It was also recommend that the government should provide ICT facilities for business educators to practice

CHAPTER ONE

INTRODUCTION

Background to the Study

Teachers play a crucial role in the development, adoption, and implementation of any educational curriculum and innovation. This role becomes even more critical in the adoption and integration of Information and Communication Technology (ICT) into the education programme of a country. Information and Communication Technology (ICT) usage improves human capacity in every field of human endeavour, including business transactions, industrial operations, educational programmes and life in general. (Pelgrum & Law, 2003). Carlson and Gadio (2002) stated that teacher training in the use of ICT is the best starting point in the ICT policy of a country because they are the key to making learning happen. According to Pelgrum & Law, 2003). Carlson and Gadio (2002) is so because teachers who succeed in making use of ICT in their work process do not only help to improve learning outcomes in their students but will also benefit personally from enhanced work productivity, reduced isolation and increased professional satisfaction.

Teaching and learning, as well as teacher education at all levels, have experienced a paradigm shift from the traditional approach that is centered on teacher and the environments towards a new approach of teaching and learning through the use of Information and Communication Technology (ICT). This new technologically inclined approach has been introduced into the educational system as a result of science, technological development and globalization in the modern world (Afolabi, 2014). Information and Communication Technology (ICT) is the fastest growing sector in recent time. It is the bedrock of national survival in a rapidly changing global setting.

Oluwaronbi (2012) defined Information and Communication Technology (ICT) as an electronic-based technology that is generally used to retrieve, store, process and package

information as well as provide access to knowledge. The development of microcomputers, optical disc, the establishment of a telecommunication network, television, internet etc, has assisted in broadcasting people's knowledge and facilitates effective communication. Information and Communication Technology is also viewed as a broad-based technology which includes its method, management, and application that supports the creation, storage, manipulation and communication of information. Information and Communication Technology in a wider sense involves all aspects of technological usage. It is a needed tool for solving problems as well as enhancing effective teaching and learning.

Undoubtedly, Information and Communication Technology have impacted on the quality and quantity of teaching and learning, through its dynamic, interactive and engaging content. It provided real opportunities for individualized instruction (Egomo, Enyi & Tah, 2012). Information and Communication Technologies are great supporting tools for educational advancement and reform. When used appropriately, different ICT programmes help to expand access to education, strengthen the relevance of education to the increasingly digital workplace and raise educational quality by helping teaching and learning to become an attractive active process to real life (Ezenwafor, 2011). At the tertiary levels, Abimbade (1998) reported the benefits of ICT to lecturers in the areas of teaching which include an increase in the time learners devote to learning, enhancement in the speed of availability of data and information providing immediate feedback, assists less qualified lecturers and increase lecturers efficiency and effectiveness**.**

According to Olakulehin, (2007) Information and Communication Technology (ICT) refers to the range of technologies that are applied in the process of collecting, storing, editing, retrieving and transfer of information in various forms. The Federal Ministry of Education (2010) defined ICT as encompassing all equipment and tools (inclusive of traditional technologies of radio, video and television to the newer technologies of

computers, hardware, firmware), as well as the methods, practices, processes, procedures, concepts and principles that come in to play in the conduct of the information and communication activities. ICT competence is defined as the ability to combine and apply relevant attributes to particular tasks in particular contents. These attributes include a high level of knowledge, values, skills, personal dispositions, sensitivities and capabilities and the ability to put those combinations into practice in an appropriate way (commonwealth department of education, sciences and Sraining 2002). ICT competency describes what a teacher should be able to do with technology in professional practice.

In Nigeria, the needs to integrate ICT into the education sector and other aspects of life have become a popular concern for government, institutions, organizations, and individuals. The National Universities Commission (NUC) made a laudable achievement in this direction by putting in place physical ICT infrastructures in some selected Universities in Nigeria. The National Commission for Colleges of Education (NCCE) has mandated all college teachers to be computer literate. This is to ensure a proper integration of ICT in education at the tertiary levels of education and to enable the actualization of the higher institutions main roles. However, despite this laudable support made by the Federal government and various agencies in investing in ICT usage in education, the education sector in Nigeria still lags behind in this aspect of technology (Owolabi, Oyewole & Oke, 2013). To them, this may have been caused by factors such as poor management of ICT facilities, lack of appropriate competencies and skills in ICT among others.

Regardless of the quantity and quality of technological tools placed in the classrooms lecturers are the key to how the tools are used. Therefore lecturers are expected to have the competency in using such facilities (Diri, 2013). Teachers should be prepared to provide technology-supported learning opportunities for their students. This can be achieved if teachers see the use of technology as an integral skill that every teacher should

professionally possess. Because it supports students learning abilities. In other words, teachers should be prepared to empower students with the advantages that technology can offer. Schools and classroom should have teachers who are equipped with technology resources and competencies and can effectively teach the necessary subject content while incorporating technological concepts and skills (United Nation Educational Scientific and Cultural Organization UNESEO 2008). When teaching and learning process is assessed critically in tertiary institutions in Nigeria, it could be observed that the challenges are no longer in covering contents or adopting appropriate teaching pedagogy, but having access to ICT and using it to enhance teaching and learning (Olaofe, 2005). Jones (2004) opined that no matter the anticipation of the educational system on teaching and learning, in the end, effective teaching and learning is very dependent on the will and competencies of teachers.

Hence the effective use of ICT in teaching and learning is dependent on the teachers. Teachers play the central role in the learning process even in an ICT-rich content and environment, because ICT tools cannot work efficiently on their own unless proficient and capable hands are available to make use of the tools. It is therefore important for all teachers/lecturers to have the necessary knowledge and skills to integrate ICT into their daily teaching practices in order to maximize their ability to help improve students' digital competence.

United Nations Educational Scientific and Cultural Organization (UNESCO 2008) defined competency as a set of attributes covering knowledge, skills, and attitudes for enabling one to effectively perform the activities of a given occupation or function to the standards expected in employment. UNESCO (2008) is of the view that ICT competence is concerned with the ability to know when to apply or develop a particular skill in using an ICT resource, being aware of the reasons for using ICT and its effect on both users and content as well as having a critical and confident attitude to living with the technology.

Therefore, ICT competency in education involves different types of knowledge, skills, and attitude needed by teachers to work with ICT in educational settings in order to enhance efficiency in the teaching and learning process. Three approaches of ICT competency standards for teachers have been identified by UNESEO (2008) which includes technological literacy, knowledge deepening and knowledge creation. These approaches generate six components of an educational system which are: policy and vision, curriculum and assessment, pedagogy, ICT organization and administration, and teachers' professional development.

Teachers' technology literacy has to do with increasing the extent to which new technology is used by teachers, by incorporating technology skills into the school curriculum. Teachers' knowledge deepening in ICT competency is concerned with increasing the ability of teachers to use. The knowledge to add value to the society and the economy. Teachers' knowledge deepening in ICT competency deals with the ability of teachers to apply ICT knowledge to solve complex, real-life problems. Information and Communication Technology competence has to do with the ability of teachers to bring innovation, produce new ideas and knowledge aimed at making the competence teachers and other ICT users to mount and use ICT tools at various levels. This could be done by teachers being able to produce applications in various disciplines that make use of ICT to support teaching and learning.

ICT competencies are classified into personal, subject-oriented and pedagogical (Abolade & Yusuf 2005, Akudolu 2008, Diri, 2013). These authors further said that Personal competence deals with the skills, knowledge, and understanding of when not and how to use ICT effectively in teaching a particular subject. It encompasses skills in the function, use, and capability of ICT in supporting the teaching process. Teachers should have basic skills. It also encompasses the ability to adopt ICT in educational practice.

Competence in using subject-specific ICT courseware such as ICT mathematical and statistical packages, sourcing for solutions to mathematical problems among others in mathematics class during instruction and the ways of handling information through ICT. Teachers need to develop competencies in using ICT as an educational tool in the class, as well as in developing learner's ICT capability. Pedagogical competency deals with the ability to plan, prepare, teach, assess and evaluate lessons in which ICT could be seen to be supporting a range of suitable learning outcomes. It refers to those skills, abilities, and attitudes that teachers hold pertaining to the nature of teaching and how teaching should be carried out using ICT.

Business education is a component of vocational-technical education programme that prepares an individual for a career in business and also to be an intelligent consumer of economic goods and service (Utoware & Kren-Ikidi, 2014). Business education provides students with the needed competency Skills, knowledge, understanding, and attitude to workers in industries, civil service and also as proprietors of businesses. According to Ugwoke (2011). Business education is work-focused, skill-based, result-oriented and technology-based. For business education programme to sustain its relevance in providing the needs of the individual and that of the society, it must embrace current trends of new technology in the academic and economic demands of the society.

Many ideas have been put forth on why high achieving women may not be entering ICT and ICT related professions. This may be attributed to gender discrimination, gender stereo-typed socialization, self-control or ability in these areas and the value and the interest that women have in these professions (Eccles, 2006). Given mount pressure on ICT has placed on the educational community, there is a dramatic surge in the new teaching competency expected of teachers in schools.

All business educators are expected to use and integrate new technologies into their instruction, communication, and research. However, findings from local and international studies have suggested that gender differences exist in relation to the use of ICT and of late this issue is beginning to gain the attention of researchers.

Gender is an enduring characteristic of lecturers and students that stands as an important variable which could produce differences in individuals. Gender is intertwined with identity, expression, presentation, relationships and societal role and structure, among other things. As noted by the United Nations (2008) gender refers to the social attributes and opportunities associated with being male and female and the relationships between women and men and girls and boys, as well as the relations between women and those between men.

Gender determines what is expected, allowed and valued in a woman or a man in a given context. In most societies, there are differences and inequalities between women and men in responsibilities assigned, activities undertaken, access to and control over resources, as well as decision-making opportunities. Gender differences have been reported in the sense of men being more prone to use computers and new media (Adamus et al., 2009) as well as in the way women and men evaluate technology and make use of it (Venkatesh and Morris, 2000; Adamus et al., 2009). Women consider computers as social media and they are more involved than men in communicative activities.

A teacher cannot teach beyond his/her scope of mastery. Teaching using ICT facilities has been observed to enhance learning (UNESCO 2011), and any teacher who doesn't possess requisite competency needed to effectively teach desired content in ICT, cannot benefit from the inherent gains of using ICT to teach in Universities. Business education lecturers in particular need to possess the basic ICT competency needed for the more effective teaching of desired contents in ICT. The acquisition level of basic ICT

competency needed by business education lecturers to effectively teach is what the study seeks to assess. Having reviewed literature, the researcher discovered that there are different aspects of ICT but because of the nature of this topic, the researcher is interested in looking at the different aspects of ICT in teaching business education courses which include word processing, internet, multimedia, and data processing.

Word processing is the application of computer for manipulating text-based documents, the electronic equivalent of paper, pen, typewriter, eraser, and most likely dictionary and thesaurus (Encarta, 2009). According to Agomuo (2005), word processing can be likened to a typewriter inside a computer in that it incorporates all the duties of a typewriter which basically are the ability to type and produce text on paper, store and manipulate text in documents and get printed copies. But when using computers, it deviates a little from the common typewriter. There is the enter key replacing the carrier movement and there are commands (simple ones) for a paragraph, indent, spacing and so on. In addition, one can store the document for future reference or use, make corrections to the documents very conveniently, format the documents to a wide variety of specification, automate some functions such as page numbering, generation of indexes; check the spelling of text in the document for correctness and have greater control over page layout attribute such as margin and so on.

Internet is a computer-based global information system (Comer, 2009). It is composed of many interconnected computer networks. Each network may link tens, hundreds, or even thousands of computers, enabling them to share information. The Internet has made it possible for people all over the world to communicate with one another effectively, inexpensively and have free access to useful data for further processing.

Multimedia is defined as any combination of text, graphic, sound, video, and animation. Multimedia can be delivered to the user via electronic or digital manipulated

means. In order to create a good multimedia project, one needs to be creative, technical, and organizational and have business skills. When the user is allowed to control what and when these elements are delivered, it becomes an interactive multimedia. Interactive multimedia can be called hypermedia. This happens when a user is provided with a structure of linked elements, for the use of navigation. (Vanghan, T. 2011). Multimedia is a content system that uses a combination of different content forms. This is in contrast with the media that use only rudimentary computer displays, such as text-only or traditional forms of printed or hand-produced material. Multimedia includes a combination of text, audio, still images, animation, video, or interactivity content forms.

Data processing deals with the analyzed, collection, manipulation and organization of data to produce meaningful information through computer programmes. (Kogge 2009). Data processing is used extensively in business and in all areas in which computers are used such as education, to process data educationally by the teachers and other educational administrators. The researcher observed that business education teachers in the state have some difficulties in teaching ICT component.

Statement of the Problem

Despite the incorporation of ICT into the curriculum of business education in universities in Nigeria, the performance of business education students has not changed. Despite the introduction of the new teaching method that is ICT based, most lecturers prefer to use the traditional method in teaching and learning of business education courses, such as chalkboard, they use outdated equipment for teaching skills acquisition courses such as a typewriter. A lot of reasons were advanced by lecturers and students for still maintaining the old method of teaching and learning.

Based on the researcher's interaction with some lecturers from Universities in Kwara state, it was observed that the incorporation of ICT in teaching business education

courses has not made much impact, due to unavailability of the relevant ICT facilities for teaching purpose. Similarly, the students interviewed complained that the ICT facilities provided by the Universities cannot go round the students due to their unavailability which is making the students be deficient in using the new technology; and lack of adequate ICT facilities tends to hamper effective teaching of business education courses. Some other students the researcher interacted with complained that some lecturers are not skilled in using ICT in teaching their students. This is why such lecturers prefer to stick to the traditional method of teaching.

On the basis of the foregoing, the researcher became concerned with the assessment of ICT competency level of business educators in Universities in Kwara State.

Purpose of the Study

The general purpose of this study was to assess ICT competency level of business educators in Universities in Kwara State.

Specific Purposes are:-

1 To assess business educators competency level in using word processing to teach business education courses in universities in Kwara State.

2 To assess business educators competency level in using internet to teach business education courses in universities in Kwara State.

3 To assess business educators competency level in using multimedia system to teach business education courses in universities in Kwara State.

4 To assess business educators competency level in using data processing to teach business education courses in universities in Kwara State.

Research Questions

The following research questions were raised to guide the study.

1. What is the competency level of business educators in using word processing to teach business education courses in universities in Kwara State?
2. What is the competency level of business educators in using internet to teach business education courses in universities in Kwara State?
3. What is the competency level of business educators in using multimedia system to teach business education courses in universities in Kwara State?
4. What is the competency level of business educators in using data processing to teach business education courses in universities in Kwara State?

Research Hypotheses

The following research hypotheses were formulated and tested in the study:

H_{01}: There is no significant difference in the mean responses of male and female business education students on the competency level of business educators in using word processing to teach business education courses.

H_{02}**:** There is no significant difference in the mean responses of male and female business education students on the competency level of business educators in using internet to teach business education courses.

H_{03}**:** There is no significant difference in the mean responses of male and female business education students on the competency level of business educators in using multimedia system to teach business education courses.

H_{04}**:** There is no significant difference in the mean responses of male and female business education students on the competency level of business educators in using data processing to teach business education courses.

Significance of the Study

This study was to assess ICT competency level of business educators in universities in Kwara State. The findings of this research work would be of great benefit to all stakeholders in education such as Ministry of Education, National Universities Commission, Students, Business Educators and Other Researchers.

The findings of this study would help the ministry of education to know the level of ICT competency possessed by the teachers and to know to decide and where to improve the teacher's ICT skills through refresher courses or by organizing in-service training for them. The result of this study will also make the ministry to liaise with the pre-teachers training institutions to make sure that the teachers in training attain the required competency standard.

National Universities Commission (NUC), whose statutory responsibility is to manage the university in Nigeria, would find this work useful. It would assist the commission to evaluate the implementation of ICT in teaching and learning in universities in Kwara state and make necessary recommendations.

The outcome of the study would provoke business educators in all universities to acquire Information and Communication Technology skills relevant in teaching business education courses. It would also emphasize the need for the lecturers to attend conferences, seminars and workshops to update their knowledge. Also, the outcomes of the study would be beneficial to students of business education as the study would show Information and Communication Technology skills needed by business education graduates from all universities. The result would provide a guide and direct the students to acquire saleable skills to give them a competitive advantage in the world of work.

In addition, intending researchers would find the work useful for further studies in this area. Also, Management of different universities could use the result of this

research to emphasize the need for adequate Information and Communication Technology facilities for teaching and learning of business education courses in their various universities.

Scope of the Study

The study focused on ICT competency level of business educators in universities in Kwara State of Nigeria. The study was limited to the following areas of ICT: word processing, internet, multimedia and data processing where business education lecturers need improvement.

Geographically, the study covered three universities that offered business education courses in Kwara State.(Kwara State University, Malete, University of Ilorin, Ilorin & Al-Hikmah University, Ilorin) The instrument for data collection was restricted to questionnaire while the respondents were restricted to business education students in universities in Kwara State.

Operational Definition of Terms

The following terms are defined operationally

- **Assessment:** Is the process of evaluating a performance of business education lecturers on ICT in tertiary institutions in Kwara state.
- **Business Education:** Is a component of vocational technical education programme that prepare an individual for career in business education in the study of accounting options, office practice and marketing.
- **Competence level:** A set of attributes covering knowledge and skill of business education lecturers in ICT.
- **Information and Communication Technology:** as electronics based technology that is generally used to retrieve store, process and package information as well as provide access to knowledge for business education lecturer.
- **Word processing:** is the application of computer for manipulating text-based documents.
- **Multimedia:** any combination of text, graphic, sound, video and animation.
- **Data processing:** deals with the analyzed, collection, manipulation and organization of data to produce meaningful information through computer programmes.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter reviews literature under the following sub headings;

Theoretical framework

- Competency Theory

Conceptual frameworks

- Concept of ICT in schools
- ICT competency level of business educators in Nigeria
- Uses of ICT through gender
- Word processing skills needed by the teacher
- Internet skills needed by the teacher
- Multimedia system skills needed by teacher
- Data processing skills needed by teacher

Empirical studies

Appraisal of the literature reviewed

Competency Theory

Noel Burch in 1970 developed competency theory. The theory deals with stages of learning a new skill. It stipulates that individuals are unaware of how little they know or are unconscious of their incompetence. As they recognize their incompetence, they consciously acquire a skill and then consciously use that skill. Eventually, the skill can be done without consciously being thought and the individual is said to have unconscious competence. The theory is characterized by helping someone know what they don't know and it explains how skills can be acquired. The theory described the four stages of learning a new skill thus:

Unconscious stage: the individual does not understand or knows how to do something and does not necessarily recognize the deficit. He may deny the usefulness of the skill. The individual must recognize his own incompetence and the value of the new skill before moving to the next stage.

Conscious incompetence: though the individual does not understand or knows how to do something, he recognizes the deficit, as well as the value of a new skill in addressing the deficit. The making of mistakes can be integral to the learning process at this stage.

Conscious competence: the individual understands or know how to do something. However, demonstrating the skill or knowledge requires concentration. It may be broken down into steps, and there is heavy conscious involvement in executing the new skill.

Unconscious competence: the individual had so much practice with a skill that it has become "second nature' and can be performed easily. As a result, the skill can be performed while executing another task. The learner may be able to teach it to another person, depending on how and when it was learned.

Effective application of the theory will enable business educators to identify the ICT competency they need. They will understand the importance of those competency

levels and the guidelines to follow in mastering them so that they would be able to use it in teaching their students. The theory relates to this work because ICT competency can only be acquired through learning, seminar, workshop, and training. Technological based competency is learned through practice since the learner is the center of the whole learning process.

Concept of ICT in Schools

The fact that Information Communication Technology has made the world a global village cannot be overemphasized. Development in this global era is now controlled by ICT (Offor, 2013). People with the aid of ICTs are now able to interact and send messages across the continent without barriers of distance and time constraints. Information is freely sorted and received within the shortest possible time. People have access to libraries of renowned repute where tangible current and reliable research information is published through the aid of visual libraries.

People collect information to store it in their memories and transmit them verbally to their receivers and users. But with the invention of printing technology, there came the first breakthrough in the field of Information and Communication Technology. ICT has led to the globalization of the world. Information and Communication Technology is a mixture of information technology and communication technology. Information communication technology (ICT) is therefore, the application of computers and telecommunication gadgets in processing, storing and sending information of all kinds in whatever form or distance. ICT encompasses all that is involved in modern communication technologies such as communication satellite, radio, television, video, tape recorders, compact discs, floppy diskettes and personal computers and other related equipment so that the output generated can reach the users at a reasonable cost and in good time across the globe (Ezekoka, 2007). lbenyenwa (2011) sees ICT as all the electronic devices, computer hardware and software

and telecommunication gadgets that enable the processing, storage and immediate dissemination of huge amount of information through the computer networks. Obanya (2003) describes Information and Communication Technology as the sole creation of humankind that has thrown off balance the conventional perceptions of time and space that have destroyed geographical barriers to the transmission of knowledge, ideas and information Furthermore, Etonyeaku (2010) sees ICT as the study, design, development, implementation, support, and management of computer-based information systems, particularly software applications and computer hardware. Similarly, Afolabi and Adeyanju (2005) define ICT as the science and activity of processing, storing and sending information through the use of a computer. They also define ICT as the use of hardware and software to enhance communication.

Information and Communication Technology is the systematic application of computers and other technologies to acquire, organize, process, store, retrieve and disseminate information to bring about the effective exchange of information in communication. Ogechukwu and Osuagwu (2010) stated that information communication technology (ICT) is the processing and maintenance of information, and the use of all forms of computer communication, network and mobile technologies to mediate information. Nwaiwu (2009) explained the term ICT to include electronic information processing technology such as computers and internet as well as fixed-line telecommunication, mobile phones, and other wireless communication networks. Supporting the above views, Nworgu (2008) stated that ICT refers to a whole range of facilities or technologies involved in information processing and electronic communication to be handled with skills and expertise, for effective achievement and realization of its potentials in education. Furthermore, ICT refers to harnessing electronic technology for information processing needs of business organizations, using the computer and

telecommunication equipment for storage, processing, and dissemination of information (Oyedele, 2002).

In the view of Okeke (2002), ICT is a systematic handling, dissemination, processing, and storage of information especially, by means of computers. According to World Bank (2002), ICT is a set of activities which are facilitated by electronic means, the processing, transmission, and display of information. World Bank affirms that ICT gives the opportunity to revolutionize pedagogical methods, expand access to quality education and improve the management of education system. Okereke (2008) noted that application of ICT in teaching and learning makes institutions more effective and productive and engenders a variety of tools to enhance and facilitate pedagogical activities. This means that the use of ICT will go a long way in helping teachers of business education in their instructional delivery.

Information and Communication Technology has changed the methodology of teaching business subjects in schools. Teaching and learning have been changed from a traditional chalkboard to electronic learning requiring ICT skills from teachers. Nyiahule (2006) observed that teachers can now talk less active work and achieve more result. He also, added that teaching and learning have shifted from teacher centered to material centered, where the teacher only guides students to use available materials to achieve learning objectives. Hu Chun (2005) defined ICT as a broad range of activity and equipment including all the tools, applications and information which are available and accessible via computer. Gay and Blades (2005), explained that ICT is concerned with the storage, retrieval, manipulation, transmission or receipt of information electronically in a digital form. In this study, ICT involves the whole range of electronic technologies such as computers and telecommunication facilities that are used for instruction in teaching-learning processes.

Adoni and Kpangbam. (2010), described Information and Communication Technology (ICT) as electronic technologies used for information storage and retrieval. According to the online Oxford Dictionary, Information and Communication Technology usually abbreviated as ICT is often used as a drawn-out substitute for information technology (IT), but it is usually a more general term that stresses the role of integrated communication and integration of telecommunication (telephone lines and wireless signals), computers, middleware as well as necessary software, storage, and audio-visual systems, which enable users to create, access, store, diffuse and direct information (Ololube, Ajayi & Kpolovie, 2011, Ololube, Amaele, Kpolovie, Onyekwere & Elechi, 2012). In other words, ICT entails Information technology as well as telecommunications broadcast media, all types of audio processing and transmission and network based control and monitoring functions.ICT as described by Scott (2002), incorporates a range of applications, communications, and technologies which aid information recovery and research communications and administration. This embrace online database, library services, and online services as well as the fax machine (Tomie, 2013).

Abdulsalam, Akinola, & Buwanhoy (2008) defined information as knowledge communicated by others or obtained from investigation of study or instruction. It could be the process by which the form of an object of knowledge is impressed upon by the apprehending mind so as to bring about a state of knowing. Technology, on the other hand, is the science of application of knowledge to practical purpose. Information has been the driving force of so many human activities in search of developing one's self which has created a basis for the need to know. ICT stands for Information and Communication Technology and is defined as a "diverse set of technological tools and resources used to communicate, create, disseminate, store, and manage information." The term ICT refers to forms of technologies that are used to create, store, share or transmit, and exchange information. This broad definition of ICT

includes such technologies as radio, television, video, DVD, telephone (both fixed line and mobile phones), satellite systems, computer and network hardware and software; as well as the equipment and services associated with these technologies, such as video conferencing and electronic mail (UNESCO, 2009). ICT has been defined by different commentators many of such definitions focusing particularly on the newer computer-assisted, digital or electronic technologies, such as the internet of mobile telephone. Some however, do include older technologies, such as radio or television. Others even do include the whole range of technologies that can be used for communication, including print, theatre, folk media and dialogue processes. Some focus only on the idea of information handling or transmission of data. Others encompass the broader concept of tools to enhance communication processes and the exchange of knowledge (Greenberg, 2005, Weigel and Wald burger, 2004). Academics and students who use ICT gain a deeper understanding of complex topics and concepts and are more likely to recall information and use it to solve problems outside the classroom (Apple computer, 2002). In addition, through ICT, Academics and students extend and deepen their knowledge, investigation, and inquiry according to their needs and interest when access to information is available on multiple levels (CEO Forum on Education and Technology, 2001).

Babalobi (2010) acknowledged that ICT is the processing and maintenance of information and the use of all forms of computer, communication, network and mobile technologies to mediate information. Communication technologies include all media employed in transmitting audio, video, data or multimedia such as cable, satellite, fiber optics, wireless (radio, infrared, Bluetooth, and Wi-Fi). Network technologies include personal area networks (PAN), campus area network (CAN), intranets, extranets, local area networks (LANs), wide area networks (WANs), metropolitan area network (MANs) and the internet. Computer technologies include all removable media such as optical discs, disks,

flash memories, video books, multimedia projectors, interactive electronic boards, and continuously emerging state of the art P C s. According to him, mobile technologies comprise mobile phones personal digital assistants (PDAs), palmtops etc. These technologies have information as their material object. Information is not reserved for use in isolation, but rather communicated among users. ICT consists of hardware, software, networks and media for collection, storage, processing, transmission and presentation of information (voice, data, text, images) as well as their related services. It can be divided into two components: Information and Communication Technology (ICT) which refers to physical telecommunications systems and networks (cellular, broadcast, cable, satellite, postal) and the services that utilize information (internet, voice, mail, radio, and television.

ICT Competency Level of Business Educators in Nigeria

Research findings have indicated that the extent to which business educators integrate ICT in their teaching and learning is affected by several factors, among which is teachers' competence in ICT applications (Tayo & Adedayo, 2013). In the same vein, Yusuf (2006) affirms that a teacher's competence is a particular concern when new subjects or media are introduced into the school system. It is believed that the level of ICT competencies among lecturers in tertiary institutions in Nigerian is determined by a number of other factors including institutional type (that is Universities, Polytechnics and Colleges of Education). This is why Onasanya, Shehu, Oduwaiye, and Shehu, (2010) ascertained that the level of competencies and skills acquisition of colleges of education lecturers in the use of ICT facilities and equipment is worrisome. The authors further said that Universities and polytechnics lecturers' possessed more ICT competencies level and skills than lecturers in Colleges of Education. Similarly, educational qualification seems to influence the level of ICT competencies possessed by lecturers because Ololube, (2006) has reported that ICT utilization competencies vary with teachers. A professionally qualified teacher seems to be

more dominant with high ICT competency rate than their non-professional counterparts. This is perhaps attributable to their exposure to basic theories and practice of educational technology (Ololube, 2006).

Business educators ICT competence enables appropriate decisions on ICT application, new technologies requiring new lecturer's roles, new pedagogies, and new approaches to lecturer's training to be acquired. The successful integration of ICT in the classrooms at the tertiary levels of education depends on the ability of the lecturers to structure new pedagogy to develop socially active classrooms encouraging cooperative interaction, collaborative, learning and group work. It is essential that the pedagogy of ICT becomes the main focus of teaching development and this will build upon in a constructive manner in order to allow instructors to achieve full benefits of using ICT in their daily tasks (McCarney, 2004). This will enhance the successful achievement of the objectives of the Nigerian national policy for ICT which include; to facilitate the teaching and learning processes and to promote problem-solving, critical thinking and innovative skills among others (Federal Ministry of Education, 2010).

Uses of ICT through gender

Gender is an enduring characteristic of lecturers and students that stands as an important variable which could produce differences in individuals. Gender is intertwined with identity, expression, presentation, relationships and societal role and structure, among other things. As noted by the United Nations (2008) gender refers to the social attributes and opportunities associated with being male and female and the relationships between women and men and girls and boys, as well as the relations between women and those between men.

Gender determines what is expected, allowed and valued in a woman or a man in a given context. In most societies, there are differences and inequalities between women and

men in responsibilities assigned, activities undertaken, access to and control over resources, as well as decision-making opportunities. Gender differences have been reported in the sense of men being more prone to use computers and new media (Adamus et al., 2009) as well as in the way women and men evaluate technology and make use of it (Venkatesh and Morris, 2000; Adamus et al., 2009). Women consider computers as social media and they are more involved than men in communicative activities.

In recent years, the gender gap issue has caught many scholars attention and as a result, many studies have been conducted to study Information and Communication Technology. Oniga & Lai (2008), reported that females had more positive attitudes towards ICT than males. They found significant gender variations where female's ratings of perception towards computer self-efficacy, perceived usefulness and ease of use and behavioral intention to use ICT were all higher than those of males. Chen & Tsai (2005) also reported that males exhibited more favorable attitudes towards Web-based learning than females. Their results suggested that males perceived the proliferation and development of the Internet to result for a better tool in reducing the digital divide and establishing a society of equity and justice. Petriel (2009), however, found that while females used ICT more than male. The letter used the Web more. He further found significant gender difference in the way females and males rated themselves in their ability to master technical skills, though both genders were positive about their technological ability. Males rated themselves higher than females. Kirkpatrick & Cuban (2008), however, noted that the gender gap is narrowed when both genders are exposed to the same amount and types of experience on computers.

Regarding gender differences on ICT, there has been little empirical evidence so far for the existence and the effects of these and the few studies that exist are often contradictory. While one position argues that there are gender-specific behavior patterns

that may lead to a discrimination against women using ICT in teaching and learning. (McSporran and Young, 2001; Astleitner and Steinberg, 2005), others argue that ICT, through its flexible and interactive learning approach favors particularly women (Bruestle et al., 2009). Notwithstanding, neither gender roles nor technology can be seen as stable categories (Bruestle et al., 2009). There is evidence to supporting that male and female express varying degrees of anxiety, acceptance, and interest in new technologies across time (McCoy and Heafner, 2004) and the gender gap is narrowing over time (Shaw and Gant, 2002). Among the factors that contribute to reducing the gender gap, it has been pointed out access and training. (Adamus et al., 2009). This female focus on ICT and cooperation also highly influence learning situations. Male tend to live longer and more frequent statements while female show more openness for other's proposals and willingness to cooperate. Female prefer working in groups using ICT while male is more likely to solve problems on their own (Adamus et al., 2009). In research conducted by Kay (2006), he found that female students had relatively higher levels of computer attitude and ability before computer implementation, but there is the difference between females and males regarding computer attitude and ability after the implementation of the technology. He claims that quality preparation on technology can help lessen gender inequalities.

The fifth goal of the United Nations for All Education policy aims to provide equal opportunities for education, regardless of gender, by the year 2015 (UNESCO, 2000). It was further noted in the document that one of the greatest opportunities is to facilitate informal learning to complement formal schooling by using ICT; features used are different among gender. Gender differences exist in the use of social and web-based media, consumption patterns, attitudes, and affinity toward technology. Gender difference in the adoption of technology has been studied in the literature, producing mixed results. Regarding that Information and Communication Technology use for teaching has indicated

that female is more likely to use ICT tools of teaching and learning process. (Tseti, 2016). However, male is likely to use some of the ICT tools. (Christopher & Evangelia, 2016).

Word processing skills needed by the teacher

Word processing is the application of computer for manipulating text-based documents, the electronic equivalent of paper, pen, typewriter, eraser, and most likely, dictionary and thesaurus (Encarta, 2009). Hu Chun (2005) pointed out that word processing is the application of computer technology to input, editing, merging, sorting, formatting, and printing of text. The word processor is a special-purpose computer expressly designed for and solely devoted to the preparation, storage and printing of documents. The system includes a display unit, keyboard, floppy disk drives and a letter-quality print head. Harison (2005) stated that word processing has been developed from typewriting, using computer technology to automate many of the procedures in the production of documents. The computer can be used to perform multiple word processing activities such as editing text, inserting new text, deleting text, and performing search and replace functions within the text. Another area where the computer is most useful in daily activities in offices is in the use of the internet and data processing.

New ways of performing office task have emerged with new technologies. Business Education Teachers are required to adopt the new skills so that they would be able to train students who can function effectively in their career and even advance in it. Wikipedia (2011) stated that word processing developed a specialized programme on mainframe computer during the 1970's on online computing with the use of personal terminal devices having keyboards and display screen become more common. These programs evolved from text-based editors used by programmers and computer professionals. In the late 1970s, the desire to place intelligent devices on the desk of workers at a reasonable cost including cheaper and smaller prints led to the introduction of machines dedicated to word processing.

The term word processing refers to the various ways words are combined, arranged, placed, formatted, organized or presented for a defined purpose in the form of a letter, memo, and technical report. Word processing machines were primarily aimed at typists particularly those in centralized tying pools where other workers sent handwritten notes or Dictaphones, tapes to be transcribed and retrieved for review. Considerable time saving, economy was achieved by word processing operators. In the view of Osuala (2009), word processing is a term used to describe equipment, the use of machines as word processing typewriters combined with audio dictation equipment and organized systems to facilitate the handling of words or texts, resulting in greater productivity in office procedure. The author further stated that business educators should be aware that the system consists of input and out equipment that can be classified as discrete media or an endless loop system. This media system utilizes magnetically coated belts, disc, or tapes, cassettes and cartridges.

Word processor involves the following processes, production, re-production, and distribution of documents. There are many ways through which words enter a system. Words enter through typing, electronic communication from another computer; it records data through diskettes, or on endless loops inside the central system. The device has made it possible for words and data to be entered simultaneously into the computer using the keyboard like that of a typewriter. Agomuo (2005) noted that word processing can be likened to a typewriter inside a computer in that it incorporates all the duties of a typewriter which basically are: the ability to type and produce text on paper, store and manipulate text in documents and get printed copies. But when using computers, it deviates a little from the common typewriter. There is the enter key replacing the carrier movement and there are commands (simple ones) for a paragraph, indent, spacing and so on. In addition, one can store the document for future reference or use, make corrections to the

documents very conveniently; format documents to a wide variety of specification; automate some functions such as page numbering, generation of indexes. Check the spelling of text in the document for correctness and have greater control over page layout attribute such as margin, any others all computer applications, word processing is the most common. To perform word processing one needs a computer, a special program called word processor and a printer.

A word processor enables you to create a document, store it electronically on a disc, display it on a screen, modify it by entering commands and characters from the keyboard, and print it on a printer. Furthermore, Ovbiagele (2006) stated that a typical word processing activity is entered into the computer via a keyboard. The text is displayed on the screen, special commands are used to arrange the documents and select the appropriate format for texts. Correction of errors on the text is easily done on the screen. The system also provides for edit function such as searching for character strings or moving paragraphs while processing text, a user can rely on the sophistication of the system to work on two or more documents at the same time in different parts of the screen. A word processor could optionally justify the right margin of a text and could at low hyphenation of words based on predetermined logic or set of words. Automatic spelling checks are now a feature of most word processors. These are predetermined dictionaries that can be easily augmented with the user's defined dictionary o f special terms. Most word processors have capabilities of checking grammars and their usage. The author further explained that document can be coded in machines reader form by word processors, and stored in the computer storage facility.

The basic skills required for word processing as stated by Moody and Bolt-Lee (2002) include one's ability to type sentences without assistance; insert text; select/highlight text; vary font size and style; understand cut, copy and paste; use undo

command, create text box, use boarders; use spell checker; realize limitations of spell check; change text alignment. Others are the ability to use Thesaurus; change margins and line spacing; use columns as well as add to a document and edit rows and columns and finally by understanding factors that affect down loadable copy of the document. Tally (2007) indicated that word processing skills include: Insert text, page set up: these include delete text, setting margins, tabs, paragraphs, font specification, headers, footers and page numbering. Editing documents include cut and paste, search and replace, merge text from one file to another file, check spelling and sentences and margins. Save files to hard disc, disc drives and networks. Print this involves selecting a printer, the paper source, number of copies, then send documents to printer to get a hard copy Brennan and Mahon (2000), outlined the following as word processing skills required for effective use of word processing technologies particularly, the computer: understanding the various types of word processing software applications (which include Microsoft word, word perfect, and integrated packages such as Apple works and Lotus Office Suite which also include word processors) be familiar with the component parts of word processor; be able to accomplish basic operations associated with word processing using Microsoft word for windows such as: word document operations (opening, creating, storing, viewing, formatting, and printing a document, managing text operations selecting text, inserting text, deleting text, coping and pasting text).

Changing the appearance of text operations (changing font, alignment or justification, line spacing, paragraph spacing), spell and grammar operations (using inbuilt spell check, change default language, find and replace text, use grammar check, and using the Thesaurus to find the right word) printing operations (choosing a printer, installing printer's software, previewing a document, printing a document) adding and improving text operations (add or open text from other document without having to retype it by more than

one document viewing two documents at the same time inserting one document into another and improving a spreadsheet) layout, header and footer operations (page set up, page break, using header and footer tool bar) table operations (creating a table, entering text, aligning text in tables.) bullets and numbering operations, template operations mail, labels operations, graphics operations (inserting Clip Arts, inserting a graphic from file, drawing Auto Shapes using freehand drawing and rotating an object).

Nwosu (2007), outlined the following as word processing skills: knowledge of word processing systems involving hardware, software, personnel and procedures appreciate the relationship of computerized application to word processing know the skills in using different word processing software packages for creating different types of documents speed and accuracy in computer keyboarding activate the computer and other word processing equipment edit keyed in text, store text, retrieve text, activate text and print out documents. Odegbeyemi and Akingbade (2002), outlined the following as word processing technology skills, knowledge of the different types of word processing technology equipment computer software packages, functions of control keys on the keyboard such cursor control keys, insertion, delete, page formatting keys and understanding of and ability to manipulate the facilities used for printing such as printers, paper feeds appreciate the need and benefits of work processing technologies appreciate good positioning of word processing technology and good sitting posture and ability to follow operational and safety procedures.

Word processing applications on the computer are becoming highly sophisticated in outlook and function. They now incorporate many more enhancements and features which are turning the computer into a one-stop print shop where you could produce all sophisticated documents such as reports incorporating graphics, tables. Supporting the above view, Njie (2009) asserted that today, there are office machines that can run off

hundreds of copies of documents, collate the pages and address envelopes needed for bulk mailing, update information on record cards without searching through files and produce invoices and statement of accounts at the pressing of buttons. Word processing is not just a machine, it is a system a sophisticated system too that requires well-planned education and more pragmatic curriculum development. The new designations and job opportunities occur daily, therefore, there comes to a need for Business Education teachers to be versatile in the effective use of the system and to match the new challenges by acquiring new skills and competencies for the operation of office technology so that students can be well informed about what they will find in the world of work and may be required to use.

Internet skills needed by the teachers

Internet is a computer-based global information system (Comer, 2009). It is composed of many interconnected computer networks. Each network may link tens, hundreds or even thousands of computers enabling them to share information and processing power. The Internet has made it possible for people all over the world to communicate with one another effectively, inexpensively and to have free access to useful data for further processing.

Internet is one of the computer and multi-media skills that have brought revolution to the entire educational system in recent times. It is another important skill area that is required by Business education lecturers. Internet is the abbreviated form of international communication (computer) network. It means a network of computers linked to the big central processing unit in the same way telephone lines in homes are linked to one central communication equipment in NITEL (Nweke, Umezurike, and Nnamdi, 2006). This enables the user to interact with another via the computer if he or she is connected. The internet is a global collection of many different types of computers, computer operators

and computer networks that are linked together through telephone lines, satellites, microphones, and all other possible devices. It channels each computer by taking a common language or protocol called transmission control protocol/ internet protocol (TCP/IP)

Okwuanaso and Obayi (2008) described internet as the interconnection of large and small network around the globe. The internet is an international network through which the users all over the world can communicate or exchange information. According to Agomuo (2005), internet is a worldwide system of a computer network in which user of one computer can get information from any other computer operators. This implies that through the internet one can send or receive information within the shortest time frame. Internet makes communication possible over the globe, once fully subscribed and connected to the internet services provider (ISP), one could access any information needed in any discipline in the world regardless of the distance. It allows for instant publishing of texts, graphics, and picture. Through internet, users share information transfer files, send messages and utilizes others. Also, Aliyu (2006) described the internet as an intercontinental spider web that enables millions of people from around the world to download millions of files consisting of reports, research, graphics, and millions of people to send and receive information around the world within a second. In the opinion of Onojaife (2006), the internet is an inter connectivity of computers via-email to share data and computing resources by researchers, corporate bodies, academics, and individuals. The author further says that the internet has no central computing system or telecommunication center. Instead, each message sent has a unique code. So any internet makes service in the network can forward it to its destination in a different city or country.

Internet makes the location of information possible to the internet you can communicate with any other computer that is linked to the network anywhere in the world. He states that we live in the information age, where knowledge is power. The internet,

therefore, helps the user in three basic ways: to get information, to provide information and to compile information. Leon (2003) said that internet offers the best opportunity of getting specialized information from the webs. With the internet, it is possible to pool the demand for your line of products or conduct survey and get opinions of people across the world. The author maintains that the most recent and very successful attempt at presenting information over the internet is the World Wide Web.

Ovbiagele (2006) stated that the World Wide Web is a system based on Hyper Text Transfer Protocol (HTTP) for providing, organizing and accessing a wide variety of resource text, images, and sound that are available via the internet. The author explained that it is a set of interconnected electronic documents (Web pages) that are linked together over the internet. The electronic documents are linked together by words and or symbols highlighted by blinking colors or underline that connect one document to another related document on the web.

Several authors have contributed variously on how the computer has become an inevitable tool in the academic work. Chime (2006) maintained that the internet is one of the major innovations of the computer that has found its way deep into the academic sector, According to him the internet is the biggest computer network in the world. Most of the information on the internet is free. Using the internet makes available to the teachers information that cannot be found in any other way except through the World Wide Web (WWW).

Etim, Akpan, and Ibok (2013) defined internet as the inter connection of system of subsystems of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission or reception of data or information. Dickson (2012) noted that the internet can be seen to provide resources and services that are used for accessing, processing, gathering, manipulation and

presenting or communicating information. The use of internet in education is now growing in all parts of the world and their application is becoming an integral part of education in many parts of the globe.

Oyedum (2007) noted that the internet provides access to more information than a librarian could dream of. A teacher can also use the Web to access resources journals, magazines and speeches of prominent personalities. The internet has broken down barriers to communications access from anywhere in the world. It is fast, reliable and does not have restrictions on content or formats; it also has a limitless range of facilities, which assist the user to access almost infinite information on the net. Computer and internet are today almost one and the same thing and one cannot be mentioned without the other tagging along (Nwagwu, 2009). One will need to harness the internet in all types of work whether it is research on any topic or plain sorting for information. For this purpose, one needs to know what a search engine is and how it works, what a keyword is and how it works, how to open a browser and how to use a link. Also, contributing to the above view Ugwuanyi (2009), stated that some skills such as the ability to understand the general structure of a web address equate URL with web address use to prepared bookmarks use and understand the feature of browser example, Back, forward, stop, search, refresh, history, home, buttons, address bar, loading status, use and understand hyper links/navigation buttons choose appropriate sites from a search to interpret information from a website; cite any electronic reference to information used and to determine whether information is current, accurate and reliable. Ugwuanyi (2009) stated that internet skills include: using the World Wide Web (WWW), sending email messages, using a word to find specific information, taking part in an on-line discussion or chatting (video conferencing), and sending attachments with email. Also, included are, having the World Wide Web skills which include- using search engines like Google, Yahoo, MSN, using

keywords or phrases to search for information on the www, using more advanced search techniques than key words or phrases.

The ability to operate a computer system to perform job-related task, use web browsers and searching on the internet to retrieve information needs and communicating with others by sending and retrieving e-mail is an essential part of needed everyday skills especially those in academics. E-mail: another major component of the internet which supports academic work is the electronic mail. The e-mail is the most commonly used internet resource. The e-mail is similar to the traditional postal system except the messages are exchanged via the use of computer networks and telecommunication systems. In other words, the e-mail is an internet resource in which messages are sent back and forth between individual users and organizations through an electronic medium. A user can send textual, vocal, pictorial and other multi-media information in digital forms to friends, peers, families, organizations, and institutions. Ovbiagele (2006) defined e-mail as an electronic message sent from one computer to another. By e-mail, you can send or receive personal and business related messages with attachments like pictures or other documents. Basically, the e-mail is sent on a wide area network. It is a way of communicating person to person via computer.

Ansari (2010) noted the following as the main advantages of the e-mail it is very fast to send and receive email messages from one destination to another just within few minutes around the globe because it is electronic in nature, it reduces the use of papers the cost of sending emails is lesser compared with sending conventional letters via post office. In fact, it is almost free unlike sending a regular letter you can send and receive e-mail from anywhere in the world you can attach and send any type of files both incoming and outgoing email can be stored from mobile phones. The 21stcentury man does most of his communication through e-mails. Whether it is posting curricular-vitae (CV) for a

vacancy or applying for a job, the most common way and the best way is to email it. According to Adetimirin (2009), the e-mail enables one to keep in touch with his/her near and dear ones in real time instantly. With e-mails, you can send photographs, documents, and video clips.

The skills required for effective operation of e-mail services as stated by Ibegwam (2002) includes: understanding of the general structure of an e-mail address ability to interpret features of an in box example owner, to, CC, subject, interpret features of a retrieved message from date sent, reply, forward other skills as maintained by him are the ability to retrieve and reply to an e-mail forward an e-mail and to send an attachment with the e-mail. The e-mail is another important basic skill business education lecturers need to know.

Multimedia skills needed by the teachers

Multimedia is usually recorded and played displayed or accessed by information content processing devices, such as computerized and electronic devices, but can also be part of a live performance. Multimedia devices are electronic media devices used to store and experience multimedia content. Multimedia is distinguished from mixed media in fine art; by including audio, for example, it has a broader scope (Vaughan, 2011).

Multimedia in Education has been extremely effective in teaching individuals a wide range of subjects. Multimedia is changing the way people communicate with each other. The way people send and receive messages is more effectively done and better comprehended. While a lecture can be extremely informative a lecture that integrates pictures or video images can help an individual learn and retain information much more effectively. Using interactive CD-ROMs can be extremely effective in teaching students a wide variety of disciplines, most notably languages and music.

A multi-sensory experience can be created for the audience which in turn, elicits positive attitudes towards its application (Neo and Neo, 2001). Multimedia has also been shown to elicit the highest rate of information retention and result in shorter learning time (Ng and Komiya, 2000). On the part of the creator, designing a multimedia application that is interactive and multi-sensory can be both a challenge and thrill. Multimedia application design offers new insights into the learning process of the designer and forces him or her to represent information and knowledge in a new and innovative way.

ICT and multimedia have been used in education for more than 25 years (Rodriguez, Nussbaum, López & Sepúlveda, 2010). In teacher-driven education, multimedia lessons were found to be effective in teaching road signs and speed limits and produced higher levels of performance than non-multimedia instruction (Lee & Keckley, 2006). This highlights that the unique characteristics of a subject influence the success of learning via picture or audio presentations.

Multimedia has succeeded in psychomotor development and strengthening of visual processing of the intended users in multi-disciplinary multimedia educational programmes where DVDs were also used as multimedia technology (Malik & Agarwal, 2012). The integration of ICT and multimedia into teaching and learning by means of a portable DVD player may be used as the foundation for a mind-shift that must be made at universities to teach business education courses. The mind-shift involves the integration of ICT not only to learn a specific skill but also to integrate multimedia resources into the teaching and learning of pre-service teachers, who can then apply their experience to teaching in schools. The inclusion of on-screen information sources proposes opposite reactions to traditional historical printed text and contributes to the development of critical and objective skills development (Lee, 2002).

Educational media and technology can be defined as all means of communication like prints, graphics, animations, audios, and audiovisuals. Educational multimedia technology incorporates all the qualities of prints, graphics, animations, audio and audiovisuals and technology is defined as any object or process of human origin that can be utilized to convey media and multimedia. In this sense, technology includes phenomena as diverse as books, films, television, and the internet. In education, media are the symbol systems that teachers and learners utilize in representing knowledge and technologies are the tools that allow them to share their knowledge representations with others (Thomas, 1998). Educational media and multimedia technology are the channels of transmitting information to learners and are also those gadgets and machines that are needed in transmitting information to learners. There are various types of educational media and multimedia technology currently utilized in teaching and learning processes which are: a computer system, microphone, mobile device, interactive whiteboard, digital-video-on-demand, online media stream, digital game, pod-cast and so on. Computer system relevance in the classroom allows teachers to demonstrate a new lesson, animate, present new materials, illustrate how to use new programs and show new websites. In a noisy classroom or large classes, learners will be able to hear their teacher's instruction clearly and in the process learn better with the use of microphones (Webcrawler, 2013).

Multimedia is a content system that uses a combination of different content forms. This contrasts with media that use only rudimentary computer displays such as text-only or traditional forms of printed or hand- produced material. Multimedia includes a combination of text, audio, still images, animation, video or interactivity content forms (Vaughan, 2011).

Ogunbote and Adesoye (2006) expressed that multimedia technology adds a new dimension to learning experiences because concepts were easier to present and comprehend when the words are complemented with images and animations. Stating

further that it has been established that learners retain more when a variety of senses are engaged in impacting knowledge and the intensity of the experience aids retention and recall by engaging social, emotional and intellectual senses. The evolution of multimedia has made it very possible for learners to become more involved in their work. With multimedia technologies, they can create multimedia applications as part of their project requirements. This would make them an active participant in their own learning process, instead of just being passive learners of the educational content.

A study by Ubogu (2006) supports the view that multimedia resources facilitate access to all human knowledge anytime and anywhere in a friendly, multi-modal efficient and effective way by overcoming barriers of distance, language and culture, and by using multiple Internets-connect devices. It is important to say that the use of multimedia technology has great significance in colleges, universities and research institutions in the Western country. In these countries, the technology is being seen as a key player to development in all ramifications and essential component of education.

Donkor, (2011.) multimedia has become a powerful medium for an explanation of the concept, theories and abstract things which make learning more meaningful (Gupta & Sehgal, 2012). It links the images, audio and visual together to provide a multisensory experience for the learner

Yoon & Hoon (2009), in order to have effective service delivery in teaching and learning the use of educational media and multimedia technology is paramount and higher education media and multimedia technology service delivery has had a dramatic impact on teaching and learning, especially with the ready access to new technologies, educational institutions are well positioned to take advantage of these rapid changes. There are a number of ways that educational media and multimedia technology can enhance effective service delivery programs while conserving program resources through:

Data processing skills needed by the teachers

Data processing is used extensively in business, engineering, science and to an increasing extent in nearly all areas in which computers are used such as education, to process data educationally by the teachers and other education administrators. Data processing deals with the analyzed, collection, manipulation and organization of data to produce meaningful information through computer programmes. The aforementioned importance makes it necessary for the teachers of business studies to possess the required skills in these areas. This will make them be more efficient in their teaching of the required ICT skills.

In this information age, data is the building block on which every organization is built to operate. Data takes varied forms, whether it is the name of the new employee who joined last month or is it the date on which John made his last transaction in the bank, or even the average marks that Mary scored in her examinations. Each of these is data. This data is later manipulated and reorganized to produce information. For example, the marks that Mary scored will come in handy when calculating and displaying a class wise performance. In order to be able to use this data later, it needs to be stored. In manual systems, such data is written in books and registers. For example, details of a faculty are maintained in a staff register and details of the students are entered in a student register.

In preparing mark sheets for students manually, for instance, each teacher would have to evaluate the allotted set of answer sheets subject and compile the marks according to the roll numbers. The examination officer would then collect the subject-wise mark sheets. For preparing the mark sheet of a student, the examination officer would have to follow the following steps: lookup all the subject-wise mark sheet for the marks obtained by that student write them in the appropriate boxes on the student's mark sheet note down

these marks in the student's register for the school record. This above-mentioned scenario would be an example of how any manual system would operate.

Osuala (2009) defined Data processing as the handling of information from simple manual process to a sophisticated modern computer. He explains that it involves the manipulation of raw and unorganized fact (data) in a computer to generate information. Thus, data processing is the conversion of data into meaningful information which involves a series of activities and the use of technological equipment. However, computers can be used for storing data retrieving and even manipulating data in different combinations to obtain the required information very easily. Also,

The simpler and more common way of storing and manipulating such a long list of data would be with the help of spreadsheets. Data could be stored in a grid of rows, and columns in a spreadsheet such as Microsoft Excel very efficiently. As we know, spreadsheets help in storing data and performing calculations. But they are limited in the amount of data that they store. Hence, when it comes to large organizations managing their data, they prefer to us Database management systems to take care of storing and managing their data within databases.

A database is a collection of data as well as programs required to manage that data. Database application enables computers to be conveniently used as a record keeping tool. They are designed to be able to store information that exists as records example, personal records, store records, student records. The flavor of database application, however, lies in the fact that they provide tools which enable the records they hold to be conveniently manipulated by performing operations, such as adding new records, modifying or updating records, viewing records, and deleting records. In addition to these basic activities, database applications usually include the following features. Forms which provide more user-friendly way of entering data records in the computer by using input screen that

are designed like the paper usually used for collecting data, means of organizing data records by sorting or indexing; means of extracting records that meet specified criteria; means of producing mailing labels and reports (Agomuo, 2005).

Business educators need to know how to create and use a simple database. To do this, one has to gain an understanding of the structure and purpose of database and must equally understand the basic terminologies of data base such as fields, records and file, locate specific information searching by subject, key words, authors, locate specific records using find function, choose appropriate search for fields, sort data, delete records, edit data in existing record (McDonald, 2005). Database application also comes with command languages which enable stand-alone management of information system to be developed by programming. Such may be designed to meet the specific information processing requirement of the task for which it is designed and be used to the preclusion of the general business data. Because of the record- oriented nature of most business data, they rely heavily on database application for processing them. Hence, the most business application is implemented as data applications are mechanically processed. This has brought about the advent of the information system, which in a nutshell is a computer application, which addresses the data processing and information needs of specified functions and tasks in an organization.

Odegbeyemi and Akingbade (2002) highlighted the following as data processing technology skills ability to perform data processing such as sorting, calculating and classifying data. Ability to install appropriate data processing software (word processing, spreadsheet, desktop publishing and data base) Data processing skills have brought a about considerable of improvement on the work of business education students which will equally be helpful to business education teachers in handling bookkeeping at the tertiary level in the areas of knowledge in routine accounting operations such as posting to

ledger accounts determining accounting balance printing financing statements, reports, payroll, vouchers, work hours and stock inventory analysis. Business educators employed to lay a good foundation on all business subjects at the tertiary level need to acquire skills in modern Information and Communication Technology (ICT), machines and equipment to enable them to impart the knowledge and skills in the training of their students. The ICT skills acquired through organized training will assist them to succeed in instructional delivery.

Related empirical studies

The researcher was able to go through some relevant past work such Adeyemi and Olaleye (2010) conducted a study to assess Information and Communication Technology (ICT) for the effective management of secondary schools for sustainable development in Ekiti State, Nigeria. The study adopted a descriptive survey design. The study population comprised all the 182 secondary schools in the State. Out of this population, a sample of 160 secondary schools was taken and selected through the stratified random sampling technique. Out of the 6,278 teachers in the schools, 812 teachers made up of 160 principals and 652 teachers were selected for the study. The method of selection was also through the stratified random sampling technique. The instrument used to collect data for the study was a questionnaire while the data collected were analyzed using frequency counts, percentages mean and Pearson Product Moment Correlation analysis. It was found out that the level of provision of ICT equipment to secondary schools in the State was low. The level of principal's management of schools as regards provision for ICT facilities was also poor. The intermittent disruption of electricity and inadequate funding were found as major problem inhibiting the usage of ICT equipment for the management of schools in the State. Based on the findings of the study, it was recommended that the state government should supply the necessary ICT equipment to all secondary schools in the State, that the

government should also improve the training of principals, teachers and computer personnel in the use of computers and other ICT equipment through seminar, workshop and in-service training. The study is similar to the one because they both focus on Information and Communication Technology. However they differ because while the Adeyemi and Olaleye study focuses on ICT usage for effective management of secondary school, this study focuses on lecturers ICT competency level for teaching business education courses in universities.

Anyamene, Nwokolo and Anyachebelu (2012) carried out a study on availability and use of information and communications technology resources for counselling university students in South East States, Nigeria. The design of the study was survey. The respondents comprised 10,800 students drawn from the nine universities in the south east, Nigeria. Three research questions and hypotheses were developed to guide the study. All the students in all the universities constituted the population. Proportionate stratified sampling technique was used to select 10,800 students from the nine universities. The instrument was a structured questionnaire developed by the researchers. The instrument was validated by two experts in Guidance and Counselling and measurement and evaluation. The reliability analysis of the instrument yielded co-efficient of 0.81. The instrument was therefore deemed reliable for the study. The researchers adopted a direct approach in the administration of the instrument to the respondents. By this method copies of the questionnaire were taken to respondent's universities and administered personally with the help of 18 research assistants who were duly oriented. The findings of the study showed that the availability and non-availability of ICT facilities in the Universities used in counselling and learning. The data collected were analysed using percentage and mean scores. The results indicate that information communication technology (ICT) facilities for counselling are limited in the universities in the south east states, Nigeria. The results also

indicate that the level of Information Communication Technology is very low among universities in the area. Based on the findings of the study, it was recommended that government should make available ICT facilities in counselling laboratories in all universities in other to help facilitate counselling and learning. The study is similar to Anyamene, Nwokolo and Anyachebelu study because they both focus on Information and Communication Technology. However they differ because while the Anyamene, Nwokolo and Anyachebelu study focuses on ICT availability for counseling university students, this study focuses on lecturers ICT competency level for teaching business education courses in universities.

Fakeye (2010) studied assessment of English Language teachers' knowledge and use of Information and Communication Technology (ICT) in Ibadan Southwest Local Government of Oyo State. The success of the integration of Information and Communication Technology (ICT) into the teaching and learning of English Language depends largely on the level of knowledge of ICT possessed by the teachers and actual utilization of same in the classroom. The study therefore assessed Senior Secondary School English Language teacher's knowledge and use of ICT in English Language classrooms using survey research design. Attempt was made to provide answers to four research questions and three hypotheses. The participants were 94 English Language teachers from 30 randomly selected senior secondary schools in Ibadan Southwest Local Government of Oyo State. A self-designed questionnaire was used to collect pertinent data which were analyzed using frequency counts, simple percentage and t-test. Findings revealed that the level of knowledge of possessed by English Language teachers was poor and as such, they rarely use ICT in English Language instruction. It was also found that there was significant difference in the male and female teacher's knowledge of ICT with the males demonstrating a higher level of knowledge than their female counterparts. Based on these

findings, it was recommended, among others, that English Language teachers must attend periodic seminars, workshops and in-service trainings to equip them with knowledge of ICT and its utilization in classroom instruction while teacher education programmes in tertiary institutions must be reviewed to incorporate ICT assisted instruction. The study is related to present study in that both are on ICT. However, they differ because while Fakeye study focuses on English language teachers knowledge in Ibadan southwest local government of Oyo state, this study focuses on lecturers ICT competency level for teaching business education courses in universities in Kwara state.

Clever (2009) who conducted a research on issues of Information and Communication Technology assessment in teaching and learning of Business Education courses. The study was conducted to investigate issues of Information and Communication Technology in the teaching and learning business education courses in Delta State. The researcher employed survey research design which consisted of one thousand three hundred and thirty seven (1337) respondents which are made fifty (50) business education lecturers and one thousand two hundred and eight seven (1287) students in four tertiary institutions in Delta state.

The researcher developed an instrument for the study titled "Information Communication Technology Assessment Questionnaire (I.C.T AQ)". The instrument is a 25 item questionnaire. Item 1 are modified two point likert scales while items 14-25 modified four point likert scale. The instrument was designed in line with the research questions and null hypothesis.

The descriptive statistical tool of percentage frequency and mean was used to answer the research questions while t-test was used for null hypothesis 2.50 and above was regarded as an acceptable mean for the research questions. The findings of this study revealed that there was a serious problem in the availability and utilization of ICT facilities

for teaching business education courses. Also business educators do not have most skill competencies in ICT packages. In conclusion, it was recommended that business educator should engage themselves in continuous training in ICT facilities package to enable them deliver a more effective instruction. The study is similar to Clever's study because they both focus on Information and Communication Technology. However they differ because while the Clever study focuses on issues in teaching and learning of business education courses in Delta state, this study focuses on lecturers ICT competency level for teaching business education courses in universities in Kwara state.

Achibong, Ogbiji and Obi-Idem (2010) conducted a study on ICT competence among staff in Universities in Cross River State, Nigeria. The purpose of the study was to examine ICT competencies and challenges to ICT usage among academic staff in the Universities under study. A questionnaire was used for the data collection from a sample size of 30 academic staff. The collected data was analyzed using descriptive statistics (percentage). The result showed that majority of the academic staff funded their ICT training, high number of them has lap tops; access to internet was mainly at public cyber cafe; majority (53%) rated their ICT competence as low. Inadequate facilities, excess workload and funding were identified as major challenges to ICT usage by academic staff, Recommendations made by the research include: funding of ICT training of academic staff by the University management and making ICT training mandatory for all academic staff. This study is related to the present study in that both emphasized on ICT competency. Notwithstanding, they differ in that Achibong, Ogbiji and Obi- Idems study considered on ICT competencies of staff in Universities in Cross River state. Why the present study is on ICT competencies level of lecturers teaching business education courses in universities in Kwara state.

Furthermore, a study was conducted by Ezemoyih and Okafor (2010) on the Evaluation of Information and Communication Technology skills needed by Accounting Education Lecturers in Nigeria. The major purpose of the study was to determine the Information and Communication Technology skills needed by accounting education teachers in tertiary institution in Nigeria. The study adopted a survey design. A structured questionnaire was used for data collection. Data were analyzed using mean and standard deviation for research questions. The reliability of the instrument was established using Cronbach Alpha Coefficient for internal consistency. The population of the study consisted of 55 College of Education lecturers teaching accounting in South-East geopolitical zone of Nigeria. Three research questions guided the study. The study tried to find out the ICT concepts, skills and knowledge and to what extent the ICT skills are needed by accounting lecturers. It was concluded that ICT skills were vital for effective teaching of accounting courses. It was recommended that Colleges of Education accounting education lectures in the South-East geopolitical zone of Nigeria should acquire (through symposia, seminars, conferences and workshops) ICT skills and put into practice these skills to enable them to use these skills effectively and efficiently in the teaching of accounting. The study is similar to Ezemoyih and Okafor study because they both focus on Information and Communication Technology. However they differ because while the study of Ezemoyih and Okafor focuses on ICT skills needed by Accounting education lecturers in Nigeria, this study focuses on lecturers ICT competency level for teaching business education courses in universities in Kwara state.

Ezeugbor, (2008) conducted a study on Information and Communication Technology competence level of Nigerian Tertiary Institution teachers as a challenge to harnessing the ICT Gains in Education. The purpose of the study was to investigate the ICT competence level of tertiary institution teachers as a challenge to harnessing the

ICT gains in education. It was a survey design carried out in three government owned tertiary institutions in Anambra State of Nigeria. The sample comprised 527 lectures; (253 male and 274 female). 18-item questionnaire were used to collect data for the study, mean was used for data analysis of research questions while t-test and ANOVA was used for the hypothesis. The findings revealed that, though the lecturers have been exposed to ICT training, their ICT competence was still low and this has hindered their ability to harness the numerous ICT gains in teaching and learning. It was recommended that ICT training programmes for lectures should be continuous and on-going with emphasis in such areas as basic computer operations and applications of ICT in teaching and learning. The study is related to the present study in that both are on ICT competency level, they differ in that they focused broadly on tertiary institutions teachers in Nigeria, while this study focuses on lecturers ICT competency level for teaching business education courses in universities in Kwara state.

Appraisal of the Reviewed Literature

The literature reviewed shows competency theory deals with the stages of learning new skills by business educators in teaching in the classroom. The theory comprises the following stages Unconscious incompetence, Conscious Incompetence, Conscious Competence and Unconscious competence. Information and Communication Technology (ICT) is the systematic application of computers and other technologies to acquire, organize, process, store, retrieve and disseminate information to bring about the effective exchange of information in communication. ICT Competency Level of Business Educators in Nigeria it emphasized the competency level required by the business educators for utilization of Information and Communication Technology (ICT) in different tertiary institutions in orders to make the appropriate decision in classroom interaction with the students. Gender differences have been reported in the sense of being more prone to use computers and new media. Some authors report that gender differences in using ICT have no limit between men and women, Gender difference in the adoption of technology has been studied in the literature, producing mixed results.

Word processing refers to the various ways words are combined, arranged, placed, formatted, organized or presented for a defined purpose in the form of a letter, memo, and technical report. Skills required for effective use of word processing technologies particularly, the computer understanding the various types of word processing software applications (which include Microsoft Word, word perfect, and integrated packages such as Apple works and Lotus Office Suite which also include word processors) be familiar with the component parts of word processor; be able to accomplish basic operations associated with word processing using Microsoft word for windows such as: word document operations (opening, creating, storing, viewing, formatting, and printing a document, managing text operations selecting text, inserting text, deleting text, copying and pasting text).

Internet as the interconnection of the large and small network around the globe. The skills required for effective operation of internet services as stated includes: understanding the general structure of an e-mail addressability to interpret features of an inbox example owner, to, CC, subject, interpret features of a retrieved message from date sent, reply, forward other skills as maintained by him are the ability to retrieve and reply to an e-mail forward an e-mail and to send an attachment with the e-mail. The e-mail is another important basic skill business educators need to know. Multimedia is distinguished from mixed media in fine art; by including audio, for example, it has a broader scope. It links the images, audio and visual together to provide a multisensory experience for the learner. Data processing as the handling of information from simple manual process to a sophisticated modern computer. Skills require in performing data processing such as sorting, calculating and classifying data. Overall, the literature uses the idea as through its theoretical, conceptual and empirical were all accomplished.

Lacking proper definition and adequate testing the ideas are bound to play a limited role in revamping the teaching practice of business education courses in universities. Form review of literature, it was discovered that not much attempt has been made to find out assessment of information and communication technology (ICT) competency level of business educators in universities in Kwara State.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter focuses on the methods and strategies to be employed in the conduct of the study. The elements of the chapter were presented and discussed as follows:

Research Design

Population of the Study

Sample and Sampling Techniques

Research Instrument

Validity of the Instrument

Pilot Study

Reliability of the Instrument

Procedure for Data Collection

Method of Data Analysis.

Research Design

Descriptive survey research design method was used for the study. This method helped the researcher to describe record, analyze and interpret the variables in the study. The method is considered best because it enabled the researcher to obtain the opinion of a representative sample of the target population explaining the assessment of ICT competency level of business educators in universities in Kwara state.

Nwanwkwo (2006), stated that the purpose of descriptive research design is to collect factual and accurate, detailed information that describes existing phenomenon, identify problems or justify current conditions and practices, to determine what others are doing to similar problems or situations and to benefit from their experiences in order to make future plans and decision.

Population of the Study

The populations for this study were all the 300 level and 400 level business education students in three universities in Kwara State. The estimated population was 249 respondents which constituted the population for the study. These levels (300 level and 400 level) were selected because the categories of students have spent more than two years in the universities and it is expected that most of them have known their lecturer's competency level in ICT.

Table 1. Population of 300 level and 400 level students of business education in Kwara State

N/S	SCHOOLS	300 level Students	400 Level Students
1	Kwara State University malate	26	36
2	University of Ilorin	101	78
3	Al-hikmah University	5	3
	Total	132	117

Sample and Sampling Technique

Since the population was sizeable or not large, no sample was drawn. The entire population was studied. This is in line with the recommendation of Ademuliyi and Okwuanaso (2009) that it is ideal to study the entire population whenever possible.

Research Instrument

A researcher-designed questionnaire was used to obtain information from the respondents in assessing the ICT competency level of business educators in universities in Kwara State. The Questionnaire was developed based on the research questions generated to guide the study in relation to the hypotheses. The instrument was tagged Assessment of ICT Competency Level of Business Educators in Universities in Kwara State. (AICLBEU)

The Questionnaire comprised two sections: section A of the questionnaire elicits information on the demographic data of the respondents while section B contains items on word processing, internet, multimedia, and data processing.

Four points scale was used in scoring the items in section B which include High competent (HC), Moderate competent (MC), Low competent (LC), and No competent (NC). High competent is 4 point, Moderate competent is 3 point, Low competent is 2 point and No competent is 1 point.

Validity of the Instrument

The instrument used for this study was vetted by the supervisor and experts in Business and Entrepreneurship Education Department, Colleges of Education, Kwara State University Malete and others experts in other universities. This was to determine the face and content validity of the instrument. All relevant corrections and modifications were noted by the experts were effected and items or research statements constructed based on the comments of the supervisor and experts in the field

Pilot Study

After necessary corrections and validation of the instrument, a pilot study of the instrument was conducted at Ekiti State University, Ado Ekiti using ten students. The university was not part of the population of the study, but its choice was influenced by the location and because it offers business education, with the same characteristics as the research location. The purpose of the pilot study was to determine a reliability of the instruments, its difficulty level and also to determine whether the questions were free of ambiguity. The data collected were analyzed using mean and t-test statistics

Reliability of the Instrument

Reliability refers to the consistency of the measuring instrument. That is the extent to which an instrument consistently measures what is purported to measure (Ogunlade 2004). It

emphasizes consistency, trustworthiness and so on. To determine the reliability of the instrument the researcher used test re-tests method. The researcher selected a university outside the scope of the study.10 copies of the questionnaire were administered to 10 students, twice at the interval of two weeks. Thereafter, Person Product Moment Correlation Coefficient (PPMC) was used to correlate first and second scores. Correlation Coefficient of 0.86 was obtained which shows that the instrument is reliable and stable.

Procedure for Data Collection

An introductory letter was obtained by the researcher from the Department of Business and Entrepreneurship Education Kwara State University, Malete, and an application form was filled for ethical consideration. The consent of the respondents was sought and confidentiality pledged, so as to secure full co-operation of the target respondents.

The researcher made use of two trained research assistants for the distribution and retrieval of questionnaire. The respondents attempt the questionnaire and copies of the questionnaire were collected back immediately.

Method of Data Analysis

To analyze data for this study, descriptive statistic of frequency count and percentage were used to describe the demographic data of the respondents. Descriptive statistics of mean and standard deviation were used to answer the research questions raised for the study. All the hypotheses were tested using inferential statistics of t-test at 0.05 alpha level of significance.

Decision Rule

A weighted mean score of 2.50 and above was considered highly competent while a weighted mean score of 2.49 and below was considered no competent. If the t-calculated is less than t-value the null hypotheses were retained otherwise, it is rejected.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

This research work was conducted on the Assessment of Information and Communication Technology (ICT) competency level of business educators in Universities in Kwara State. This chapter deals with the presentation and analysis of the research data and discussion of findings. The analyses were carried out under the following sub-headings:

Analysis of Demographic Data

Analysis of Research Questions

Hypotheses Testing

Summary of Major Findings

Discussion of Findings

Analysis of Demographic Data

The analysis of demographic data of the respondents was conducted in table 1 as follows:

Table 2: Percentage Distribution of the Respondents Based on Gender

Gender	Frequency	Percentage (%)
Male	106	42.6
Female	143	57.4
Total	**249**	**100.0**

Source: Field Survey 2018

Table 1 indicated the percentage distribution of respondents based on gender. The table revealed that there were 106 male respondents representing 42.6% and 143 female respondents representing 57.4%. This implied that female respondents were more in number than male students.

Analysis of Data to Answer the Research Questions

Analysis of data to answer the research questions conducted is shown in table 2 to 5 as follows:

Research Question one: What is the competency level of business educators in using word processing to teach business education courses in universities in Kwara state?

Table 3: Mean and standard deviation of responses on the competency level of business educators in using word processing

S/N	**Item Statements**	$\overline{X}$	SD	**Remark**
1.	Type document and letter	3.83	0.38	Highly Competent
2.	Identify and use various templates such as tools bars, title bar	3.19	0.40	Highly Competent
3.	Create and transfer document into folder	3.78	0.41	Highly Competent
4.	Save, open and delete files	3.58	0.49	Highly Competent
5.	Edit, copy and paste file	3.42	0.49	Highly Competent
6.	Understanding file name e,g jpeg, pdf	3.22	0.42	Highly Competent
7.	Use the tools	3.32	0.47	Highly Competent
8.	Align, centre and justify text in documents	3.12	0.37	Highly Competent
9.	Adjust margins in documents	3.36	0.50	Highly Competent
10.	View menu to manipulate the page layout	3.64	0.48	Highly Competent
Weighted average		**3.45**	**0.44**	**Highly Competent**

Source: Field Survey, 2018

Analysis of data in table 3 revealed that respondents indicated that business educators are highly competent in typing document and letter (mean = 3.83), the same way they are highly competent in identifying and using various templates such as tool bars, title bar (mean = 3.19). In addition, the respondents stated that business educators are highly competent creating and transferring document into folder (mean = 3.78), as well as save, open and delete files (mean = 3.58). The respondents indicated that business educators are

highly competent in editing, copying and paste file (mean = 3.42), understanding file name e,g jpeg, pdf (mean = 3.22), and using tools (mean = 3.32). Business educators are highly competent in aligning, centering and justifying text in documents (mean = 3.12), adjust margins in documents (mean = 3.36) as well as View menu to manipulate the page layout (mean = 3.64). All the 10 items had standard deviation ranging from 0.37 to 0.50 which is below the fixed value of 1.96. This means that the responses of the respondents are not wide spread as it is close to the mean.

On the overall, the respondents indicated highly competent for all the constructs in table 3 above. This implied that business educators are highly competent in using word processing to teach business education courses in universities in Kwara State. This was supported by an average mean (mean = 3.45, SD = 0.44).

Research Question Two: What is the competency level of business educators in using internet to teach business education courses in universities in Kwara state?

Table 4: Mean and standard deviation of responses on the competency level of business educators in using internet

S/N	**Item Statements**	$\overline{X}$	SD	**Remark**
1.	Send and access electronic mails	3.23	0.42	Highly Competent
2.	Transfer protocol	3.29	0.45	Highly Competent
3.	Familiarity and access to internet aided equipment such as modem, hub	3.26	0.46	Highly Competent
4.	Use search engine such as Browser, Google Chrome, Firefox	3.49	0.52	Highly Competent
5.	Use internet phones	3.75	0.43	Highly Competent
6.	Use the internet service provision e.g wifi, hotspot	3.43	0.50	Highly Competent
7.	Access different websites	3.72	0.45	Highly Competent
8.	Access the internet	3.55	0.50	Highly Competent
9.	Engage in electronic commerce delivery	1.57	0.50	Low Competence
10.	Download files	3.83	0.38	Highly Competent
	Weighted average	**3.31**	**0.46**	**Highly Competent**

Source: Field Survey, 2018

Analysis of data in table 4 revealed that respondents indicated that business educators are highly competent in sending and accessing electronic mails (mean = 3.23), the same way they are highly competent in transferring protocol (mean = 3.29). In addition, the respondents indicated highly competent for business educators' familiarity and access to internet aided equipment such as modem, hub (mean = 3.26), as well as use search engine such as Browser, Google Chrome, Firefox (mean = 3.49). The respondents indicated that business educators are highly competent in using internet phones (mean = 3.75), internet service provision e.g wifi, hotspot (mean = 3.43), and access different website (mean =

3.72). Business educators are highly competent in accessing the internet (mean = 3.55), and downloading files (mean = 3.83). The respondents indicated low competence for business educators in engaging in electronic commerce delivery (mean = 1.57). All the 10 items has a standard deviation ranges from 0.38 to 0.52 which are below the fixed value of 1.96. This means that the responses of the respondents are not wide spread as it is close to the mean.

On the overall, the respondents indicated highly competent for all the constructs in table 4 above. This implied that business educators are highly competent in using internet to teach business education courses in universities in Kwara State. This was supported by an average mean (mean = 3.31, SD = 0.46).

Research Question Three: What is the competency level of business educators in using multimedia system to teach business education courses in universities in Kwara state?

Table 5: Mean and standard deviation of responses on the competency level of business educators in using multimedia

S/N	**Item Statements**	$\overline{X}$	SD	**Remark**
1.	Preparing slides	3.19	0.40	Highly Competent
2.	Make slide presentations	3.78	0.41	Highly Competent
3.	Open, save and retrieve slides	3.58	0.49	Highly Competent
4.	Create different slides e.g title side content with option, picture with capture	3.40	0.49	Highly Competent
5.	Use smart boards for teaching	3.21	0.41	Highly Competent
6.	Use teleconference gadgets for teaching	1.70	0.46	Low Competence
7.	Use projector in teaching	3.11	0.36	Highly Competent
8.	Use slides master, handout master	1.25	0.44	Low Competence
9.	Insert image, photo album, screen shot into slides	3.62	0.49	Highly Competent
10.	Use different colored outline and shape outline	3.22	0.42	Highly Competent
	Weighted average	**3.01**	**0.44**	**Highly Competent**

Source: Field Survey, 2018

Analysis of data in table 5 revealed that respondents indicated that business educators are highly competent in preparing slides (mean = 3.19), the same way they are

highly competent in making slide presentations (mean = 3.78). In addition, the respondents indicated highly competent for business educators' in opening, saving and retrieving slides (mean = 3.58), as well as creating different slides e.g title side content with option, picture with capture (mean = 3.40). The respondents indicated that business educators are highly competent in using smart boards for teaching (mean = 3.21), projector for teaching (mean = 3.11), different colored outline and shape outline (mean = 3.22) and Inserting image, photo album, screen shot into slides (mean = 3.62). The respondents indicated low competence for business educators in using teleconference gadgets for teaching (mean = 1.70) and slides master, handout master (mean = 1.25). All the 10 items has a standard deviation ranges from 0.36 to 0.49 which are below the fixed value of 1.96. This means that the responses of the respondents are not wide spread as it is close to the mean.

On the overall, almost all the respondents indicated highly competent for the constructs in table 5 above. This implied that business educators are highly competent in using multimedia system to teach business education courses in universities in Kwara State. This was supported by an average mean (mean = 3.01, SD = 0.44).

Research Question Four: What is the competency level of business educators in using data processing to teach business education courses in universities in Kwara state?

Table 6: Mean and standard deviation of responses on the competency level of business educators in using data processing

S/N	**Item Statements**	$\overline{X}$	SD	**Remark**
1.	Classify data into groups	3.27	0.45	Highly Competent
2.	Insert rows and columns	3.25	0.45	Highly Competent
3.	Create grade score for students	3.47	0.52	Highly Competent
4.	Collect and store data	3.74	0.44	Highly Competent
5.	Interpret result of analysis	3.43	0.50	Highly Competent
6.	Use available data processing software such as spreadsheet	3.72	0.45	Highly Competent
7.	Analyzing date using statistical tools	3.55	0.50	Highly Competent
8.	Create simple data base structure and fields	3.43	0.50	Highly Competent
9.	Sort data into sequence	3.72	0.45	Highly Competent
10.	Format and print out result	3.55	0.50	Highly Competent
	Weighted average	**3.51**	**0.48**	**Highly Competent**

Source: Field Survey, 2018

Analysis of data in table 6 revealed that respondents indicated that business educators are highly competent to classifying data into groups (mean = 3.27), the same way they are highly competent in inserting rows and columns (mean = 3.25). In addition, the respondents stated that business educators are highly competent to create grade score for students (mean = 3.47), as well as collect and store data (mean = 3.74). The respondents indicated that business educators are highly competent to interpret result of analysis (mean = 3.43), use available data processing software such as spreadsheet (mean = 3.72), and analyze data using statistical tools (mean = 3.55). Business educators are highly competent

to create simple data base structure and fields (mean = 3.43), sort data into sequence (mean = 3.72) as well as format and print out result (mean = 3.55). All the 10 items has a standard deviation ranges from 0.45 to 0.52 which are below the fixed value of 1.96. This means that the responses of the respondents are not wide spread as it is close to the mean.

On the overall, the respondents indicated highly competent for all the constructs in table 6 above. This implied that business education lecturers are highly competent in using data processing to teach business education courses in universities in Kwara State. This was supported by an average mean (mean = 3.51, SD = 0.48).

Hypotheses Testing

The four null hypotheses of the study were tested using independent t-test. The null hypotheses were tested at 0.05 level of significance. The summary of the test of hypotheses are presented in table 7 to 10 as follows:

H_{01}: There is no significant difference in the mean responses of male and female business education students on the competency level of business educators in using word processing to teach business education courses.

Table 7: Summary of t-test of the difference between the mean ratings of male and female students on the competency level of business educators in using word processing to teach business education courses

Gender	N	Mean	SD	t-cal	Df	p-value	Decision
Male	106	3.46	0.10				
				0.042	247	0.967	NS
Female	143	3.46	0.10				

Source: Field survey, 2018 P>0.05

The data in table 7 revealed that there were 106 male students and 143 female students. The male and female students' responses showed that business educators are highly competent in using word processing to teach business education courses ($\bar{x}$ = 3.46; SD = 0.10) and ($\bar{x}$ = 3.46; SD = 0.10). Their responses are close to the mean as the standard

deviations are very low. The table revealed that there was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using word processing to teach business education courses (t_{247} = 0.042, P>0.05). Therefore, the null hypothesis was not rejected. This implied that male and female students did not differ in their responses regarding competency level of business educators in using word processing to teach business education courses.

H_{02}: There is no significant difference in the mean responses of male and female business education students on the competency level of business educators in using internet to teach business education courses

Table 8 Summary of t-test of the difference between the mean ratings of male and female business educators on their competency level in using internet to teach business education courses

Gender	N	Mean	SD	t-cal	Df	p-value	Decision
Male	106	3.24	0.14				
				-7.474	247	0.000	NS
Female	143	3.36	0.12				

Source: Field survey, 2018 P<0.05

Analysis of data in table 8 revealed that there are 106 male students and 143 female students. The male and female students' responses showed that business educators are highly competent in using internet to teach business education courses ($\bar{X}$ = 3.24; SD = 0.14) and ($\bar{X}$ = 3.36; SD = 0.12). Their responses are close to the mean as the standard deviations are very low. The table revealed that there was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using internet to teach business education courses (t_{247} = -7.474, P>0.05). Therefore, the null hypothesis was not rejected. This implied that male and female students differ in their responses regarding the competency level of business educators in using internet to teach business education courses. Their responses showed that female

students rated the competency level of business educators in using internet higher than the male students did (mean difference = 0.12).

H_{03}: There is no significant difference in the mean responses of male and female business education students on the competency level of business educators in using multimedia system to teach business education courses.

Table 9 Summary of t-test of the difference between the mean ratings of male and female students on the competency level of business educators in using multimedia system to teach business education courses

Gender	N	Mean	SD	t-cal	Df	p-value	Decision
Male	106	2.99	0.10				
				-2.725	247	0.007	NS
Female	143	3.02	0.10				

Source: Field survey, 2018 P<0.05

Analysis of data in table 9 revealed that there are 106 male students and 143 female students. The male and female students' responses showed that business educators are highly competent in using multimedia system to teach business education courses ($\bar{x}$ = 2.99; SD = 0.10) and ($\bar{x}$ = 3.02; SD = 0.10). Their responses are close to the mean as the standard deviations are very low. The table revealed that there was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using multimedia system to teach business education courses. (t_{247} = -2.725, P>0.05). Therefore, the null hypothesis was not rejected. This implied that male and female students differ in their responses regarding the competency level of business educators in using multimedia system to teach business education courses. Their responses showed that female students rated the competency level of business educators in using multimedia system higher than the male students did (mean difference = 0.03).

H_{04}: There is no significant difference in the mean responses of male and female business education students on the competency level of business educators in using data processing to teach business education courses.

Table 10 Summary of t-test of the difference between the mean ratings of male and female business educators on their competency level in using data processing to teach business education courses

Gender	N	Mean	SD	t-cal	Df	p-value	Decision
Male	106	3.50	0.22				
				0.733	247	0.464	NS
Female	143	3.52	0.20				

Source: Field survey, 2018 P>0.05

Analysis of data in table 10 revealed that there are 106 male students and 143 female students. The male and female students' responses showed that business educators are highly competent in using data processing to teach business education courses ($\bar{x}$ = 3.50; SD = 0.22) and ($\bar{x}$ = 3.52; SD = 0.20). Their responses are close to the mean as the standard deviations are very low. The table revealed that there was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using data processing to teach business education courses. (t_{247} = 0.733, P>0.05). Therefore, the null hypothesis was not rejected. This implied that male and female students do not differ in their responses regarding the competency level of business educators in using data processing to teach business education courses. Though there was a slight difference between their mean responses with female students having higher mean responses, but the difference was not statistically significant (mean difference = 0.02).

Summary of Major Findings

The following are the summary of major findings of the study:

1. Business educators are highly competent in using word processing to teach business education courses in universities in Kwara State.

2. Business educators are highly competent in using internet to teach business education courses in universities in Kwara State
3. Business educators are highly competent in using multimedia system to teach business education courses in universities in Kwara State
4. Business educators are highly competent in using data processing to teach business education courses in universities in Kwara State
5. There was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using word processing to teach business education courses ($t_{247} = 0.042$, $P>0.05$)
6. There was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using internet to teach business education courses ($t_{247} = -7.474$, $P>0.05$)
7. There was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using multimedia system to teach business education courses. ($t_{247} = -2{,}725$ $P>0.05$)
8. There was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using data processing to teach business education courses. ($t_{247} = 0.733$, $P>0.05$)

Discussion of findings

Based on the analysis of research question one in table 3, business educators are highly competent in using word processing to teach business education courses in universities in Kwara state. The average weighted mean of 3.45 had a mean score above 2.50 (cut off mean) which is the level of highly competent. This result shows that all business educators in the three universities are highly competent in using word processing to teach their students. The finding agreed with Nwosu (2002) who

emphasized that it is important for teachers to acquire the skills, knowledge, and competencies in word processing to be efficient in the performance of their work.

The result of analysis of research question two in table 4 shows that business educators are highly competent in using internet to teach business education courses in universities in Kwara state. The average weighted mean of 3.31 had a mean score above 2.50 (cut off mean) which is the level of highly competent. This result shows that all business educators in the three universities are highly competent in using internet to teach their students in the class. The finding collaborates with Oyedum (2007) who stated that the internet provides access to more information than the librarian could dream of; therefore, internet skills could access it by teachers.

The third research question shows the result analysis in table 5 that business educators are highly competent in using multimedia system to teach business education courses in universities in Kwara state. The average weighted mean of 3.01 had a mean score above 2.50 (cut off mean) which is the level of highly competent. This result shows that all business educators in the three universities are highly competent in using multimedia system to teach their students. The finding Yoon & Hoon (2009) stated that in order to have effective service delivery in teaching and learning the use of educational media and multimedia technology is paramount and higher education media and multimedia technology service delivery has had a dramatic impact on teaching and learning, especially with the ready access to new technologies, educational institutions are well positioned to take advantage of these rapid changes. Therefore, it is necessary for business educators to possess the needed skills in these areas. This will make them be more efficient in their teaching of the required skills.

The finding of this study also revealed research question four in table 6 on data processing it shows that business educators are highly competent in using data processing to teach business education courses in universities in Kwara state. The average weighted mean of 3.51 had a mean score above 2.50 (cut off mean) which is the level of highly competent. This result shows that all business educators in the three universities are highly competent in using data processing to teach their students. The findings agree with the work of Kogge (2009) which stated that data processing is used extensively in business and in nearly all areas in which computers are used such as education to process data electronically by the teachers; therefore, it is necessary for business educators to possess the needed skills in these areas. This will make them be more efficient in teaching and required skills.

Table 7 showed the result of statistical analysis of hypothesis one, where t-test was used. The result showed that there was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using word processing to teach business education courses as the t-cal 0.967 was greater than t-crit: 0.042. This implied that male and female students did not differ in their responses regarding competency level of business educators in using word processing to teach business education courses. The finding collaborates with Kirkpatrick & Cuban (2008), however, noted that the gender gap is narrowed when both genders are exposed to the same amount and types of experience on computers.

Table 8 showed the result of statistical analysis of hypothesis two, where t-test was used. The result showed that there was significant difference in the mean responses of male and female business education students on the competency level of business educators in using internet to teach business education courses as the t-cal -7.474 was greater than t-crit: 0.000 This implied that male and female students differ in their

responses regarding the competency level of business educators in using internet to teach business education courses. Their responses showed that female students rated the competency level of business educators in using internet higher than the male students did. The finding support with Petriel (2009), however, found that while females are highly used ICT more than male. The letter used the Web more. He further found the significant gender difference in the way females and males rated themselves in their ability to master technical skills, though both genders were positive about their technological ability.

Table 9 showed the result of statistical analysis of hypothesis three, where t-test was used. The result showed that there was a significant difference in the mean responses of male and female business education students on the competency level of business educators in using multimedia system to teach business education courses as the t-cal -2.725 was greater than t-crit: 0.007. This implied that male and female students differ in their responses regarding the competency level of business educators in using multimedia system to teach business education courses. Their responses showed that female students rated the competency level of business educators in using multimedia system higher than the male students did. Oniga & Lai (2008), reported that females students had more positive attitudes towards ICT than males students. They found significant gender variations where females rating perception towards computer self-efficacy, perceived usefulness and ease of use and behavioral intention to use ICT were all higher than those of males.

Table 10 showed the result of statistical analysis of hypothesis three, where t-test was used. The result showed that there was a significant difference in the mean responses of male and female business education students on the competency level of business educators in using data processing to teach business education courses as the t-cal 0.733 was greater than t-crit: 0.464. This implied that male and female students do not differ in

their responses regarding the competency level of business educators in using data processing to teach business education courses. Though there was a slight difference between their mean responses with female students having higher means responses, the difference was not statistically significant. The findings reveal Kay (2006), he found that female students had relatively higher levels of computer attitude and the ability of computer implementation, but there is the difference between females and males regarding computer attitude and ability after the implementation of the technology. He claims that quality preparation on technology can help lessen gender inequalities.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary

The study was conducted to assess Information and Communication Technology (ICT) competency level business educators in universities in Kwara state. To guide the study, four purposes, four research questions, and four null hypotheses were developed. A descriptive survey design was adopted for the study. The entire 249 300level and 400level students of business education from the three universities in Kwara state formed the population and sample of the study. A 4 point rating scale with a structured questionnaire containing 40 items was used to elicit responses from the respondents and generate data for the study. The instrument was face-validated by three experts. A pilot test of the instrument was conducted on 10 students at Ekiti State University Ado Ekiti. The study made use of test re-tests reliability method to determine the internal consistency of the instrument and reliability coefficient of 0.86 was obtained. The data collected were analyed using mean and standard deviation to answer the research questions while t-test was used to test the null hypothesis of no significance difference at the level of 0.05. The following findings were made, based on the analysis of data.

1. Business educators are highly competent in using word processing to teach business education courses in universities in Kwara State.
2. Business educators are highly competent in using internet to teach business education courses in universities in Kwara State.
3. Business educators are highly competent in using multimedia system to teach business education courses in universities in Kwara State.
4. Business educators are highly competent in using data processing to teach business education courses in universities in Kwara State.

5. There was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using word processing to teach business education courses (t_{247} = 0.042, P>0.05).
6. There was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using internet to teach business education courses (t_{247} = -7.474, P>0.05).
7. There was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using multimedia system to teach business education courses. (t_{247} = -7.474, P>0.05).
8. There was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using data processing to teach business education courses. (t_{247} = 0.733, P>0.05)

Conclusion

Based on the findings of the study, the following were drawn; it is concluded that business educators are highly competent in using word processing, internet, multimedia system and data processing to teach business education courses in Universities in Kwara State. There was no significant difference in the mean responses of male and female business education students on the competency level of business educators in using word processing, internet, multimedia system and data processing to teach business education courses. Therefore, business educators should be given equal training and opportunities to learn in all aspects of ICT.

Recommendations

Based on the findings of the study, the researcher made the following recommendations:

1. There should be constant training and workshop for lecturers teaching business education so as to always refresh their knowledge on the use of word processing,

internet, multimedia system and data processing since they already possessed the skills.

2. Also, the government should provide ICT facilities for business education lecturers to practice with, if this is done, their knowledge of ICT will be retained as used during the classroom interaction.
3. Institutions of higher learning where business educators are trained should be fully equiped business education department with ICT gadgets so as to give them necessary training that would enable the lecturers to have full knowledge and skills they would transfer to their students.
4. Increase professional development opportunities for business educators to be retrained on the use of ICTs will help to integrate and utilize ICTs in tertiary institutions.
5. Given equal opportunities to learn and develop themselves in all areas of ICT.
6. Universities where business educators are trained should be reviewed from time to time. The review should take cognizance of the findings of this study, relating to ICT skills as required in word processing, internet, multimedia system and data processing.

Suggestion for Further Study

A study of this nature cannot cover every area of ICT hence: there is a need for further studies; it is on this basis that the researcher suggested that further researcher can be conducted as:

1. Extension of similar studies in other aspects of Information and Communication Technology (ICT) in universities in Nigeria.
2. The extent of utilization of ICT skills by business education lecturers in universities.

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The University for Community Development
P.M.B. 1530, Ilorin, Kwara State, Nigeria

Ref: ..... Date: 23/04/2018

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Dear Sir/Madam

LETTER OF INTRODUCTION: MAGAJI OLAITAN AYINDE

This is to introduce **MAGAJI, Olaitan Ayinde** (with matriculation number 15/27/MBE015) as a student of the Department of Business and Entrepreneurship Education, Kwara State University, Malete.

He is working on M.Sc Research with the topic: "Assessment of Information and Communication Technology (ICT) Competing Level of Lecturers Teaching Business Education Courses in Universities in Kwara State" and needs some information to facilitate his research work.

Please attend to him.

Thank you.

Associate Professor T.A. Umoru
Head of Department

APPENDIX

APPENDIX B
KWARA STATE UNIVERSITY MALETE
DEPARTMENT OF BUSINESS AND ENTRPENUERSHIP EDUCATION
COLLEGE OF EDUCATION.

ASSESSMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) COMPETENCY LEVEL OF BUSINESS EDUCATORS IN UNIVERSITIES IN KWARA STATE.

REQUEST TO FILL QUESTIONNAIRE

Dear Respondents,

This research project aims at assessment of Information and Communication Technology (ICT) competency level of business educators in universities in Kwara state.

Please be sincere in your answer to the items presented in this questionnaire. Again be assured of the confidentially of your response as required by research ethnics.

Thanks you `

Yours faithfully

Olaitan Ayinde MAGAJI

Appendix C

QUESTIONNAIRE

Section A

Personal Data

Instruction: please kindly tick (√) appropriate box as it applies to you

1. Name of Institution:_____
2. Gender:

   (a) Male [ ]

   (b) Female [ ]

Section B

Instruction: Please thick the appropriate response column as it applied to you

HC = High competent

MC = Moderate competent

LC = Low competence

NC = No competence

A. Competency level of business educators in using word processing

S/N	ITEM	HC	MC	LC	NC
	Indicate the level of lecturers competency in using word processing to **:**				
1.	type document and letter.				
2.	identity and use various templates such as tools bars, title bar				
3.	create and transfer document into folder				
4.	save, open & delete files				
5.	edit, copy & past file				
6.	understanding file name eg jpg, pdf				
7.	use the tools				
8.	align, centre, and justify text in documents				
9.	adjust margins in documents				
10.	view menu to manipulate the page layout				

B. Competency level of business educators in using internet

	Indicate the level of lecturers competency in using internet to :	HC	MC	LC	NC
1.	send and access electronic mails				
2.	transfer protocol				
3.	familiarity and access to internet aided equipment such as modem, hub				
4.	use search engine such as browser, Google chrome, Firefox				
5.	use internet phones				
6.	use the internet service provision e.g wifi, hotspot				
7.	access different website.				
8.	access the internet				
9.	engage in electronic commerce delivery				
10.	download files				

C. **Competency level of business educators in using multimedia system**

	Indicate the level of lecturers competency in using multimedia to :	HC	MC	LC	NC
1.	preparing slides				
2.	make slide presentations				
3.	open, save and retrieve slides				
4.	create different slides e.g Title side content with option, picture with capture.				
5.	use smart boards for teaching				
6.	use teleconference gadgets for teaching				
7.	use projector in teaching				
8.	use slides master, handout master				
9.	insert image, photo album, screenshot into slides				
10.	use different colored outline and shape outline				

D. Competency level of business educators in using data processing

	Indicate the level of lecturers competency in using data processing to :	HC	MC	LC	NC
1.	classify data into groups				
2.	insert rows and columns				
3.	create a grade score for students				
4.	collect and store data				
5.	interpret result of analysis				
6.	use available data processing software such as spreadsheet				
7.	analyzing data using statistical tools				
8.	create simple data base structure and fields				
9.	sort data into sequence				
10.	format and print out result				