Chapter One

Introduction

1.1 Background to the Study

Teaching is a deliberate and conscious effort of imparting the totality of education to learners at any level of education. The totality of education here includes; knowledge, skills, values, vocations, culture and attitude. As a result, education is seen as a tool for establishing a free and democratic society, a just society, a united and self-sufficient nation, and a strong and dynamic economy[1]. Over the years, the teaching of secretarial studies (now Office Technology and Management) has changed dramatically. Its origins can be traced back to the 17th and 18th centuries in the United States of America. centuries during the industrial revolution, following the invention of Typewriter (1714) and Pitman Shorthand system of writing (1837). By the 19th and 20th centuries the teaching of the course expanded rapidly to other developed countries of the world and spread to developing countries (Nigeria inclusive)[2].

To be effective, teaching necessitates a foundation of knowledge. Individuals' competence or ability refers to characteristics they possess that help them meet a given set of criteria. Academic staff: lecturers, instructors and technologists teaching Office Technology and Management (OTM) courses need to develop both human and intellectual abilities which will enable them to be effective in their obligatory roles to their students in terms of imparting the necessary skills and knowledge. The human abilities include; personal qualities, responsibility and decisiveness, while the intellectual abilities include effective communication, instructional planning, leadership and academic qualities[3]. This will be used in the research.

The measures of teaching have been identified as human abilities and intellectual abilities. The human abilities consist of measures like personal qualities, responsibility and

decisiveness. The intellectual abilities of teaching have the following measures; effective communication, instructional planning, leadership and academic qualities. These qualities are indispensable for effective teaching process that lead to knowledge and skill acquisition.

Research outcome revealed that developed nations of the world like United State of America (USA) relies heavily on technology-based teaching and learning method. This is called individualized Instruction[4]. This method is a process in which the learners, through the use of specially programmed text-books, electrical or electronic technology, including the Internet, intranets, satellite broadcast, audio and video conferencing, bulletin boards, chat-rooms and webcast to learn at their own speed what they want. The teacher serves as a facilitator. Among the techniques used in technology-based teaching method are; Programme Instruction (PI), Computer Assisted Instruction (CAI), Learner Controlled Instruction (LCI), Teaching Machine (TM), and Personalized System of Instruction (PSI). The teaching method allows the learner to determine his instructional objectives and goals. At each stage of the learning process, questions are answered and skills, mastered. The ability to master one skill helps to reinforce the learner as well as stimulate him to work further.

This method of teaching is not available in developing nations of the world like Nigeria. The inability of the developing nations to adopt technology based teaching method is as a result of non-availability of trained teachers, lack of infrastructural facilities, programmed text-books and instructional facilities. Nigeria, like any other developing nations, currently operates the traditional method of teaching. It is also called lecture method of teaching, whereby, the teacher tells the students his pre-planned facts. The students listen and take down notes. Students are required to read their notes and memorized what they have read. This method of teaching calls for both human and intellectual abilities to be able to pass across the necessary information and instructions to the learners. Although this method of teaching is less expensive because many students are taught at the same time, its major

limitation lies in the fact that the students are passive in class and the resultant effect is lack of appropriate knowledge and skills standard.

Office Technology and Management is a work-based programme that connects information technology activities to organizational structure. It is a programme of study that is usually found in Polytechnics and exposes students to the acquisition of vocational skills in office management and enterprise management; Information and Communication Technology skills, keyboarding skills, shorthand skills, effective communication skills and general office application skills[5]. The National Board for Technical Education assessed the existing OTM curriculum in 2004 and found that computer-related courses are heavily emphasized. These courses include computer appreciation, web page design, desktop publishing, database management, and special fields such as secretarial studies, approaches in office management and control, and general education relevant to modern challenges, sometimes known as general studies.

The integration of Information and Communication Technology (ICT) courses into the OTM curriculum necessitates the utilization of current teaching and learning facilities for teaching and learning purposes, instructional facilities are available. Various office equipment, machines, and technologies are used as tools for imparting and training students in OTM courses. It also involves provision of conducive, stimulating and teaching-learning environment, where effective teaching and learning could take place, as well as furnished manual and electronic keyboarding laboratory, ICT laboratory, shorthand laboratory, model office practice room. These facilities serve as the basis for which students can acquire the expected knowledge, skills and ability to function as responsible individuals and office managers after graduation. The use of these facilities in teaching and learning arouses the interest and active participation among students in OTM programme which, in turn, contributes to the quality assurance of the programme. For the purpose of this study, the

following instructional facilities were considered; Computers with un-interrupted power supply, Internet facilities, standby generator, microphones, headphones, electronic machines, manual typewriters, multimedia projectors, marker boards, good furniture, and air conditioners just to mention but few.

The issue of quality in the educational system, in the recent time, has been receiving a great deal of attention in the society. Parents, as well as the entire society, have been clamoring for quality in our educational system. The demand for quality in education is not out of place considering the huge sum of money that goes into the system yearly. Therefore, it is important to note that those who manage schools should be accountable to the stakeholders. The quality of the products of education is part of that accountability. Quality assurance is a concept that describes the entire picture of the management controlled measures aimed at ensuring quality of input and output of a product. The aim of quality assurance in OTM programme is to ensure that the provisions of the academic and skills acquisition standards are attained. Effective teaching of OTM courses can be attained through quality assurance measures such as qualified lecturers, training and re-training of lecturers, class monitoring, well equipped lecture halls, the Internet facilities and supervision[6]. However, instructional facilities and quality assurance measures are sometimes not available for teaching of OTM courses and the resultant effects are; frustration, lack of expected skills standard from graduates and problem of unemployment. Thus, the inability to get job creates crises of vulnerability, idleness among youths and heighten the attraction of engaging in illegal activities.

Evidence abounds to show that many polytechnics graduates are without jobs and those employed are inefficient. These are pointers to problems in quality, thus raises the question of whether quality instruction is given to students. Also, one wonders if the stakeholders in education system are doing what is expected of them in terms of providing

the needed instructional facilities and quality assurance measures in teaching and learning process. Though, there are many studies on instructional facilities, quality assurance and teaching of OTM courses, majority of them tend towards availability and utilization of instructional facilities for teaching and learning of OTM and the aspect of quality assurance and teaching of OTM courses seems to be negligible. It is worthy of note that as at the time of this study, none of the existing researchers has studied the influence of instructional facilities, quality assurance and teaching of OTM courses in public Polytechnics in South West, Nigeria. This study investigated the impact of instructional facilities, quality assurance, and teaching of OTM courses in public polytechnics in Nigeria's South West.

1.2 Statement of the Problem

Effective teaching has had a significant impact on students' academic success over the years. In polytechnics, lecturers, technologists and instructors teach skilled-based courses such as shorthand, keyboarding, and information and communication technology-related courses such as web page design, desktop publishing, and database management. When academic staff teaches effectively, students' level of competence becomes high, opportunities for gainful employment is widened, self-employment enhanced and youth restiveness is minimized. However, preliminary investigation, close observation and literature had revealed that teaching is perceived to be ineffective in the polytechnics as graduates lack the required knowledge and skills to meet the set target with dexterity. It was observed that majority of OTM graduates enroll in ICT centres in order to acquire those skills which ought to have been mastered during their days in school. This has resulted into the high rate of unemployment of polytechnic graduates and has aggravated the set-back for polytechnic education in Nigeria against its mandate. This may also prevent producing graduates with technical and multi-level skilled manpower that can drive the technological growth and

development of the nation. Lack of instructional facilities and inadequate enforcement of quality assurance measures have been identified to be preventing effective teaching of Office Technology and Management courses in Polytechnics.

Instructional facilities such as computers with uninterrupted power supply, multi-media projectors, marker boards, model offices, shorthand laboratory with headphones and microphones, rizo machines, photocopying machines, Internet connectivity just to mention but few for teaching of Office Technology and Management courses as provided for in the curriculum by the National Board for Technical Education (NBTE) seems to be inadequate in public Polytechnics. The quality assurance unit in each polytechnic across the country is also not fulfilling its mandate to ensure internal control mechanism such as employment of qualified academic staff, training and re-training of staff, moderation of scripts and compliance to regulated class capacity aimed at quality of inputs and outputs of polytechnic graduates. This unit is usually available in the Polytechnic but they are perceived not to be effective in their functions as their efforts have not been proportionately reflected in the standards of graduates[6].

The issue of instructional facilities and quality assurance in educational delivery has been a subject of discourse among scholars, researchers and stakeholders[3]. This has led to quantum of research which focused its attention on instructional facilities' availability and utilization for teaching of OTM courses in Polytechnics with various research designs but not specifically on influence of instructional facilities and quality assurance on teaching of Office Technology and Management courses. Thus, this study intends to investigate the influence of instructional facilities and quality assurance on teaching of OTM courses in public polytechnics in South West Nigeria.

1.3 Aim and Objectives of the Study

The aim of this study is to investigate the influence of instructional facilities and quality assurance on teaching of Office Technology and Management (OTM) courses in public polytechnics in South West, Nigeria. The specific objectives are to:

1. examine the teaching abilities of OTM academic staff in public Polytechnics in South West, Nigeria;
2. ascertain the instructional facilities available for teaching of OTM courses in public Polytechnics in South West, Nigeria;
3. investigate the level of utilization of instructional facilities for teaching of OTM courses in public Polytechnics in South West, Nigeria;
4. determine the quality assurance measures to ensure quality teaching of OTM courses in public Polytechnics in South West, Nigeria;
5. investigate the combined influence of instructional facilities and quality assurance measures on teaching of OTM courses in public Polytechnics in South West, Nigeria; and
6. investigate the relative influence of instructional facilities and quality assurance measures on teaching of OTM courses in public Polytechnics in South West, Nigeria.

1.4 Research Questions

The following research questions guided the study.

1. What are the teaching abilities of OTM academic staff in public Polytechnics in South West, Nigeria?
2. What are the instructional facilities available for teaching OTM courses in public Polytechnics in South West, Nigeria?
3. What is the level of utilization of available instructional facilities for teaching OTM courses in public Polytechnics in South West, Nigeria?

4. What are the quality assurance measures put in place to ensure effective teaching of OTM courses in public Polytechnics in South West, Nigeria?

1.5 **Hypotheses**

The following null hypotheses guided the study and were tested at 0.05 level of significance.

Ho_1 There will be no significant combined influence of instructional facilities and quality assurance measures on teaching of OTM courses in public Polytechnics in South West Nigeria?

Ho_2 There will be no significant relative influence of instructional facilities and quality assurance measures on teaching of OTM courses in public Polytechnics in South West, Nigeria.

.1.6 **Scope of the Study**

The study focused on the influence of instructional facilities, quality assurance and teaching of OTM courses in public Polytechnics in South West, Nigeria. Teaching is measured by the human abilities such as personal qualities, responsibility, decisiveness while intellectual abilities are; effective communication, instructional planning, leadership and academic qualities.

The instructional facilities under the scope of the study are; keyboarding laboratories, Computer laboratories, shorthand laboratories and model office rooms with (scanners, rizo machines, television, photocopying machines), multimedia projectors, the Internet facilities and marker boards. The quality assurance measures are; qualified lecturers, training and re-training of lecturers, class monitoring, well equipped lecture halls, the Internet facilities and thorough supervision. The study also covered all the academic staff which includes; lecturers,

instructors and technologists who taught OTM courses during the 2019/2020 academic session in ten public Polytechnics in South West, Nigeria.

1.7 Significance of the Study

The findings of this study would be of benefits to the following stakeholders: Office Technology and Management curriculum planners, National Board for Technical Education, lecturers, students of OTM and researchers.

The findings would benefit Office Technology and Management Curriculum Planners at polytechnics' level. This may guide them to make necessary review, towards enriching the teaching competent contents of Office Technology and Management programme.

Furthermore, the outcomes of the study may be of immense benefits to the National Board for Technical Education by exposing the Board to the level of instructional facilities and the internal quality assurance measures in the Polytechnics in South West, Nigeria.

Moreover, the results of this study may also benefit Office Technology and Management academic staff in that, it will expose them to different types of competences that will help to enhance effective teaching.

In addition, the study may benefit Office Technology and Management students because they will be exposed to the skills needed to be possess in order to be employable after their graduation.

Finally, the outcomes of the study may contribute to the relevant literature of other researchers who may want to carry out research on similar topic.

1.8 Limitations of the Study

The major challenges that limited this study was retrieving data from the respondents, who, in this regard, are the academic staff teaching OTM courses in public polytechnics in South West, Nigeria. This was due to the Covid 19 pandemic that limited the grade level of staff to be on duty to 13 and above. Also, as the pandemic was subsiding, the national body of Academic Staff Union of Polytechnics declared a national strike which lasted almost three months. Likewise, the uncooperative attitude of some academic staff (lecturers, instructors and technologists) in some of the Polytechnics caused delay but with continued persuasion, appeal and the involvement of Heads of Departments of OTM, the researcher eventually made them fill the questionnaires.

1.9 Operational Definition of Terms

For the purpose of this research, the following terms and phrases are being defined operationally.

Teaching– This is the art of guiding students through a variety of selected abilities toward the attainment of a widening field of learning OTM courses in the public Polytechnics in South West, Nigeria. Such abilities include but not limited to human abilities; personal qualities, responsibility and decisiveness. The intellectual abilities are; effective communication, instructional planning, leadership and academic qualities for teaching of OTM courses in the public Polytechnics in South West, Nigeria.

Personal qualities: refer to perseverance, initiative, self-control and humour for teaching of OTM courses in public Polytechnics in south West, Nigeria..

Responsibility: refers to accountability for students' knowledge in their courses, being unbiased in relating with students, commitment to institutional values, trusted with effective teaching and adherence to academic calendar of the institution.

Decisiveness: refers to the ability to make firm and quic.k decisions and being able to prevent crisis during class interaction in teaching of OTM courses in public Polytechnics in South West Nigeria

The effective communication: refers to good listening skills to teach students, clear expression while teaching students, courteous speech when interacting with students and attention to non-verbal signs from students when teaching OTM courses in public Polytechnics in South West Nigeria.

Instructional planning: refers to ability to state aims and objectives of their various subjects, use various teaching strategies to hold students' attention during class, consciously manage time within teaching periods and ability to maintain effective class monitoring to achieve course objectives.

Leadership: refers to the ability to preserve honesty while dealing with students, motivate pupils when interacting with them, and keep flawless character in order to maintain dignity.

Academic qualities: refer to ability to go through students' questions with intelligence, display adequate subject matter knowledge, display practical knowledge and be passionate about helping students gain literacy when teaching OTM course in public Polytechnics in South West Nigeria.

Academic Staff – These are the lecturers, instructors and technologists teaching OTM courses in public Polytechnics in South West Nigeria. They were used interchangeably in this thesis.

Instructional Facilities -These are tools for illustrating the contents of teaching OTM courses in public Polytechnics in South West Nigeria so as to make them more effective and efficient. They also involve human and non- human elements in the course of instructional delivery. Examples are computers, shorthand laboratories with microphones and headphones, keyboarding laboratories with electronic and manual machines, multimedia projectors, and

model office with rizo machines, photocopying machines, Internet facilities, marker boards, standby generator, among others.

Quality Assurance - These are control measures put in place to promote, ensure and sustain quality standards of OTM graduates in the public Polytechnics. Such measures are; well-furnished lecture halls, qualified academic staff, training and re-training of academic staff, compliance to regulated class capacity, academic staff monitoring, moderation of examination scripts, examination monitoring team, among others.

Office Technology and Management – This is a course of study that leads to the acquisition of knowledge and special skills in the public polytechnics in South West Nigeria.

Polytechnics – This refers to public tertiary institutions that train multi-level manpower.

Endnotes

1. Federal Republic of Nigeria (2004) National Policy on education Lagos; NERDC Press.

2. Peter A. Iredia (2015). The tripod of liberal, vocational and technical education: politics of dichotomy in Nigeria. *4th Inaugural Lecture of Auchi Polytechnic, Auchi, Edo State.*

3. Mary Ronke Arinde (2010). Educational services, Teacher Quality and Students' Academic Performance in public Senior secondary Schools, North Central Zone, Nigeria. Being unpublished Ph.D thesis submitted to the Department of Educational Management, University of Ilorin, Kwara State.

4. S. S. Chauhan (1981). Innovation in teaching learning process. New Delhi: Vikas publishing House PVT limited.

5. National Board for Technical Education (2004.). Curriculum and course specification for National and Higher National Diploma in Office Technology and Management Studies, Kaduna.

6. Matthew Udoudom & Emmanuel Usoro (2017). Improving quality assurance in office technology education through effective classroom management. Association of Business Educators Book of Reading: pp 90-96.

Chapter Two

Review of Related Literature

`This chapter examines relevant literatures found in textbooks, academic journals, seminar papers, workshop proceedings and conference papers, published and unpublished articles and other related documents to this study. In this chapter, literature that are relevant to teaching and learning, Instructional Facilities' availability, utilization and Quality Assurance in teaching and learning of OTM courses were reviewed. Thus, the review is presented under the following sub-headings:

2.1 Conceptual Review

2.1.1 Concept of Teaching

2.1.2 Instructional Facilities for Teaching

2.1.3 Concept of Quality Assurance

2.2 Theoretical Review/Framework

2.2.1 Competency Theory by Azemikhah (2005)

2.2.2 Reinforcement Theory of Motivation by Skinner (1938)

2.2.3 Cognitive Learning Theory by Wolfgang and Tolman (1920)

2.2.3 Theory of Cognitive Flexibility (Spiro, et al, 1989)

2.2.5 System Theory by Ludwig Von Bertalanffy (1940)

2.3 Review of Empirical Studies

2.3.1 Instructional Facilities and Teaching

2.3.2 Quality Assurance and Teaching

2.1 Conceptual Review

Considering the variables to be discussed in this study, the review was discussed in line with the existing literatures in order to widen the understanding of these variables. To this end, each variable was reviewed with their definitions, types and significance to the study. The following variables were discussed: Instructional Facilities (computer laboratories, shorthand laboratories, keyboarding laboratories, multi-media projectors, modern offices, rizo machines fax machines and so on), Quality Assurance (well-furnished lecture halls, qualified lecturers, training and re-training of lecturers, compliance to regulated class capacity, monitoring, moderation of examination script) and Teaching (human abilities; personal qualities and intellectual abilities).

2.1.1 Concept of Teaching

What constitutes teaching may be subject to debate as it would be ideal simplistic and reductive to insist on a monolithic definition of teaching, considering the multiplicity of factors that come into play. Most scholars would agree that the primary goal of teaching is to facilitate learning, and that the most effective teaching leads to the most effective learning. Therefore, teaching can be said to be an instruction that is explicitly engaging, clear, takes cognizance of individual differences and ultimately leads to the learner's success. Likewise, teaching is one that concerns students' learning outcomes, it entails lesson clarity, instructional variety, task orientation and it engages students in the learning process that leads to their success[1].

Teaching is a process in which one person transfers their knowledge to another in order to help them change their behavior. The four ocee of teaching offer a coherent way of thinking about the "process" of teaching and how it influences students' learning. When teachers are able to apply the four "ocee," students learn better, faster, and/or for a longer period of time. The acronym "ocee" stands for:

1. *Outcome:* the first ocee of teaching concerns the utilization of an outcome-based instructional orientation. Students can focus their attention on defined teaching goals thanks to outcomes. Students will know where they are heading and how to get there based on these outcomes. Outcomes also give a framework for the teacher to plan and deliver course content. Furthermore, outcomes allow teachers to analyze student learning as a metric for their own effectiveness.

2. *Clarity: The clarity of instruction is the second ocee of teaching.* More effective lecturers usually provide students very clear instructions and explanations about the course's structure and content. Nothing should be left to chance when giving instructions. If pupils aren't achieving your expectations, it's possible that your delivery methods aren't clear enough. Furthermore, the course should be designed in such a way that students are able to find connections between the new information being taught and the concepts they have already learned. learnt.

3. *Engagement:* the third ocee of teaching is engagement. The principle suggests that students learn by doing. As a result, teachers must establish a dynamic educational atmosphere that allows pupils to practice each topic they are learning. Teachers that are more effective use instructional tactics that keep students engaged throughout the lesson. This participation should begin early in the lecture and continue throughout: introduction, body, and conclusion. Furthermore, knowledge, skill, and attitudes that would enable pupils to complete the lesson that was previously identified outcome.

4. *Enthusiasm:* as straight as this may seem, if you hate to teach it, your students will hate to learn it. Conversely, If you enjoy teaching, your students may enjoy learning as well. It is contagious to be enthusiastic. Teachers who are more effective have a high level of passion, which indicates their professional competence and confidence. These are based on the subject matter knowledge and teaching experience of the individual. Teachers might start to create a pleasant learning atmosphere by demonstrating their enthusiasm for the subject. students' names, reinforcing students‟ participation during classes as well as going around among the pupils. However, student accomplishment is the most important aspect of developing classroom excitement. Accordingly, it is your obligation to create a classroom atmosphere that promotes high levels of student accomplishment.. Ultimately, high level of student accomplishment is a potent motivation for both students and teacher[1].

Teaching is an interactive process that encompasses participation by both students and the lecturers. Teaching is a complex art of guiding pupils through a variety of selected experiences towards the attainment of a widening field of learning. Teaching is a never-ending process that entails instilling desired changes in students. Teaching, according to his own contributions, is an intentional and conscious endeavour to make a meaningful change in pupils' behaviors in order for them to be valuable in society[2].

Teaching has been defined in a variety of ways, including as communication, praxis, and art. He went on to say that teaching is a process of supporting, leading, and generally modifying a learner's behaviour by providing relevant experiences in order for him to grow meaningfully[3] Teaching entails the teacher and the learner exchanging their understanding of the subject. He went on to say that the teaching process requires that a person is performing the teaching knowingly and purposefully, underlining that teaching can only be done by humans when there is one relationship or interaction between two or more people.

Teaching is a teacher's deliberate and planned activity with the goal of effectively communicating information to a student in order to change his orientation[4]. According to the description given above, teaching is the visible modification of a person's behaviour through organized activities and experiences, such that his abilities, attitudes, and knowledge, as well as modes of adjustment to the environment, are permanently transformed. Accordingly, teaching involves passing information, making the students acquire some skills, changing the attitude, modifying the behaviour and giving some experiences of life to students. He explained further that a teacher can't fully teach until he's still learning, and a lamp can't light another lamp unless it's still burning flame[5]. Teaching therefore, is a purposeful and planned activity which lecturers consciously communicate to students, for the purpose of modify and change their behaviour for better performance.

Teaching is a process which usually takes place in the classroom situation when the teacher has something in his mind and he wants to convey it to the students[6]. Teaching is also seen as efforts made by teacher to make students understand the concept he is passing across to them[7]. This implies that a teacher must demonstrate his talent when teaching. Teaching involves giving knowledge to the learners. Teaching in the class depends upon how the teacher performs his duty of teaching. Teaching is very good classroom interaction which leads to desired result of changing the behaviour of learner[7]. That is to say a good teacher faces the class clearly and boldly because of the expected outcome. Teaching is the art of educating other people[5].

Teaching is an activity which goes on between the two parties i.e. the giver and the receiver. Here the giver is the teacher more matured person with more experiences of life while the receiver may be an individual or a group of learner[8]. Teaching is the complex art of guiding learners through a variety of selected experiences towards the attainment of a widening field of learning[6]. Teaching is an intimate contact between a more mature

personality and a less mature one which is designed to further the education of the latter[7]. Teaching is also seen as a form of interpersonal influence aimed at changing the behaviour potential of another person. That is to say that teaching involves a decisive action aimed at attaining set target[4]. Teaching is a system of actions intended to induce learning; learning is the art of doing what has been taught[8]. Teaching involves planning, organizing, leading and controlling the process of imparting knowledge so that desirable outcomes of his teaching may be properly obtained[9].

Teaching involves intelligence in that it results in bringing quite stable changes in the cognitive and effective domains of one's behaviour[10]. Teaching is the process of changing the behaviour of students through the efforts of a teacher and the teaching process[6]. The contents of teaching method and techniques of teaching are all known as intervening variables. These variables are responsible for bringing desirable interaction between the teacher and the students by producing proper teaching environment, teaching materials and facilities and creating appropriate learning condition or situation

A teaching method is a style used by a lecturer or instructor to impart knowledge and influence student behaviour. As a result, there are a variety of ways to influence knowledge, however the following will be discussed: Methods of discussion, brainstorming, problem solving, seminars/conferences, demonstrations, and projects[9].

Discussion Method: One of the most effective strategies for increasing the learning process is the discussion approach of teaching. It entails group interaction in which people express themselves and listen to others' opinions in order to generate the finest ideas and judgments. This strategy aids in the application of material taught as well as the formation of student attitudes. It also aids pupils' social development by teaching them to listen to other people's perspectives on the issue.

Brainstorming Method: Brainstorming method of teaching is valuable for the stimulation and generation of ideas and to improve the students' ability to express themselves. It involves promoting ideas relating to a particular subject by identifying the solution to a specific problem. Brainstorming encourages association and spirit of competition and free use of imagination to enhance academic achievement of students.

Problem Solving Method: This method involves the presentation of a problem to the whole class and the entire students are requested to find solution to it. The problem solving is a method of err elating sense, experience and already accepted or established thought. It involves identifying the problem, planning alternative behaviour that may resolve the problem, activating the most promising of these behaviours, evaluating the consequences and applying the process to new problems as they occur.

Seminar/Conference Method: In this method, the participants present talks and discussions on topical issues in the selected subject topic. This group discussion allows the participants to take advantage of the idea and results of the investigations carried out for the purpose of enhance academic standard of those present.

Demonstration Method: This is a learning technique which promotes the acquisition of specific manipulation skill within a short time. Examples of areas where demonstration method could be of tremendous importance include, keyboarding, ICT, shorthand etc. Demonstration provides a concrete and realistic visual picture of what is being presented to supplement words, images and usually results in a more lasting impression. This method can be effectively used in OTM courses.

Projects Method: A lecturer may assist a student to choose project to be carried out and completed by him. Through this process, students cultivate the spirit of self initiative, ingenuity, perseverance and self-reliance which are the qualities required for success by an

OTM graduate. The role of the lecturer is the one of a supervisor or an adviser to the project. The project helps the student to be self-reliant and independent. This method is very useful in teaching all the subject areas in Office Technology and Management programme.

Provision of teaching materials and taking other variables into consideration requires the competence of the teacher to be developed to the maximum in other to be able to pass knowledge and skills across to learners. Teaching competence, therefore, is a grade, a degree of excellence, especially a high level of expertise or worth, is referred to as competence. As a result, competency can be defined as the capacity to deliver goods and services at a predetermined level. Competence refers to the qualities that an individual possesses that enable him to meet a set of requirements[10]. As a result, a competent individual is someone who possesses the characteristics required for work performance to the required levels. All dimensions of performance are included in competence. It is a complicated collection of characteristics (knowledge, attitudes, values, and abilities) as well as tasks that must be completed under specific circumstances. Competence, or the strength and authority of knowledge, attitudes, and facts required to complete tasks, is the key to success. Competence is a trait that must be cultivated both cognitively and physically by the learner. It must be formed and refined in the minds of learners based on their performance (underpinnings and qualities), as well as physically developed and perfected by performance (based on performance criteria), resulting in balanced hands and equilibrum[10].

Competence is defined as a person's capacity to execute tasks satisfactorily, to identify solutions, and to put those solutions into action in a timely manner. It includes of trainable components (knowledge, skills) as well as components that are more difficult to change (attitudes, believes). It also comprises of aptitude (verbal, numerical, skills) and abilities (thinking, leadership); knowledge (general, profession specific, job specific, level specific, organizational specific); physical competencies (stamina, energy); styles (leader,

manager, employee); personality (social orientation); principles, values, beliefs, attitudes and spirituality (fairness, equity); interests (dealing with people, dealing with facts)[1].

The concept of competence as the aptitude to carry out a task or job position effectively, on account of possessing the qualifications required for such. In this situation, the concepts of competence and qualifications are tightly associated, seeing as how qualifications are considered the acquired capability to fulfil duties or carry out a job position. Competence is noted to be a condition or quality of being competent, ability, fitness, legal capacity, power or jurisdiction. It is a compendium of knowledge, skills, values, attitude and behaviour needed by an individual to perform his or her role efficiently. It embodies the ability to transfer skills and knowledge to work situation within the occupational area[11].

Competence is defined as the set of knowledge, skills, abilities, or attributes that are linked to excellent performance on a job and it can help to distinguish high performance from average and low performance. Competence is the capacity for tasks and roles required to the expected standards; mastering of socially expected standards; the capacity of a person to act; knowledge, abilities and qualities in action; capability to use knowledge in practice; the ability of a person to attain specified goals. In this respect competence is seen as being holistic and it comprises not only content or subject knowledge and ability, but also core and generic abilities[12].

It was also mentioned that when it comes to vocational education and training, both capability and eligibility are important because the goal of education is to prepare students to do certain activities associated with a specified occupation or profession. In that situation, the competence notion is founded on the assumption that if employees can become more involved in the decision-making process, they will take a greater interest in and enhance the productivity of their work. In this way the workers improve both their self-image and their

working environment[13]. In the educational sector, competence can be defined as a level of acceptability or satisfied excellence in the teaching/learning process.

People's abilities determine the products and services they provide, as no company can outperform its employees. As a result, all products and services must be of high quality in order to satisfy potential consumers (learners), withstand the test of time, and generate the desired results. Lecturers at schools that are at the heart of learning are required to have the personal and professional traits that will enable them to function well and fulfill the educational goals and objectives outlined in the National Policy on Education.

It is believed that the more experienced a lecturer is the more productive he will be in his teaching and the more likely his students will perform more brilliantly academically in school examinations than those students taught by inexperienced ones[14]. Any educational program's success is determined by how well it is implemented. Institution depends solely upon the standard of lecturers employed to run the instructional programme. It is also of importance to note that their functions dictate the size, rules, policies and the general organization of their institutions. No wonder the Federal Government decided that teachers' education be given a primary focus in all educational planning because there is no educational system that can rise above the competence of its teachers[15].

Similarly, like the case in any other area of human activity, a lecturer in OTM department should have both natural and acquired characteristics to be able to perform satisfactorily. Natural qualities are traits which the lecturer is born with, while acquired characteristics are, additionally natural traits, those that come through training. A lecturer needs to develop his human and intellectual abilities which will make him/her a better lecturer, such as personality qualities, physical energy, perseverance, responsibility, initiative, self-control, decisiveness, humour, effective communication, good listening, instructional

planning, classroom and time management, loyalty, leadership and academic qualities. Academic ability includes intelligence, subject-matter knowledge, knowledge of teaching and learning, teaching experience and certification status and vigour to carry out research.

A lecturer is supposed to have the following attributes for efficient education delivery: initiative, patience, sympathy, respect, flexibility, honesty, foresight, intellectual curiosity, and keenness, according to the following assertion. These are the usual and exceptional attributes that a lecturer must possess in order to generate well-integrated individuals capable of performing key roles in the educational system[1]. They went on to say that one approach to assess a lecturer's efficiency is to look at their certification, teaching experience, academic responsibility, and teaching attitudes. The entire performance of the lecturer determines the effectiveness of the teaching. The National Educational Goals and the Nigerian Philosophy of Education both implicitly strive to produce high-quality graduates. If qualified academics are hired to run our educational system, we will be able to achieve these objectives[16].

It is a fact that education consumes a lot of money. It is imperative that those who manage the schools should be accountable, and the quality of the products of education is part of that accountability. Teaching is a form of art in that lecturers, Painters, composers, actresses, and dancers, for example, create art judgment mostly determined by attributes that emerge during the course of action Competences are used to select, control and organize classroom qualities such as tempo, tone, pace of discussion and forward movement. The instructor must be able to 'read' the emerging traits and respond with skills that are suited to the desired outcomes or the path the students should take. In order to achieve a high level at the end of the procedure, qualitative judgment is used. Competence is a complex concept that encompasses a variety of characteristics. Knowledge, skill, attitude, tasks, ethics, and values are some of these characteristics[17].

The teacher is responsible for a huge range of educational and associated activities both within and outside the classroom. A lecturer/teacher with a specific level of knowledge, attitude, and skills would be required to effectively organize these events. This is referred to as teaching abilities. To put it another way, teaching competence relates to the proper delivery of knowledge, application, and skills to students. Knowledge of the contents, procedures, methods, and means of imparting contents and attitudes are all part of the proper approach and a description of education The sort of schooling available in a given location, as well as the culture and values held by the society, all influence competence. It also depends on a number of factors, including instructor and student characteristics, as well as the classroom atmosphere[18].

Teaching competency is intrinsically linked to the efficacy or ineffectiveness of a teacher's instruction. A good teacher would also create learning-friendly classroom settings and atmosphere. Knowledge of the subject, instructional planning, teaching skills, and other factors all contribute to teaching competence. Important aspects to examine are student motivation, presentation and communication skills, evaluation abilities, and classroom management abilities. While the lecturer/teacher will need all of these characteristics to some level, it is the expression of all of them in an integrated manner that will allow him to be effective in the classroom. Many components of teaching competences, according to previous study, include subject understanding and instructional abilities of the lecturer to students, as well as class attendance[19].

The comprehension and transformation of knowledge concepts to be imparted to students can be used to evaluate a lecturer's teaching abilities. Teaching necessitates that the lecturer first comprehend the topic's unique results as well as the discipline's subject frameworks. Accordingly, teaching skills enable the lecturer to assist students to function, you must learn to read, write, and develop skills and values. effectively in society, provide

them with the opportunity to have as well as additional information that will enhance understanding of new concepts and there are the three dimensions that a lecturer's knowledge of subject matter content knowledge, pedagogical content knowledge, and general content knowledge can all be measured[20].

This implies that the lecturer cannot teach what he or she does not know. Since there exist high correlation between what lecturer's subject knowledge is and what he teaches students. The concept of attitude refers to an individual's style of thinking, acting, and behaving. It has major implications for the student, the instructor, the learner's immediate social group, and the overall educational system. Attitudes are formed as a result of certain types of educational experiences. They can also be learned by simply following a parent's, teacher's, or friend's example or advice. This is a good example of imitation, which is useful in both teaching and learning. As a result, the student draws from his teachers' attitudes to form his own, which may affect his learning outcomes[21].

An observational theory demonstrated that behaviours are acquired by watching another (the model displays it and the learner observes and tries to imitate it). Teachers are, invariably, role models whose behaviours are easily copied by their students. What teachers like or dislike, what they value, and how they feel about their learning or studies can have a significant influence on their students. Unfortunately, many teachers are unaware of this, and it's likely that how they teach, conduct, and engage with students is more essential than what they teach[22]. In a nutshell, teachers' attitudes have a direct impact on pupils' attitudes. The views of lecturers are influenced by their cultural and religious values. Teachers' attitudes toward their students must be positive enough to keep students moving. The value attached determines the success of the learning processes in any part of education when the learners exhibit the expected behaviour or response.

Many studies have found that the attitude of teachers toward teaching, as well as the topic matter, has a significant impact on student attitudes and academic achievement. Teachers with a positive attitude are always industrious, motivated, and dedicated to their jobs, and are typically willing to go above and beyond to achieve their goals and objectives in the classroom. But teachers with negative attitudes behave contrarily. Teachers' attitude towards the teaching of Office Technology and Management courses plays a significant role in shaping the attitude of students towards developing interest in the programme[23]. Students' positive attitude towards Office Technology and Management programme can be enhanced by the following teacher related factors: Teachers' enthusiasm; Teachers' resourcefulness and helpful behaviour; Teachers' thorough knowledge of the profession and Teachers' ability to expose the students toward opportunities ahead[24].

It is clear that the role of the teacher as the facilitator of learning and his contributions to the intellectual success of students is measured by the success of Office Technology and Management programme depends greatly on the classroom lecturer as he is the one that translates all thoughts into action. The nations' overall development is inextricably tied to its educational system. If we accept this view, then there is the need to introduce quality into the system. It is the teacher's knowledge, skills, ability, resourcefulness and ingenuity to efficiently utilize the appropriate language, methodology and available instructional materials to bring out the best in learners in terms of academic achievement[25]. According to education policy research, attitude is defined as a lecturer's continuous tendency to react in a specific way, often positively or adversely, to a circumstance. This assertion is supported by the fact that the attitude has both cognitive and emotional components, both of which have a significant impact on how a professor thinks and reacts in a given scenario. Attitudes are crucial to effective teaching and students' academic performance in any case. According to the findings of the study, there is a link between lecturers' attendance in class and students'

academic accomplishment. The findings encourage school administrators to design development strategies for low-performing instructors early in the academic year[26]

Teachers are the most important factor in the school system's efficiency and effectiveness. As a result, aside from students, instructors are the most significant and important contributors to an educational system. As a result, the quality of teachers has a significant impact on the quality of educational output. The quality of lecturers is a critical metric for assessing the effectiveness of a school system. It is correct to state that there is a link between the qualities of teachers and the academic accomplishment of students. In a similar discovery, it was discovered that the effect of qualities on group performance is considerable, and that the use of unqualified and under-qualified teachers in South Africa has a detrimental impact on teaching quality, with implications for student performance.[27]. Perhaps the advice on improving the staffing situation in terms of quality with the goal of increasing learning and raising the level of students' academic achievement in Nigerian schools is in acknowledgement of the beneficial association between teacher quality and students' academic performance. Education is the compilation and product of many and varied resources. Teachers stand out as a cornerstone to achieving the highest standards, which are becoming increasingly important in schools[28].

Teachers' quality is widely recognized by policy-makers, practitioners, and researchers alike as the most powerful school-related influence on students' academic performance, according to Web information on its study of Teacher Preparation Program: Teachers' quality is widely recognized by policy-makers, practitioners, and researchers alike as the most powerful school-related influence on students' academic performance. Many empirical research have been undertaken in the United States to discover the features of Instructor quality that are connected with improved student accomplishment. Subject knowledge,

pedagogical understanding, and teaching experience have all been linked to higher student accomplishment or bigger achievement gains in several studies[29].

The contemporary issues which the OTM Educators should not only just get interested in, but be fully involved in the issue of business teacher preparation. There is no doubt that the life and status of the office technology and management education tomorrow as a discipline in the present technological age depends on how the business teachers of today are prepared to impart the knowledge and skills of ICT competencies to the office technology and management education students. As a result, the importance of business professors acquiring modern ICT skills has been emphasized in order to properly transfer these abilities to students who must be appropriately prepared to meet the demands of today's technology developments in business offices. If the business teachers themselves, especially the lecturers of OTM are deficient in the application of ICT in teaching and learning, it means they are inadequately prepared to deliver instruction in ICT skills to the students[30].

Since the Business Education/Studies teacher plays a prominent role in preparing Office Technology and Management students for the world of work, they are expected to demonstrate specific Information and Communication Technology skills, apply knowledge and possess professional qualities. They must have deep rooted knowledge and competencies in ICT equipment and operations of automated office facilities such as microcomputers, fax machines, internet facilities, reprographics, duplicating and micrographic machines but must effectively teach these skills to their students[31]. Office Technology and Management Educators should get themselves familiar with, and utilize hi-tech ICT tools in preparing students using effectively, appropriate instructional strategies, as these will no doubt, improve teaching and learning and equip students with necessary knowledge and skills which will help them cope with challenges in our modern innovative businesses. Some of these

Information and Communication Technology facilities are interactive TV, web 2.0, video tapes, search engine, virtual classroom, computers, yahoo chart room, interactive white boards, smart board, clever board, robot teachers, google, e-mail and so on in the teaching environment. All these technological tools serve as an asset to a business educator.

It is to be noted that every vocational business teacher should possess information and communication technology competencies so as to enable the business education graduates function in the world of work. Any business education that is not based on ICT will be classified as outdated and not in tune with the present realities because as education becomes globalize, nations agree to standardize business rules, regulations and practices[32]. Another indicator of lecturer competence is experience. As a result, the importance of business professors acquiring modern ICT skills has been emphasized in order to properly transfer these abilities to students who must be appropriately prepared to meet the demands of today's technology developments in business offices. It has also been discovered that there is a positive correlation between teaching experience and student academic achievement.

Teacher quality is the crucial driving force for improving students' academic performance and thus promoting a nation's economic competitiveness in the global society. In addition to the academic qualification, a look at some of the personality traits of the teacher revealed the following - initiative, foresight, patience, respect, sympathy, flexibility, firmness, honesty, intellectual curiosity and keenness[32].

2.1.2 Instructional Facilities for Teaching

Instructional facilities include a variety of teaching and learning equipment, instruments, and teaching aids that are used to ensure a child's correct education at school. It is one of the most important and highly debated issue in contemporary educational policy in teaching and learning[33]. Instructional facilities in the OTM curriculum refer to a variety of

office equipment, machinery, and technology that were used to impart and teach students. It also entails creating a welcoming and dynamic learning environment in which effective teaching and learning can take place, such as furnished manual and electronic keyboarding laboratories, ICT/Computer laboratories, shorthand laboratories, and a model office practice room. It also entails creating a welcoming and dynamic learning environment in which effective teaching and learning can take place, such as manual and electronic keyboarding laboratories, ICT/Computer laboratories, shorthand laboratories, and a model office practice room. ICT/computer labs, shorthand labs, and a model office practice area are all available. These learning environments help students build the knowledge, skills, and abilities they'll need to succeed as responsible individuals and office managers after school[34].

Teaching and learning facilities have been identified as a key method for achieving effective teaching and learning. The relevance of good and enough instructional facilities in teaching and learning can be shown in how well they are used in the classroom. All of the resources that teachers can employ to make learning more exciting and memorable are included in the instructional facilities. Teachers' strategic factor in organizing and offering education and skill acquisition is instructional facilities. This is because it aids in the development of a notion that the teacher would not have been able to attain without the use of instructional materials. This makes it easier for pupils to learn and, as a result, affects their academic achievement and skill acquisition[35].

It was argued in a paper on the function of instructional facilities, availability, and use in teaching that Office Technology and Management courses cannot be taught effectively without the availability of teaching equipment. This is due to the fact that educational facilities assist students in developing problem-solving skills and scientific mindsets. Students will have access to the reference resources stated by the teacher if instructional

facilities are available to meet related needs of the teaching process. In the same way, each student will be able to learn at their own pace[35].

As a result, students will do significantly better. Because textbooks and other resource materials are basic tools, instructional facilities are regarded crucial in teaching and learning at all levels of education, particularly in skills programs such as Office Technology and Management. Due to a lack of resources or poor facilities, teachers treat subjects randomly, portraying them as dull and uninteresting[36]. The availability and use of instructional facilities such as classroom size, seating position and arrangement of tables, seats, computers, laptops, projectors, model office, shorthand laboratory, computer laboratory, and other practical instruments are critical in the teaching transaction. If other variables, such as classroom quality, are met, the availability and utilization of these facilities can operate well. While everyone recognizes the importance of instructional facilities in the teaching and learning process, there is no agreement on their impact on academic achievement and skill acquisition, which is one of the study's main objectives[36].

Instructional facilities, in the context of Office Technology and Management as a course of study, include any communication device or application that includes a computer network, hardware, software, electronic mail, satellite system, and the different services and applications associated with them[37]. These include, but are not limited to, video conferencing, distance learning, internet technology, audio conferencing, and others, according to them. Lecturers must adapt to the computation and communication facilities, which include varied teaching, learning, and a variety of management tasks, in order to address the challenges of the information age.

Technology in education is a broad phrase that refers to a variety of instruments and strategies that are employed in a variety of learning scenarios. It is a three-way interaction between the teacher, the media, and the student. The use of instructional media should be

considered an important part of the curriculum. Another study found that the need for infrastructure (instructional materials) in office education includes, but is not limited to, lecture halls and furnishings, labs, studios, library resources, information and communication technology (ICT) resources, power supply, and resource centers[38]. These are crucial for the teaching and learning of Office Technology and Management courses in order to get the best possible skill and competency acquisition. As a result, one of the goals of infrastructural (instructional) materials is to motivate learners to succeed. The learner can completely participate in learning activities with the help of instructional facilities. As a result of the availability and accessibility of instructional materials, he/she also gains first-hand knowledge[39].

Instructional facilities include anything a teacher utilizes to achieve the goal of teaching and learning, including small stones, pieces of paper, small sticks, and samples of leaves, as well as chalk boards, maps, charts, projectors, radio, television, and computers. Instructional facilities, according to another study, are materials designed to make instructions enjoyable meaningful and clear to the learners in the teaching/learning setting, as well as increasing the rate of learning, saving time and effort for the teacher, increasing learner interest in the subject, and facilitating retention of what is learned[40]. As a result, it implies that teachers' use of instructional facilities illuminates explanations and makes teaching more engaging and precise.

It was also stated that instructional facilities include any materials within the teacher's and students' reach that are used to facilitate teaching and learning. As a result, such resources could be both human and non-human, as long as they help people acquire and evaluate knowledge, skills, attitudes, morals, and values. The collection and selection of resources from available resources that are applied and integrated into a systematic process

are also considered instructional facilities To make learning more successful, teachers and students must use a variety of teaching and learning techniques[41].

This referred to educational facilities as learning resources, with proper utilization assisting learners in learning more quickly and effectively. There are certain intrinsic advantages to instructional settings that make teaching more unique[42]. They provide teachers with engaging and compelling venues for communicating information by encouraging students to learn more. It ensures that the learner sees, hears, feels, understands, and enjoys what he or she is learning, utilizing nearly all of the senses at the same time[43]. Computers, scanners, projectors, and images, as well as an interactive whiteboard, duster, chalkboard, notebooks, and other scientific instruments[44.] These are some examples of educational facilities. The importance of instructional facilities in the teaching and learning of Office Technology and Management courses cannot be overstated. Instructional facilities or resources are the most up-to-date technology, designs, and materials used in teaching and learning to make instructions more appealing, entertaining, and understandable[45]. Instructional facilities are micro-based computer and telecommunication systems that administer audible, graphical, textual, and numerical information.

Those essential needs that aid and support effective school teaching and learning are referred to as instructional facilities. It was also suggested that instructional materials include human beings (teachers), as well as teaching and learning facilities and equipment[43]. In the field of office technology and management, instructional materials include typing labs, shorthand studios, model offices, classrooms, libraries, and equipment such as computers, typewriters, and projectors, among other things. Some instructional facilities for teaching OTM courses are listed below[44]:

Computer: Because it affects everything, the computer is at the heart of modern technology. It's defined as an electrical device that can accept data as input, process it, store it, edit it, and

retrieve it as output. Computer: Because it affects everything, the computer is at the center of modern technology. It is defined as an electronic device that can accept data as input, process it, store it, edit it, and retrieve it as output. As a result, computers are widely employed for a wide range of tasks, including word processing, class presentations, data analysis, information retrieval, and communications. Teachers' impressions of the influence of technology on student achievement were revealed in a poll of their responses. There was widespread consensus that technology, such as computers, had a good impact on student achievement.

The projector is a modern innovation in the classroom that allows instructors and lecturers to display charts, pictures, and words. It can be used in place of the chalkboard by the instructor. In places like workshops, this equipment is now commonly employed Conferences, classrooms, and other similar venues are available. Small group presentations can also benefit from multi-media projectors and transparencies. As a result, it's characterized as a basic gadget that projects transparent materials of any kind onto a screen in a regularly illuminated room. Teachers can also use different projection screens based on the number of participants and the size of the space, according to the report. There are benefits for both the teacher and the pupils in using projectors. It was mentioned that careful use of multi-media projectors in presentations is critical to capturing the audience's attention and improving their understanding of what the speaker is saying. The teacher can write or draw on the transparency, allowing for the development of ideas during the session. The multimedia projector does not require any specific abilities, and the teacher can handle it because it is simple to use.

Flip charts are one of the most common visual aids available in today's technology, despite not being the most advanced. They are simple, inexpensive, versatile, and incredibly successful when applied with creative ingenuity. When students are organizing their group

ideas for presentations to the entire class, flip charts come in handy. Teachers can keep eye contact with students by using flip charts in front of the class, which allows them to gauge student reactions and adjust teaching tactics during a presentation. The teacher has control over the charts and can write or draw on them while giving the explanation. Students can build their ideas in the course by recording their remarks on flip charts. Flip charts, like overhead transparencies, can be prepared ahead of time, written on during the session, and stored for future use.

Audio and video conferencing, e-mail, and other services are available over the Internet. It is believed that by using the internet, one can obtain nearly any type of information available on the internet (www). The Internet gives librarians access to more material than they could ever want, all of which can be loaded into a computer. The Internet is a global network that connects millions of individuals all over the world at the same time.

Audio Conferencing: This technology allows for two-way, real-time communication between teachers and students. It can be done with internet telephony, which sends digitalized voice packets between people via the internet. Because professionals' voices can be heard over the phone, this technique aids collaborative teaching and learning.

Video Conferencing: Using video-conferencing technology, individuals in various locations can see and hear one other in real time. It's similar to conversing on the phone, but with the added benefit of being able to see the person you're speaking with.

Electronic Mail (e-mail) is a computer network application in which messages are transmitted and received by computers on the network using various methods. Each e-mail user has a mailbox address where messages are received and saved on the computer. This means that lecturers in remote learning locations can transmit their lessons/lectures or messages to their students via e-mail.

Dial Access System: The dial access system's main goal is to allow direct and personalized access to the whole audio collection at whatever moment is most convenient for the learner and the learning process. They went on to say that a teacher or a student can utilize the dial system to request any available program, whether it's in audio or video format.

Closed-circuit television (CCTV): It was claimed that a closed-circuit system using microwave cable pick-up of standard band TV, or a central dissemination system, would generally service classroom monitors or other receiving locations. Many school systems in wealthy countries, he claims, use this technology to mass-deliver instructions for viewing in class. The advantages of using close-circuit TV through microwave cable or satellites for OTM lectures are limitless. Closed-circuit television, when used carefully and imaginatively, can play a significant role in widening and enriching a student's education. It has great potential for education, particularly in Nigerian business education, of which OTM is a part. Others include:

Interactive Whiteboard (IWB): An interactive whiteboard, also known as a touch screen monitor, is a huge display that is connected to a computer and projector. For classroom education, a projector projects the computer's desktop onto the board's surface, where the teacher controls the computer via a pen, finger, mouse, or other devices.

Rizo is a photocopier with advanced features. When operational, it is one of the fastest reproduction machines, capable of creating 50 to 100 copies of a document in one to two minutes.

Scanner: A scanner is a device that records photos and text. It is linked to a computer so that images and phrases can be altered in a unique way. The scanner, like the photocopier and the Riso, has an integrated glass where photos and words are placed before being scanned into the computer.

Both the teacher and the pupils benefit from the utilization of instructional tools and facilities. Students are motivated, their attention is captured, and complicated concepts are explained via instructional tools. It's used to motivate people: The word motivation originates from a Latin root that means "to move," implying a desire to complete activities. Teachers work hard to instill this motivation in their pupils, encouraging them to participate completely in instructional activities and gain a thorough comprehension of ideas. Intrinsic and extrinsic motivation are two types of motivation. Intrinsic motivation is when you do something just for the joy and satisfaction that comes with it. Teachers do not have to be concerned when pupils are intrinsically motivated since they are geared for success. Because their relationship and/or enticement are internal, students who are intrinsically motivated can readily study on their own. Students can be drawn in and kept engaged in lessons via extrinsic motivation. It was argued that when teachers talk about motivation as a component of a lesson, they're referring to what they do to pique students' attention and get them to participate more or less freely in the work. Students' drive to learn and accomplish more can be sparked by the usage of technologies that they can readily adjust to produce the desired end product. Students' motivation to do more is fueled by resources that they can relate to in their daily lives.

Students' curiosity and attention are captured and maintained through instructional technologies throughout their classes. It was mentioned that using an overhead projector allows the teacher to maintain complete control over the classroom and maintain student attention in the session. This control is especially useful when the teacher wishes to draw the pupils' attention to something, whether it's the technology being utilized or something else. or the technology's display of information, or to the teacher48. Explaining Topics: The teacher can use instructional technologies to explain concepts that might be difficult to express orally. Teachers are saved the difficult explanation when students see the material, its mechanism, and its functions, and students, in turn, simply understand what the instructor is talking about.

Additionally, instructional tools assist students in developing listening and observing abilities that aid in their comprehension of complicated subjects.

Regarding the usage of videos, it was stated that the use of technology allows for improved individualized instructional possibilities, allowing the teacher to have more time with the students enough free time to prepare instructional facilities that will satisfy the needs of the students When teachers incorporate technology into their classrooms and students participate in the use of those technologies, they see the connection and relevance between what the teacher is teaching and the technologies being used, Their attitude toward learning improves, and they are better prepared for a technologically oriented culture as a result. As a result, new technologies (instructional facilities) have had a tremendous impact on how people around the world live, work, and play. It has also altered the traditional teaching and learning process, as well as the way education is managed. As a result, it is important and effective in the following ways:

Access to a Wide Range of Educational Materials: ICT-based instructional facilities, like as computers and the Internet, provide a wealth of materials to help teachers and students improve their teaching and learning abilities. It is now possible to give audiovisual education using ICT. Computers are urged to be viewed as instruments that can be used in many aspects of a student's studies. Access to information in a timely manner: Because to the advancement of information technology, one can study anytime he wants, whether it is day or night, and whether he is in India or the United States.

Collaborative Learning: ICT-compliant instructional facilities such as computers, teleconferencing, and audio visual have made it simple to study and teach in groups or clusters. Students can be brought together to complete a task using internet resources.

Distance learning is a technique of learning that takes place outside of a classroom. Late-twentieth-century communications gave up new possibilities for an unparalleled spread of

home-based learning, which could be done simply with the use of information communication technology.

Enhance the Teaching and Learning Process: Technology has surely influenced teaching, learning, and research in the field of education. Modern instructional technology has the potential to accelerate, enrich, and deepen skill, to encourage and engage students, to assist students connect their classroom experiences to job practice, and to offer economic opportunities. Education Accessibility: One of the most important contributions of ICT-instructional facilities in the sphere of education is the provision of easy access to high-quality learning. Students can now browse through e-books, sample test papers, previous year papers, and other current instructional tools. .. A greater availability of best practices and course materials in education, which may be shared via ICT, can help to improve teaching.[45].

Availability of Instructional Facilities for Teaching Office Technology and Management Courses

Without the availability of instructional facilities, it is impossible to teach Office Technology and Management courses effectively. For Office Technology and Management courses, effective teaching and effective use of instructional facilities are a must, as are the instructional materials required for the program's successful implementation. The purpose of the new Office Technology and Management curriculum, which places a greater emphasis on ICT courses, can only be realized if instructional facilities are available, accessible, and usable by both students and academic staff. Students' learning is enhanced by the availability and use of educational facilities, which allows them to participate in demonstrations and practice that will continue to improve their skills[46].

The term "availability" refers to the amount of instructional resources available to teachers and students. It refers to the state of being reachable or reachable at a specific point

in time. It describes how facilities can be quickly obtained and used for a certain purpose and period of time. It also specifies how operable or useable resources are when called upon to fulfill the specified or needed functions47. The state under which teachers have access to and employ functional instructional resources for efficient teaching of Office Technology and Management courses to students in Polytechnics in Nigeria's South Western States is referred to as availability in this study. It refers to the quality, quantity, usefulness, and availability of such educational facilities to instructors at all times in order for them to be used effectively.

It is an umbrella term that refers to a component instrument's serviceability, resilience, dependability, and maintainability. It is critical to remember that the availability and adequacy of educational facilities play a major role in the development of education in any society, regardless of its socioeconomic status. The availability and adequacy of teaching and learning facilities is one of the pillars of a successful implementation of effective Business Teacher Education (OTM included). These resources come in the form of materials and equipment that help to stimulate skill development and ensure product standards and quality. Availability or adequacy of teaching and learning materials, in their opinion, is that they are conveniently, readily, openly and widely available, and sufficient in number and quality for use. Unfortunately, inadequate infrastructural facilities, such as inadequate class rooms, laboratory equipment, and teaching and learning materials, are one of the key issues facing Polytechnic and Office Education[48].

The aforesaid argument is also backed by the fact that physical facilities and equipment in Polytechnics in Abia State that provide Office Technology and Management programs are insufficient. He went on to say that having adequate infrastructure will help students study better by allowing them to participate in demonstrations and practices that will help them build and concretize their skills. All materials within the teacher's and students' reach that are used to aid both teaching and learning are referred to as instructional facilities[49]. As a result,

such resources can be both human and non-human, as long as they help people acquire and evaluate information, skills, attitudes, morals, and values.

Teachers and equipment shortages are issues in teaching and learning Business Education (including office education), hence the provision of equipment and other teaching/learning materials is critical in teaching and learning Office Technology and Management courses. Only when these essential pieces of equipment are available and well-maintained will goods become proficient in the workplace, thanks to their newly acquired skills, without having to be retrained. It was also suggested that if the necessary equipment/materials are not provided or available, teaching and learning will become theoretical and unproductive[50].

Allowing students to witness and emulate varied reaction patterns, particularly in computer applications, keyboarding, and shorthand, is one of the fundamental roles of lecturers in the Office Technology and Management curriculum. As a result, students learn by emulating the lecturers' reaction patterns. In view of the foregoing, both lecturers and students must have access to and fully utilize instructional facilities in order to provide successful teaching and learning. As a result, studios, labs, resource centers, and the overall environment in which vocational and technical education (including office education) is provided must be available and appropriately prepared to mirror actual working conditions. He also stated that the institution's laboratories should have the same sorts, designs, and specifications of equipment, tools, and materials as the office where the students will work after training[51].

It was argued that one of the most important roles of teachers in Business Education and Office Technology in particular is to illustrate to students how distinct response patterns are formed. On the other hand, it is the students' responsibility to mimic the reaction patterns. He went on to clarify that those response patterns can only be used if instructional resources

are available and the teaching and learning process is appropriately controlled. It was also revealed that pupils will not perform well if they do not have access to enough infrastructure (instructional) materials. This means that good student performance is also dependent on the availability of teaching and learning facilities at Nigerian Polytechnics' Office Technology and Management programs.

This means that good student performance is also dependent on the availability of teaching and learning facilities at Nigerian Polytechnics' Office Technology and Management programs[52]. Unfortunately, instructional facilities are always given at a very low level, thereby impacting teaching and learning standards. According to him, learning comes through action, and the goal of this study is to look at instructional facilities and their use in the context of a democratic connection between teachers and students. Unfortunately, instructional facilities are always given at a very low level, thereby impacting teaching and learning standards. According to him, learning comes through action, and the goal of this study is to look at instructional facilities and their use in the context of a democratic connection between teachers and students.

It was asserted that e-learning, with its web-based features, provides learners with interesting options to look for further educational knowledge. As a result, they develop an inquisitive mind, inventiveness, and strong study habits. The availability of various instructional materials, it was noted, allows teachers and students to enrich and develop their teaching and learning abilities. He went on to say that if professors and students are to perform better, the provision and/or availability of teaching and learning facilities in Office Technology and Management courses in Nigerian higher institutions is critical[53].

The significance of instructional facilities in the educational circle for effective teaching and learning cannot be overstated. However, several of these instructional facilities are deficient in Nigerian tertiary schools due to the following factors:

Inadequate Government Funding: Inadequate infrastructure (instructional) facilities are clearly connected to insufficient government funding. Because of the severity of the situation, funding is frequently provided in response to conditions imposed by international financial institutions.

Inadequate Government Funding: Inadequate infrastructure (instructional) facilities are clearly connected to insufficient government funding. Because of the severity of the situation, funding is frequently provided in response to conditions imposed by international financial institutions.

Poor Policy Formulation and Implementation: The Nigerian government lacks a well-articulated educational policy. Other areas receive more attention than education. This is causing issues with the provision of educational resources, particularly ICT-based teaching and learning tools. Because they are lacking in our tertiary institutions, particularly the polytechnics, the level of literacy in ICT learning facilities remains low.

Due to a lack of maintenance culture in Nigeria, most equipment and infrastructure are in a state of disrepair and decay. The lack of a maintenance culture in our educational systems has hampered the efficient execution of the OTM program. Due to a lack of funds, it can be difficult to repair equipment that breaks down in public institutions. Damaged equipment continues to degrade in this situation until it is eventually abandoned. All parties in the educational sector are expected to work together to maintain school equipment, with parents and the government providing funding for upkeep[54].

Equipment and apparatus such as computers, internet and networking, overhead projectors, printers, and other capital-intensive items are required to run and maintain the

OTM program (costly). In support of this claim, it was asserted that the Office Technology and Management program is capital expensive, and that the funds available to the department are not always sufficient to offer all of the essential training materials.

Corruption in the Nigerian Education System: The Nigerian education system has seen unparalleled irregularities in terms of fund diversion, bribery, and falsification of unverifiable projects for personal gain and at the expense of Nigerian education. The distribution of educational resources has been damaged by corruption to such an extent that most government-owned institutions lack the materials required for effective teaching and learning.

This has an impact on our Polytechnics' teaching and learning. As the psycho-social beast beclouded the brains of those who ruled Nigeria, it was regretted that corruption began to have major and detrimental consequences on education in the middle and late 1980s. According to him, those in positions of authority's hurry to pilfer as much as possible resulted in the educational sector being neglected[2].

Students' Attitudes Toward Educational Facilities: The concept that government property belongs to no one can sometimes have an impact on the availability, upkeep, and continuation of instructional equipment in our tertiary institutions. As students mishandle equipment and go scowling, the "It's government property" attitude has grown into a canker worm, eating deep into the fabric of our educational system.

As a result, instructional resources are insufficient, and educational authorities bear the brunt of the burden. While agreeing with the preceding remark, it was also stated that “government, instructors, and students have little or no interest for improving the current level of facilities” in our higher institutions. Students must be educated on how to properly care for educational facilities in order for successful teaching and learning to take place.

Increase in Student Enrolment: Another issue that has plagued Business Education, of which OTM is a part, is the gradual increase in the number of students enrolled as a result of the search for a discipline that will enable one to be self-sufficient and productive after graduation. Increase in Student Enrolment: Another issue that has plagued Business Education, of which OTM is a part, is the gradual increase in the number of students enrolled as a result of the search for a discipline that will enable one to be self-sufficient and productive after graduation[55].

The Federal Republic of Nigeria established the National Board for Technical Education (NBTE) as the higher education supervisory parastatal in charge of Polytechnic education by Decree (Act) No. 9 of 11th January, 1977, to coordinate technical and vocational education *activities and ensure that courses offered reflect national needs,* society's interests and ambitions This organization accredits and re-accredits Polytechnic study programs. People sent to accredit programs frequently jeopardize their authority by seeking fulfillment in accrediting programs that lack necessary facilities[56].

Another researcher backed up this claim, claiming that most administrative and supervisory agencies had lost confidence in their areas of responsibility. When an officer takes a bribe and sweeps his power under the rug, or when the opposite sex demands fulfillment before carrying out his or her responsibilities, functionaries are less likely to take them seriously[57].

The role of educational facilities in societal re-engineering and change is critical. It is self-evident that the Office Technology and Management curriculum cannot be taught and learned effectively without the utilization of appropriate instructional facilities. Electronic media has risen to the forefront as one of the most radical vehicles of globalization and social development, with a favorable impact on classroom teaching and learning. Networked and non-networked computers, as well as the Internet, are examples of technological

breakthroughs. E-mail and smart phones are essential and indelible benchmarks in the development of information[58].

It is impossible to overestimate the relevance of instructional materials to the overall performance of any educational system. When appropriately employed in the classroom, instructional facilities aid teaching and learning; they assist the teacher in imparting knowledge to his or her students with minimal difficulty, and they make the task of teaching and learning easier. Accordingly, utilization denotes "to use anything, especially for a practical purpose." As a result, the Office Technology and Management curriculum is a skill-building program that emphasizes the actual application of facilities in teaching and learning for successful knowledge acquisition.

OTM education must be given top importance and enough attention at all levels because it is focused at providing skills and attitudes for employability. As it is a practical focused vocational course targeted at learning by doing, this can be accomplished through the utilization of instructional facilities. As a result, learners learn best when they are actively immersed in practical learning rather than passively learning. This has increased the demand for instructional facilities for efficient OTM teaching and learning in order to prepare students for the difficulties of a competitive labour market.

This further revealed that a shortage of technical manpower has severely hampered the repair and maintenance of educational facilities, resulting in the non-use of equipment that has broken down[42]. As a result, the use of instructional technology (facilities) in the classroom entails students not just being informed what a computer is and how it works, but also being shown the equipment, how it works, and being given the opportunity to utilize it practically in a variety of learning activities[16]. It was also stated that utilization refers to the extent to which facilities are used in the completion of a task. As a result, effective teaching

and learning of the Office Technology and Management curriculum is also based on the use of accessible educational resources[42].

Effective use of instructional facilities in teaching appeals to more senses in students and improves the teacher's methodology43. The proper use of instructional materials in the learning process, it was argued, improves the learners' absorption of concepts. They also pique learners' interest and assist them in locating key facts about the topics being discussed. The usage of instructional materials has the ability to change the nature and method of learning and envision a new culture of learning. Teaching and learning cannot be the same as we become more reliant on ICT; we must take advantage of the rich and exciting opportunities provided by new educational technology in order to achieve our new goals and vision. As a result, the focus of the learning process shifts from teacher-centered activity to learner-centered activity. As a result, through the use of instructional tools, students should be able to uncover their own potential[44].

Because of its numerous advantages, the use of new technology in teaching and learning is quickly becoming a standard feature in all fields of study. By facilitating access to educational resources and services, new technology has become a key instructional tool for improving accessibility, efficiency, and quality of teaching and learning. It was also stressed that the use of new instructional technology in the educational system has resulted in a shift from the traditional method of teaching and learning to a more resourceful and exciting method that can broaden the learner's access to information and knowledge via the Internet, radio, television, and computer, among other sources[45].

In the Office Technology and Management curriculum, instructional facilities or materials refers to various office equipment, machinery, and devices that were used (used) as means for imparting and teaching students. It also entails providing a favorable and engaging

learning environment, such as well-equipped manual and electronic keyboarding laboratories, ICT/Computer laboratories, shorthand laboratories, and a model office practice room, where effective teaching and learning can take place. These learning environments provide the foundation for students to gain the necessary information, skills, and abilities to act as responsible individuals and office managers after school[46].

These learning settings lay the groundwork for students to develop the knowledge, skills, and talents they'll need to function as responsible individuals and office managers after school. It is the process of transforming a set of inputs into goods or services in order to create value in them. In this application, utilization refers to the frequency with which instructional materials or services are used or provided by teachers and students in the Office Technology and Management curriculum at the Polytechnics in the South Western States of Nigeria. It also implies that the use of educational resources is contingent on their availability at Polytechnics[47].

Given that the Office Technology and Management program has been given a specific curriculum with new objectives for Polytechnics in Nigeria, it is imperative to inquire as to what instructional materials are required or available in the Polytechnics as recommended by the National Board for Technical Education (NBTE), How readily available are they to teachers in schools, and how frequently do they use them to deliver effective instruction? Positive responses to the questions could be used to predict student learning effectiveness in the Office Technology and Management program. This is likely to improve instructor and student performance in the teaching and learning process[46].

Inadequate utilization of instructional facilities by Business Education Teachers (OTM included) is attributed to the government and school authority's failure to provide these facilities, and it is argued that inadequacy of instructional facilities and lack of knowledge of utilization on the part of teachers go a long way to stifle teachers' instructional delivery. As a

result, for an efficient learning process, the acquisition of skills necessitates the employment of suitable instructional facilities. The importance of instructional facilities is critical, since they are crucial instruments for teachers to achieve the high level of competency demanded of Business Education pupils. It also stated that the teaching facilities required for Business Education are woefully inadequate, with many teachers in schools and institutions failing to use the few that are provided. The reason for this is because the teachers lacked the essential abilities to use them[47].

It is crucial to highlight that polytechnic education, particularly in the Office Technology and Management program, generally includes a large number of practical tasks that cannot be effectively carried out without adequate provision and proper use of necessary instructional facilities.

In recent years, the following aspects have been identified as influencing the use of instructional facilities for teaching and learning skills of OTM courses:

Irregular Power Supply: It was lamented that electricity supply is the primary hindrance to the use of ICT (instructional facilities) in teaching and learning. Nigeria is said to be one of the world's darkest countries in terms of electricity supply[49]. This, he claims, has hampered the use of ICT tools in rural schools where electricity supply and distribution are either erratic or non-existent. Computers, projectors, fax machines, and other technological equipment for teaching and studying OTM are available however they cannot be used without appropriate electricity. It is also claimed that electrical supply in Nigeria has been unpredictable, posing a threat to equipment's proper operation. The usage of power generators necessitates a consistent fuel supply, which is difficult to achieve due to a lack of funds.

Knowledge of Instructional Facilities: It is critical to ensure that lecturers have appropriate maturity (knowledge) of the technologies in question in order to make successful use of those technologies in the classroom. This is because lecturers have the capacity to

improve educational quality by bringing life into the classroom and motivating students to engage in self-directed learning. To put it another way, a lack of understanding of teaching facilities might diminish the quality of practical lesson delivery.

Inadequate instructional facilities and a lack of knowledge of how to use them on the side of teachers wreak havoc on teachers' ability to give quality instruction. It was discovered that what teachers think, believe, teach, and do in the classroom has an impact on the type of learning that young people receive. Inadequate knowledge of any educational materials can lead to inefficient use of time and resources[50].

Technical Manpower: At the moment, only a few Polytechnics can brag of having technical manpower to maintain, repair, and service manual and electronic typewriters, computers, and other equipment used in office technology and management teaching and learning. Due to a lack of technical manpower, repairs and maintenance of instructional facilities have been severely hampered, resulting in the non-use of equipment that has broken down.

Most colleges that provide Office Technology and Management programs do not have well-equipped computer rooms, model offices, shorthand laboratories, internet and intranet facilities, and so on. This is influencing equipment use, and as a result, office technology teaching and learning, as well as management, is hampered. With the new Office Technology and Management curriculum, more advanced instructional facilities are required to facilitate the teaching of certain basic skills such as keyboarding, Microsoft Word, and Microsoft Excel, among others[51].

Curriculum Challenges: The goal of successful teaching technique is for teachers to accurately comprehend and interpret the school curriculum's aims and objectives, and then plan teaching events to help students attain these goals and objectives. As a result, the design of the Office Technology and Management program components appears to be in response to

a global push with an objective that foreshadows a shift in academic focus toward ICT. The new curriculum's goals, theoretical and practical content are all focused toward integrating OTM graduates into the progress of technology.

This also means that professors in the Office Technology and Management department will need to get familiar with the new curriculum's objectives, which stress practical activities and the use of current technology in service delivery. Ineffective use of instructional resources in the teaching/learning process could be hampered by a lack of knowledge of curricular content and teaching aids. By linking curriculum with practice, lecturers have a responsibility to assist students in acquiring and developing necessary skills and attitudes for employment. This means that lecturers/instructors must first and foremost possess and be able to demonstrate the talents they want students to learn. The lack of those abilities may also have an impact on the efficient use of educational resources[52].

Financial Challenges: It is relatively expensive to run an education program in terms of infrastructure, training materials, equipment, and institutional personnel overheads. Finance, he said, has hampered the development of studies in Nigeria. As a result, institutions in general, and lecturers in particular, have a financial challenge in obtaining the training that would have enabled them to acquire the essential abilities for using instructional facilities.

It was discovered that the OTM program has been underfunded, preventing certain institutions from purchasing the necessary current equipment for their typing pools and laboratories. When funds are not allocated for equipment maintenance and acquisition, utilization will be poor, hurting teaching and learning[53].

Conservatism: Some instructors' belief that current technology is only for the younger generation prevents them from learning how to use modern facilities, which would have been a useful supplement to their classroom delivery approach[54]. In support of this viewpoint, he

stated that nonchallant attitudes among lecturers and students toward practical work provide a problem in the use of instructional materials for OTM program teaching and learning.

Lack of Motivation: The changing economy has an impact on teachers' lives as well, and knowledge, which used to be a source of power in the good old days, is no longer recognized and respected; rather, riches is now a source of power and cognizance. In today's Nigeria, a guy is judged not by his knowledge and experience, but by his wealth, which can be obtained legitimately or illegally. He went on to say that teachers are human beings who, like everyone else, desire to be recognized and appreciated in society. He emphasized that OTM teachers must be motivated in terms of salary, training, and retraining in order to maximize the use of instructional facilities and assist students in the Office Technology and Management program[55].

Students benefit from instructional facilities because they receive relatively consistent attention and opportunities to practice and gain skills. They make educational experiences adaptable and rich enough to cater to the learning styles of individual pupils. Students can employ a mix of senses (smell, hearing, touch, taste, and sight) to learn concepts and information more easily and effectively. Students can see some linkages that are tough to comprehend in parts as a whole thanks to instructional facilities. Without the utilization of teaching facilities that generate important vicarious experiences, certain topics would simply have slipped the student. Students could learn about things that are too risky, small, or inconvenient to bring into the classroom using instructional resources[56].

In support of the above, he claims that the availability and use of instructional facilities promote learning in the following ways: they increase learners' interest in learning; they hold their attention; they provide learners with opportunities to interact with their social and physical environment; they provide learners with opportunities for independent and individualized learning; they provide learners with opportunities to interact with their social

and physical environment; they provide learners with opportunities to interact with their social and physical environment; they provide learners with opportunities to interact with their social and physical environment; they provide learners with opportunities for independent and provide a solid foundation for conceptual thinking, provide opportunity for students to improve their abilities and skills, and promote knowledge[57].

When fully operational, instructional facilities assist the teacher in the following ways: they provide him with the means to broaden his students' learning experience, they provide his students with meaningful sources of information, they provide the teacher with the means to expose his students to a variety of learning activities, and they increase the teacher's efficiency. They bring experts and learning resources into the classroom by providing tutorials and response guidance for individual students and small groups; and they allow members of a group or class to benefit equally from the same teaching experience[58].

2.1.3. Concept of Quality Assurance

Quality Assurance is a concept that describes an institution's entire set of management practices, processes, and controlled measures for promoting and ensuring quality in its operations and products. As a result, quality assurance in the educational system is a catch-all term for a variety of activities aimed at improving the quality of input. The educational system's method and output Teachers, classrooms, labs, libraries, computers, consumable materials, equipment, infrastructural facilities, and other inputs, as well as the process, determine the efficiency of the educational institution's product (instructional delivery). The outcome will be defective if the input and process are both faulty[59].

The goals of quality assurance in the Office Technology and Management program include ensuring that academic and skill standards are met, maintained, and improved, as well as assuring employers and other members of society that graduates of the Office Technology and Management program in Polytechnics have achieved an acceptable level of competence.

As a result, using new instructional facilities for teaching and learning is one of the ways to ensure quality assurance of OTM graduates in this technology era[60].

The establishment of a polytechnic regulatory agency, such as the National Board for Technical Education (NBTE), Control, monitor, and coordinate institutional actions to ensure strict adherence to established standards. As a result, basic instructional facilities are expected to be in place before accreditation for the OTM program in Nigerian polytechnics is granted. The establishment of Quality Assurance and SERVICOM Units in each Polytechnic is also a positive step toward assuring high standards of teaching and learning at all levels of our tertiary institutions. In this era of rapidly changing technical appliances, the importance of training and retraining Lecturers/Instructors in the use of modern office facilities and teaching methods in order to ensure successful instructional delivery cannot be overstated.

The importance of great education as a tool for change and meaningful growth cannot be overstated, since it is widely recognized as a tool for any nation's economic and social progress. The Nigerian National Policy on Education, Section 1 (one), emphasizes the importance of functional education being relevant, practical, and geared toward the acquisition of skills the development of the entire society[61]. This means that learning in our institutions, particularly Polytechnics or Colleges of Technology, must be geared toward instilling values as well as acquiring the skills and competencies required for social, cultural, economic, and technological development. This is where quality assurance in Nigerian polytechnics' Office Technology and Management programs comes in. In any field of human endeavour, quality is of utmost importance.

Many researchers have defined quality in different ways. When anything is compared to other like items, its quality determines how good or awful it is. Quality is something that everyone values and wishes to possess. It is defined as relating to standards, and standards are the most important yardstick for evaluating values and ensuring comparability,

interpretability, and harmonization[62]. As a result, quality is an important aspect of education, as it focuses on the ability to adhere to a set of acceptable and institutional standards in terms of time periods, practices, and locations.

Thus, quality in Nigerian Polytechnic education is a multifaceted concept that should encompass all of the institution's functions and activities, including teaching and academic programs, research and scholarship, staffing, students, buildings, facilities, equipment, community service, and the academic environment. In education, quality refers to an educational system's capacity to conform to a set of standards as well as the appropriateness of the input used to provide the system. Quality control, on the other hand, is a sure-fire technique to ensure that a product meets its specifications every time[63].

It is educational institutions' ability to match the needs of manpower users in terms of the quality of skills gained by their products, i.e. students. In Nigerian universities, quality assurance is a process of continuous improvement in the quality of teaching and learning activities, which will be accomplished by internal and external procedures[64]. It is responsible for ensuring that the minimal academic standards are met, maintained, and improved.

In the educational sector, quality assurance refers to educational institutions' ability to meet the expectations of manpower consumers in terms of the quality of skills gained by their outputs. 65. Quality assurance in the Office Technology and Management program refers to the Polytechnics' capacity to meet academic requirements, staff-to-student ratios, and other factor, Staffing mix by rank, staff development, physical facilities, budget, and proper library facilities are all important factors to consider[66]. Again, quality assurance is a planned, systematic measuring strategy that an organization uses to ensure that a product's or service's quality requirements are met[67].

As a result, quality assurance is defined as a planned and systematic review process conducted by an organization, institution, or program to determine if accepted standards are

met, maintained, and improved. It ensures that the standards and quality of a program of study provided by an institution are maintained and improved.

As a result, quality assurance is defined as a planned and systematic review process conducted by an organization, institution, or program to determine if accepted standards are met, maintained, and improved. It guarantees that an institution's standards and quality of a program of study are maintained and enhanced, as well as assisting in education monitoring and supervision, determining the quality of teacher input, and determining the effectiveness of a program of study, To assure education quality control, evaluate the level of adequacy of the facilities available for quality control, and ensure how the financial resources available may be prudently and judiciously used, establish the number of classrooms needed based on average class size[69].

Concern for quality has been a driving force behind educational improvements. The sum of a process', product's, or service's attributes as they relate to its performance, as assessed by customers or clients, is referred to as quality. It requires a focus on internal processes and outputs rather than just a feature of a finished product or service, as well as waste reduction and productivity gains[70]. Education is evaluated based on its ability to help students succeed on standardized tests as well as its relevance to the needs of students, communities, and society as a whole. Finally, he concluded that quality is determined by gradations based on a standard of excellence below which a mark of inferiority is imposed or adduced, and degrees of superiority are imposed or adduced above which a mark of superiority is imposed or adduced[71].

Similarly, quality assurance and accountability have been linked since both are concerned with improving the efficacy and efficiency of educational systems and services in relation to their contexts, missions, and stated goals. According to his definition, quality

assurance focuses on the following: learners' entry behavior, characteristics, and attributes; learners' exit behavior, characteristics, and attributes; and learners' exit behavior, characteristics, and attributes, including some demographic factors that can impede or facilitate learning, teacher entry qualification, values pedagogic stalls, professional preparedness, subject background, philosophical orientation, and teaching/learning processes, such as curriculum structure and learning environment, as well as outcomes which are defined at various levels in terms of knowledge, abilities, and attitudes, as well as appropriate and applicable tools to measure these goals[72].

The following are some of the quality assurance strategies used in education:

1. Monitoring: This is the practice of gathering data on ongoing projects or programs inside the school system at regular intervals. The goal is to constantly review performance in order to determine how well the established objectives are being met.
2. Evaluation: This is a formal process that takes place in the context of a school. It is based on data that is accessible and is utilized to draw conclusions. It could be either formative or summative in nature. The goal of assessment, as part of a quality assurance plan, is to see how the system may be helped to improve on its current performance level (formative).
3. Supervision: While supervision may include inspection, it also includes efforts to improve the quality of training. It includes employees as an integral element of the process. It's a way of counseling, mentoring, rejuvenating, encouraging, and stimulating staff growth.
4. Inspection: An inspection usually entails a review of an institution's available facilities and resources in order to determine how well it meets mandated standards; it is more of a review than an improvement-oriented exercise.

5. Quality Control: It is impossible to overstate the importance of quality control. It is one of the ways for creating quality assurance at all levels in the underdeveloped educational system. In its quest for technical advancement, the country should prioritize quality control.
6. To ensure that the finished products are of good quality, it is necessary to examine the qualifications of teachers, the availability and use of equipment in the requisite number, as well as the proper use of the processes involved in the various talents.
7. Access and Equity: It was said that the trend of students transitioning from junior secondary schools to higher education has been discouraging, since it has fallen short of expectations. He went on to say that the issue at the tertiary level creates a situation that raises questions about access at Universities, Polytechnics, and Colleges[73].

Educational managers have a variety of responsibilities, from administrative to professional. Professional educators should be concerned about how they manage the educational resources that have been assigned to them, as well as how they regulate their schools and pupils. Similarly, the teacher's supervisory responsibilities should extend beyond those of starting classroom teachers. He must be accountable not just to himself and his students, but also to other members of the faculty and their students. Not only that, but he is also responsible for identifying the management priorities and management style to be applied in order to achieve high-quality education[74]

As a result, in order to provide a quality education, education managers must perform the following tasks: measurement and standardization of academic attainments, evaluation of work quality during supervision, use of competent teachers and administrative/supervisory personnel, dissemination of information to teachers and students, and use of educational technologies with a view to providing a quality education to improve teaching efficiency,

new research and development to enliven all educational activities, as well as guidance and counseling[75].

Making quality assurance a topic of discussion in relation to effective Office Technology and Management courses in particular and polytechnic education in general, the focus would have to be on maintaining effectiveness in the operations of polytechnic ND and HND programs in tandem with national aspirations for that level of education and the secretarial profession. Others include assisting teachers in integrating into society's social life and strengthening their dedication to national aspirations, among others. To adequately assess the situation, it is necessary to reiterate that external and internal procedures are now being used to ensure the quality of the polytechnic system. Internal measures include moderation of examination questions and results by competent academics outside the polytechnic's staff list (Senior Lecturer and above), departmental and school-level moderation of examination questions and results, and academic board review, moderation, and confirmation of examination results[76].

External quality assurance measures, on the other hand, are the sole domain of the National Board for Technical Education (NBTE). Apart from establishing a uniformed minimum academic standard by which all Polytechnics are expected to meet and be steered, this Board accomplishes this in two ways. External quality assurance measures, on the other hand, are the sole domain of the National Board for Technical Education (NBTE). Apart from establishing a uniformed minimum academic standard by which all Polytechnics are expected to meet and be steered, this Board accomplishes this in two ways. Routine re-accreditation of programs and accreditation of new programs are the NBTE systems for monitoring quality.

The re-accreditation of programs is done every five years. That clearance would be granted to a program accreditation until the fifth year, when it would be re-accredited.

Routine re-accreditation of programs and accreditation of new programs are the NBTE's quality-measurement systems.

Programs are routinely re-accredited every five years. This clearance would be granted to a program accreditation until it was re-accredited after the fifth year[77]. The NBTE's quality-control mechanisms include program re-accreditation and new program accreditation on a regular basis. Every five years, programs must be re-accredited. This clearance would be given to a program accreditation until the fifth year, when it would be re-accredited. Students are admitted as a result of this visit, and comprehensive accreditation is carried out in the second year of study by the students to evaluate the amount of compliance to specifications in the minimum academic standard with regard to staff, materials, and plants. At the ND and HND levels, an assessment of the process for guaranteeing quality and efficacy. In terms of both internal and external bodies, they should encourage and influence constructive change while also maintaining standards. Changes are launched inside the existing forms in such procedures[77].

Both internal and external bodies should support and influence positive development while also maintaining high standards. In such approaches, changes are made within the existing forms. Both internal and external bodies should support and influence positive development while also maintaining high standards. Changes are made inside the existing forms in this manner. As a result, the Office Technology and Management degree was created to provide students with secretarial/office abilities that they may use in a variety of industries. Students are prepared with effective job competencies and socio-psychological work skills, which are crucial in everyday interactions with others, in addition to vocational abilities.

As a result, the Office Technology and Management degree was created to provide students with secretarial/office abilities that they may use in a variety of industries. Students

are prepared with effective job competencies and socio-psychological work skills, which are crucial in everyday interactions with others, in addition to vocational abilities. Computer appreciation, web page design, desktop publishing, database management, and other information and communication technology applications; and broad education relevant to modern challenges, also known as general studies. As a result, the program's broad aims are to teach secretarial skills, provide general education, and create the groundwork for higher study[78].

Office Technology and Management education is the process of leading and initiating learners to acquire the needed skills, facts, information, habits, and attitudes that will enable them to coexist with others as important and productive members of society. It was stated that it is a training program aimed at providing its participants with the necessary information and skills. The current OTM program covers database administration, Microsoft Excel, Microsoft Powerpoint, word processing, web page design, desktop publishing, business communication, and other topics. The components of the Office Technology and Management curriculum appear to be designed in response to a global need and a new academic direction that favours technology[14].

The Office Technology and Management curriculum is a component of vocational education that equips aspiring confidential secretaries with the knowledge and abilities they need to succeed in the workplace. In Nigeria, three tiers of tertiary universities provide Office Technology and Management programs. It focuses on job skills, employability, and self-reliance at colleges of education, polytechnics, and universities. In the same vein, it was affirmed that Office Technology and Management programme is a specialized phase of vocational business education that prepares recipients for office occupations as office managers, secretaries, executive assistants administrative assistants, and function in other similar titles describing jobs similar or overlapping those of the traditional secretary such as

office coordinator, executive assistant, office manager and administrative professional. The Office Technology and Management programme offered in the Universities and Colleges of Education, however, have the education components that give the graduates the option to teach in secondary schools and Polytechnics or seek for employment in offices as office managers, executive assistants, personal secretaries, etc. It is a very viable career option for competent graduates. Those especially from the universities can also function as administrative officers in the public and private sectors of the economy[16].

Office Technology and Management education is to assist in the production of suitable secretarial manpower with requisite skills, knowledge and attitudes for effective participation in economy. Office Technology and Management is an area of study within the composite of what is called business studies as offered in Universities, Polytechnics and Colleges of Education in Nigeria. Office Technology and Management courses are aimed at producing personnel who, after successful training, can offer secretarial services with competence[11]. Office Technology and Management programme provides adequate training for Nigeria citizens for the new world order of technological devices. Its graduates acquire and develop needed skills, attitudes and knowledge to meet with the new technological challenges which have revolutionary changes in the offices. They can operate with ease, dexterity, efficiency, and effectiveness, the emerging technological devices which range from computer with scanning and coloured printers, to electric typewriters, e-mail, fax machines, franking machines, internet facilities, micrographic and reprographic machines, photocopiers, shredding machines, telephone with cellular and word processors[17].

Office Technology and Management programme as the process or context which has the role of preparing people for enterprises as employees, employers and or self-employed. It provides opportunities for specialization in company secretaryship and technical secretaryship. Office Technology and Management is an educational programme, which

gives its recipients the necessary knowledge and skills to enable him function effectively in an office. This is to say that Office Technology and Management programme refers to the acquisition and development of skills, competencies, attitudes and attributes to be able to function effectively in the office to meet with the new technological challenges which have revolutionary changes in the offices[23].

Office Technology and Management programme is a vital tool in the hand of government to combat unemployment crises, and that it is a tool to alleviate poverty. Office Technology and Management (OTM) education is also very useful to private organizations and individuals in terms of employability, job creation and self-reliance. It permeates all facets of a country's socio-economic and political life. All organizations need good information management systems, good record keeping for effective competitiveness and profit making[25]. The life and status of business education tomorrow as a discipline in the present technological age depends on how the business teacher of today is prepared to impart the knowledge and skills of ICT to the business education/studies graduates. Therefore, Office Technology and Management lecturers today should be computer literate and teacher education program must deliberately expose teachers of all specialization and especially technological education teachers (OTM teachers inclusive) to ICT competencies relating courses like internet services and facilities, spreadsheet operating systems, etc[85.]

Office Technology and Management started in the United States of America in the 17th and 18th centuries as Secretarial Studies. By the 19th and 20thcenturies the course expanded rapidly to some developed countries and spread to developing countries. The Office Technology and Management curriculum is a specialized phase of vocational education that prepares students to work as capable and intelligent members of the workforce in teaching and office vocations. Women have a long history of studying Office Technology and Management (OTM). They began working in the field in the late 1880s, at the same time

that adding machines, typewriters, and telephones were invented. Since then, secretarial education has experienced many changes in all aspects to adapt to changing office work and environments[93].

Information and communication technology has advanced secretarial education well beyond its creators' expectations. It has also given both men and women chances. Office management services are used in every aspect of a country's socioeconomic and political existence. Office managers, for example, who have received training in office technology and management, typically work in offices alongside other professionals in schools, hospitals, corporate settings, or legal and medical offices. The term "Office Technology and Management Education" was coined in 2004 as a new nomenclature for secretarial studies as a result of technological advancements that transformed Nigerian offices into technologically advanced environments. The secretarial profession has become vast and highly demanding than it used to be in the past because of the dynamic nature of the world. The use of archaic and slow manual machine and equipment has given way to highly sophisticated ones[6].

The National Board for Technical Education changed the nomenclature to Office Technology and Management and drew a new curriculum and course specifications in response to persistent requests from stakeholders (labor employers and professional bodies) for a change in the program's nomenclature and course contents as a result of the technological explosion. As part of Technical and Vocational Education, Office Technology and Management is defined as an aspect of the educational process that includes, in addition to general education, the study of technologies and related sciences, as well as the acquisition of practical skills, attitudes, understanding, and knowledge relating to occupations in various sectors of the economy and society[93].

The Office Technology and Management program's goals are to provide students with secretarial and office management skills that will enable them to work in a variety of areas. This means that the board wants students to be exposed to courses in their areas of specialization as well as general education in order to prepare them for work. The following are the broad objectives of the OTM programme: Acquire secretarial skills; Acquire ability to write shorthand for three minutes on a variety of materials for 1.3 syllabic intensity dictated at 80 wpm and 1.4 syllabic intensity dictated at 100 wpm and transcribed on the computer with a minimum of 95% accuracy at 100 wpm. both ND and HND respectively; Graduates of the ND and HND should be able to type quickly for a variety of office duties, with a copying rate of 40wpm for the ND and 50wpm for the HND on passages of not less than 1.3 syllabic intensity and a 98 percent accuracy rate on passages of not less than 1.3 syllabic intensity; secretary, which includes relating the office's functions to the overall transition, attending meetings and providing information as needed, maintaining accurate records of proceedings, filing and retrieving information, and acting independently when faced with difficult secretarial office problems, among other things. acquiring personal qualities and talents that are compatible with and compatible with the work group; obtaining a broad education; as well as setting the framework for future research[70].

Students will be exposed to General Studies such as Communication in English, Use of English, Citizenship Education, Social Psychology, Principles of Law, and Principles of Economics in order to meet the objectives of the Office Technology and Management program. They will also take basic courses such as Introduction to Business, Introduction to Entrepreneurship, and Accounting Principles. Shorthand, keyboarding, information and communication technology, and other professional courses will be offered to students. Desktop Publishing, Webpage Design, Database Management, ICT Office Application, Office Practice, Records Management, People's Communication Skills, and the Student

Industrial Experience Scheme are some of the topics covered in this course (SIWES). All of them were created to help ND and HND graduates perform well in office settings.

Office Technology and Management (OTM) is a business education subject that is mostly taught in Nigerian polytechnics. It is a descendant of the now-defunct secretarial courses. OTM was established by the National Board for Technical Education (NBTE) to equip students with vocational skills in modern office technology, administration, and management in order to prepare them for work in a range of industries[5]. The National Board for Technical Education (NBTE) was established by Decree (Act) No. 9 of the Federal Republic of Nigeria on the 11th of January, 1977 as a higher education supervisory parastatal that coordinates technical and vocational education activities to ensure that courses offered reflect national needs, interests, and aspirations. As a result, Office Technology and Management is a type of education that teaches people how to address problems in business and office environments. As a result, OTM's role is to equip students with skills that will increase their chances of landing a job after graduation. It also provides information and skills to students[16].

The Office Technology and Management (OTM) program, on the other hand, was developed in response to a worldwide drive to signify a new academic path in favour of ICT. There are two reasons for the existence of Office Technology and Management. The first reason was that secretarial studies students and practitioners wanted to change the name of the program because their products are only suitable for a traditional office context. The second reason was due to a shift in curriculum that emphasized information and communication technologies, as well as management, in order to extend students' knowledge and provide them with the skills needed in today's industry[46]. As a result, the new Office Technology and Management program (OTM) is designed with six components. They are as

follows: use of the Office, Technology in the Office, Administrative and Business Management, Numeric Component, General Studies and Students' Industrial Work Experience Scheme

The Office Technology and Management curriculum is a comprehensive activity-based educational program that focuses on the learning of office technology and management skills, understandings, attitudes, work habits, and competencies required for success in secretarial and office management careers. This is due to the fact that the Office Technology and Management (OTM) program is an effective, efficient, productive, and functional educational program that prepares OTM graduates for self-employment, paid work, self-reliance, and self-realization. According to the NBTE (2004) curriculum and course specifications, the office technology and management program is aimed to provide students with the skills needed to function in a modern office environment. It went on to say that the Office Technology and Management program's goals are to: acquire secretarial skills, acquisitation of general education and laying foundation for advanced studies[74].

Information and communication technology is more of a benefit than a disadvantage. Its significance in today's culture cannot be overstated, since it is a teaching and learning resource in our educational system. In the classroom, ICTs have an impact on instructional practices. Their contribution to educational reform and school innovation is unavoidable. Information and Communication Technologies benefits to the classroom teaching and learning process are: provide students with more exposure to vocational and workforce skills, provide opportunities for multiple technologies to be delivered by teachers, increase student enthusiasm for learning, provide teachers with new sources of information and knowledge, prepare learners for the real world, and produce people who can work and live independently leveraging ICT to assist and facilitate learning for the benefit of all learners and teachers across the curriculum, participating in the new economies and societies arising from ICTs and

related developments, and leveraging ICT to assist and facilitate learning for the benefit of all learners and teachers across the curriculum[11].

One of the advantages of utilizing ICT resources is the ability to communicate information quickly and effectively to all pupils while also maintaining their interest in studying. It delivers images of subjects to pupils that will spark their attention and motivation. It also improves learning while also saving time during lectures. To add to this, the factors determined to be most significant to these teachers in their teaching were: making the lessons more engaging, easier, and entertaining for them and the students, more diverse, motivating, and pleasurable[11].

Similarly, ICT resources give learning experiences a new dimension because concepts are easier to explain and comprehend when they are accompanied by images and animations. Furthermore, it has been proven that when a range of senses are used to affect knowledge, learners remember more information; and the intensity of the experience adds retention and memory by activating social, emotional, and cognitive senses. ICT resources have also been found to have the highest percentage of information retention and to reduce learning time[17]. It should be emphasized that the scope and depth of research conducted on every particular educational facility is determined by the level of importance assigned to it. As a result of the rise in technology and the explosion of knowledge, combining diverse instructional facilities allows the instructor to transmit and the learner to assimilate effectively. A competent teacher should guide and steer learning activities based on his understanding of how pupils can best attain the societal goals expected of them, selecting activities and instructional materials that are most suited to the specific aim of each day's work[8].

Scholars have proposed the following elements that could enable instructors to use Information and Communication Technology resources to impact knowledge and skills:

Easily accessible Technical Support Staff: The majority of ICT-enhanced teaching experiences necessitate knowledge beyond that of Lecturers. Computer breakdowns cause disruptions, and if there is a shortage of technical assistance, frequent computer repairs are unlikely to be carried out, resulting in instructors not using computers in the classroom[93]. As a result, teachers will be hesitant to utilize computers for fear of equipment failure because no one will provide technical support.

Adequacy of ICT Resources: Another important enabler of ICT use in education is the availability of adequate ICT resources inside educational institutions. Adequate computers (both hardware and software) and other ICT-supported tools, as well as suitable computer knowledge for instructors in the institution, can significantly improve its use.

Supportive Policies: The government, administrators, and teachers must all be committed to effectively implementing ICT in education. A well-defined national and institutional ICT policy, accompanied by a budget that demonstrates government support and commitment, will undoubtedly go a long way.

Adequate Training: specifies that teachers must receive professional training in order to successfully employ technology to increase student learning. It must prepare instructors to effectively employ technology in their classrooms. However, this training should not consist solely of short workshops or training, as this is insufficient for the development of appropriate knowledge and skills. The training of teachers is critical to the successful integration of computers into classroom instruction. They conducted research that found that ICT-related training programs improve teachers' computer skills, alter teachers' attitudes toward computers, and aid teachers, whether they are novice or experienced, rethink the mission of technology and the importance of new technology tools in student learning[93]. It should be underlined that training should not be viewed as a one-time event, but rather as a

series of experiences that allow learners and teachers to stay current with ever-changing technologies.

2.2 Theoretical Review/Framework

Theory is both necessary and unavoidable; learning and acting consistently would be impossible without it. A theory is a set of concepts that describe observable relationships and is used to explain a phenomenon. Theory can also be defined as an explanation of a set of component pieces and their interactions that allows for specific predictions about how the parts will behave under specific conditions[83]. A theory is a group of ideas that describe how something works. In a similar vein, theory contains a set of relevant assumptions that originate from empirically tested definitions or hypotheses, with the assumptions drawn from real-world events with which they are concerned and which they aim to explain. As a result, it is correct to define theory as any statement or set of statements formed by reasoned argument based on known facts and intended to explain a specific fact or event. The following theories were examined in relation to this study:

Competency Theory by Azemikhah (2005)

Reinforcement Theory of Motivation by Skinner (1938)

Cognitive Learning theory by Wolfgang and Tolman (1920)

Theory of Cognitive Flexibility (Spiro, et al, 1989)

System Theory by Ludwig Von Bertalanffy (1940)

2.2.1 Competency Theory by Azemikhah (2005)

According to the theory, competence development consists of three elements: the conceptual (intellectual), the physical (human capacities), and the balance factor (the equilibrium). The balance aspect regulated skills are employed by the student and assisted by

the teacher as an interplay factor between the two procedures. According to the notion, the mental reflection and physical action processes are both part of the competence development process. Accordingly, competence development process involves several stages. At the first stage the students identify the key concepts of the problem in the light of required knowledge and variables in the competence unit. The focus is to link the key concepts in or implied from, the problem to the variables and performance criteria in the unit of competence. The first stage is completed by listing the key concepts of the problem. The relevant variables from the unit of competence are identified and listed on the right side (Conceptual) of the diagram. The performance criteria are listed on the left (Physical) side. The relevant skills are listed at the centre of the 'V'. The key concepts are then connected to the variables; variables are connected to skills, skills to performance criteria, and performance criteria to the key concepts.

Then, the second stage extends in all the three dimensions of the first stage. That is, it extends into conceptual side by identifying relevant theories and philosophies. It also extends into the physical side of the study by identifying and linking to the relevant elements of competence.

This is illustrated in the figure below

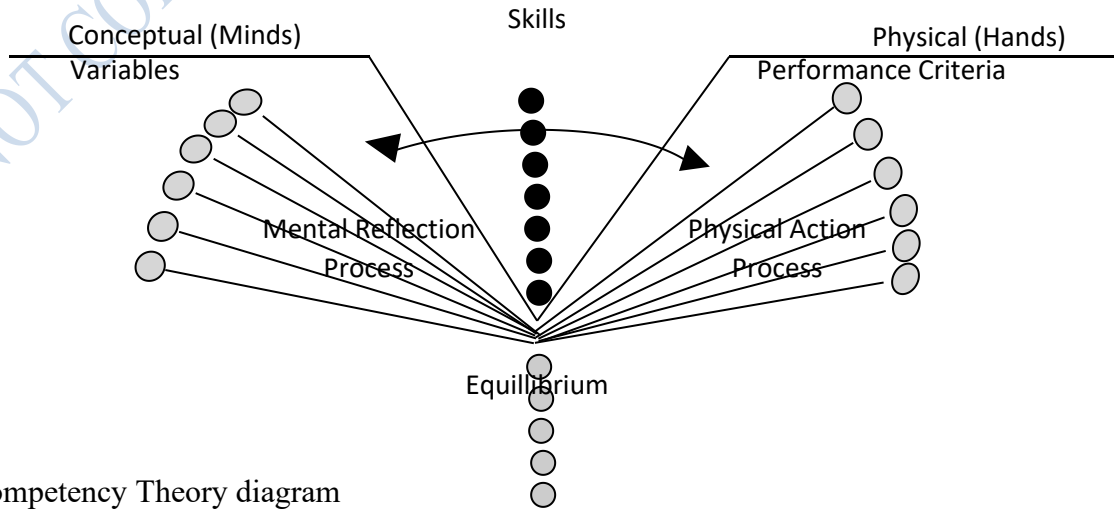

Fig.2.1 Competency Theory diagram

Source: Azemikhah Henry (2005)

The competence development process of the two stages above, is repeated for a number of times, using simple to complex problems, until the learner has attained mastery in the unit of competency. At each repetition, represented by expanding circles in the competence theory, the learner's level of competence and professionalism elevates to a higher level. This process continues until the learner arrives at the point of transposition of competency and learning. At that point, the learner is deemed competent and the relationship of learning to competence is transposed into competence to learning. When competence and learning are transposed, the learner moves from the not yet competent position to the competent position[80].

The relevance of this theory to the present study lies on the fact that the ability of teachers to teach and make students to understand any Office Technology and Management courses is contingent on the extent to which he/she is competent in that area. This is because the students' ability to strike a balance between the use of the intellectual (the conceptual element) and the hands also referred to as the (human abilities) is dependent on the ability of the teacher to use skills as an interplay element. This implies that if Office Technology and Management instructors are not competent, the mission of the programme may not be achieved owing to the critical role they played in teaching and learning process.

2.2.2 Reinforcement Theory of Motivation by Skinner (1938).

The motivation behind the theory is well-known. The theory focuses on behaviour modification, demonstrating the usefulness of extrinsic rewards in changing behaviour and indicating that motivation is a non-cognitive form of learning in which one's behaviour is influenced by the process of rewarding and punishing oneself. The employment of positive or negative reinforcement to inspire people is referred to as the reinforcement theory of motivation. According to the theory, an individual's behaviour is a function of their outcomes

(consequences). As a result, two basic theories underpin management behaviour change. The first is Thorndike's "Law of Effect," which states that individual behaviour with positive outcomes (rewarding consequences) tends to be repeated, whereas individual behaviour with negative outcomes (punishing consequences) tends to be avoided (punishing consequences) tends not to be repeated, and the second is B.F. Skinner's "Law of Effect," which states that individual behaviour with negative outcomes (punishing consequences) tends to be avoided (punishing consequences) tends not to be It is feasible to affect individual behaviour by offering appropriately timed rewards.

The theory is entirely focused on what happens to a person when he makes certain acts. As a result, the organization's external environment must be built properly and positively in order to motivate employees. There are four options, however. or techniques of reinforcement available to the school administrator to motivate or modify the behaviour of subordinates in the school. Positive reinforcement, negative reinforcement, punishment, and extinction are the four options[81]. This describes in full how a person learns to behave. Teaching and learning skills especially in OTM courses cannot be effective if the desired and necessary facilities are not provided in the school. Office Technology and Management requires adequate personnel, facilities, equipment, funding for effective skills acquisition and development. These skills and competencies are regarded as desired behaviours. Hence, all the above variables (facilities) act as motivators and have to be reinforced to ensure continued desirable behaviours (skills and competencies) in the teaching and learning of OTM. This is why reinforcement theory of motivation by B.F. Skinner was one of the theories adopted for this study. When resources are scarce, the entire teaching and learning process suffers as a result of the lack of them. As a result, the provision of instructional facilities will strengthen the teaching and learning process in schools.

2.2.3 Cognitive Learning Theory by Wolfgang and Tolman (1920)

The theory affirmed that when human beings learn, they acquire new knowledge or recognition. Cognitive learning involves more complicated processes of interpreting present perceptions in the light of past information to reason out ways through familiar routes. It asserted that what really matters when an animal learns is the acquisition of knowledge. Experiments to determine chimpanzees' ability to solve complex problems were performed. In one of the experiments, a chimpanzee was placed in an enclosed area; somewhere out of its reach was a desirable fruit or banana. The chimpanzee squats at the bars but cannot reach the fruit by means of its only available short stick. Using the short stick, the chimpanzee pulls a long stick deposited outside the bars which was long enough to reach the piece of fruit. Chimpanzee also used the stick as a pole to climb up to a banana. Stick was also used as climbing instrument to beat down the banana.

The above experiment illustrates cognitive learning. The chimpanzee later learned to solve the problem by understanding the relationship between the sticks and the piece of fruits, an example of insight. This cognitive theory therefore provides essential aid to quality of motives, attitudes, habits of work as well as complex skill like problem solving and original thinking. The problem facing the chimpanzee was how to collect the banana outside the cage and eat. It, therefore, made frantic efforts to solve the problem by using the stick provided outside the bars as a result of an insight[82].

In educational setting therefore, learners are always faced with enormous difficulties. Teaching learners to gain understanding of materials to be used is predicated upon availability of such materials. The chimpanzee in the above experiment could only get at the banana with the help of the stick provided. Learners can only gain knowledge that will help them compete in the workplace if instructional materials are available. The stick represents

educational resources, whereas the insight represents knowledge that can be applied to the use of instructional materials. This idea is pertinent to the current study since the use of instructional facilities in teaching and learning will enable students to be aware of the challenges they would face when they complete their program.

2.2.4 Theory of Cognitive Flexibility (Spiro, et al, 1989)

The Theory of Cognitive Flexibility emphasized four levels of evaluation. Level one is reactions. Learning at this level measures how participants in a training program react to it. It tries to answer questions about the participants' opinions, such as whether they liked it or not. Was the information pertinent to their work? Furthermore, the participants' reactions have significant implications for learning (level two), even while a positive reaction does not guarantee learning; a negative reaction almost certainly diminishes the likelihood of learning. At the second level, teaching aims to assess the extent to which students' abilities, knowledge, and attitudes have advanced in order to estimate the amount of learning that has occurred. The third level is transfer, which examines the changes in learners' behaviour as a result of the teaching process. This level of instruction aims to answer the question: "Are the newly acquired skills, information, or attitude ready to be employed in the learner's everyday environment?" Cognitive flexibility refers to the ability to reorganize one's knowledge in a variety of ways in response to rapidly changing situational demands.

The theory's relevance to this research is primarily concerned with the transfer of knowledge and abilities beyond their initial learning setting. Students' motivation to apply the knowledge and abilities they learned in the training program on the workplace is known as skills transfer. Students who learn the content taught in training and want to apply that new knowledge or skill to job activities are likely to change their behaviour. The benefit is that the skills and information gained during training using instructional facilities can be implemented

in the workplace. To promote the desired level of knowledge transfer, it's crucial to remember that every student wants to put their newly gained skills to use in their profession. However, this is only true if the learner recognizes the skills' connection to the sort of work expected of him in the sector. Level four is results, which is often referred to as the "bottom line." This level examines the program's success in terms that managers and executives can comprehend, such as increased production, improved quality, lower accident rates, increased enrolment, and even higher profits or return on investment.

One cause of failure to transfer is that sometimes the training rarely provides for transfer of learning. That is, cognitive learning may well occur, but programme participants may not have an opportunity to practice the training in a job context or may not be taught how to apply their knowledge on the job. So, the training itself can have a direct influence on transfer of trained skills. The presence and utilization of instructional resources by students and lecturers creates a window of opportunity for them. – The Internet, computers, projectors, TVs, video conferencing Accessibility, e-library, computer Laboratory, lecture halls, resource centres, halls of residence, the Internet kiosk user-ability, Ms-word, spreadsheet, presentation, online instruction, projector, and so on[83]..

2.2.5 System Theory by Ludwig Von Bertalanffy (1940)

The system theory views an organization as a collection of interconnected elements, such as a company's numerous departments, that work together to produce a complete entity that performs a certain task. Every department in an organization is a subsystem of the entire organization, and each organization is a subsystem of the entire society. Departments and individuals in the organization are seen as interacting elements that are working together interdependently. Each department or component of the overall system may be divided into sub-systems, each having its own network of interconnected parts, such as sections and

positions. The term "system" is used to describe the manifestations of natural events and processes that meet particular criteria. In its broadest sense, the term system refers to a collection of interconnected components and the relationships that enable the identification of a boundary-maintaining entity or process[84]. A system is a complex or unitary whole made up of an ordered or complex whole, an assemblage or combination of things or elements.

This theory is based on the idea that all systems have distinct pieces that perform different activities, and that each portion interacts with and is reliant on the other elements or parts, as well as the other systems (environment) around it. What affects one portion, however, impacts the other sections of the system as well as the surroundings. It is clear from the definition of a system that all areas of human life are systems. Bodies, homes, children, plants, education, and so on all contain a lot of subsystems within them. It is possible for a system to be closed or open. The term "closed system" refers to a system that does not interact with its environment. They are self-sustaining, but open systems interact with their environment in a dynamic way, relying on it for both inputs and outputs. The stimulants that energize the educational system and supply it with the content of its activity are the system objectives and various system inputs. To ensure system continuity, the system's inputs must be continuously supplied by the environment. Human resources, such as students, teachers, and administrators, as well as physical resources such as buildings, equipment, and machinery, are among these inputs.

Input based on this study therefore, are assistance rendered by National Board for Technical Education (NBTE) to make sure that the objectives of OTM curriculum in the programme of study are well monitored. Also, that ICT facilities and packages such as word processors, computer laboratories, shorthand laboratories, keyboarding laboratories and so on are available. The conversion can only take place when the students are well taught with ICT application that is necessary in the classroom instruction. The effective utilization of these

available resources by the lecturers goes a long way in the production of competent graduates. The key words in the educational systems of the future are production of knowledge, skills, pedagogic and structural innovation. Training in OTM heavily relies on the introduction of information and communication technologies into the school system for quality assurance in its service delivery. This process stage has roles on the academic performance and skill acquisition of students. This means that the quality of education received by students bears direct relevance to the availability, accessibility and utilization of ICT facilities in OTM courses in polytechnics.

Inputs are the raw materials which come into the system from the environment for processing. In educational system, students constitute the major input, other input that assist in the process of transformation are the teachers and supporting staff, curriculum, ICT applications such as computers, scanners, overhead projectors, word processor, marker boards, photocopying machines and so on. Tertiary institutions, of which polytechnic is one could be described as a production system, as it uses human capital with other resources inputs to produce refined human capital. The major components of the production in education are students' time and effort, teachers' time and effort, teaching facilities in form of real and improvised materials, textbooks and other equipment and tools that constitute the inputs

Transformation process is the treatment or change of the input by the internal mechanism of the system. In education institutions, students are transformed into output through the internal mechanisms of the school system. The conversion consists of the methods used in the teaching/learning process, availability, accessibility and utilization of the various ICT application packages, proper monitoring of students' academic progress, counselling, regular assessment, conducive learning environment as well as evaluation and accreditation of courses. These can be referred to as quality assurance

The product or finished material that emerges from the system after the input has been processed is referred to as output. The type of output will be determined by the nature of the inputs, the type of processing, the type of supporting material, and the intended use of the output. Outputs are results of quality assurance in polytechnic that will have reflection on institutions' objective which input transformation are directed. Outputs are educated individuals (students) as evidenced by the knowledge gained, skills acquired and the attitudes change. Within the context of educational planning, measurable outputs are the educated persons who successfully complete given cycles and are ready to enter the real world of employment.

2.3 Review of Empirical Studies

Empirical studies relevant to the present study were reviewed as follows:

*Instructional Facilities and Teaching

*Quality Assurance and Teaching

A study was carried out to look into the effects of utilising instructional facilities in the classroom on secondary students' achievement[20]. The control group was taught using the lecture method. A 100 randomly selected senior high school Biology students were drawn from four schools for a 4x2 pre-test quasi-experimental design with control group. The data was collected using an instrument, and the calculated reliability coefficient was 0.796. Analysis of Covariance (ANCOVA) and Scheffe post-hoc test analysis were used to analyze the data. The data demonstrated that instructional facilities have a strong major effect on student achievement. This study is similar to the current one in that it looked into the impacts of instructional facilities on students' academic accomplishment, but it differs in that it didn't consider quality assurance procedures in the teaching and learning process which formed another variable in this study.

A study was conducted to evaluate the use of ICT in teaching Business Education students in Delta State's colleges of education[85]. The study was guided by three research questions. All lecturers in Delta State's listed colleges of education made up the population. The study used a descriptive survey approach and a total of 100 professors were chosen at random from the population. A well-structured questionnaire was used to collect data, and it was thoroughly vetted by professionals in the field of business education. The mean and standard deviation were used to analyze the data.

The findings demonstrated that students had a greater understanding of concepts because to ICT, and that ICT has improved teaching and learning. The study is comparable to the current study, which focuses on instructional facilities and quality assurance in OTM program teaching and learning. However, unlike the current study, the non-availability of teaching facilities in most of the institutions was not considered. The research area is also distinct from that of the current study.

In Niger State, a research was done to analyze the availability and use of instructional materials for teaching and learning of Office Technology and Management courses in polytechnics[2]. This study employed a descriptive survey design. The study's population consisted of 327 lecturers and students from the Federal Polytechnic in Bida and the Niger State Polytechnic in Zungeru's Departments of Office Technology and Management, respectively. The data gathering instrument was a questionnaire. The researcher provided the questionnaire to three specialists from the Department of Business and Entrepreneurship Education at Kwara State University, Malete, in order to determine its face and content validity for the study.

The specialists helped the researcher validate the instrument based on its relevance, applicability, clarity, and covering of the study's alleged topics. In order to determine the

instrument's dependability, a pilot study was undertaken at Kwara State Polytechnic, Ilorin. The Cronbach Alpha Reliability Test (CART) was used to examine the data from the pilot study, yielding a co-efficient of 0.71. The statistical tools utilized to examine the data collected to answer the study questions were mean and standard deviation, while Student t-test statistics were employed to assess the null hypotheses at the 0.05 level of probability. The findings revealed that instructional facilities are not widely available or used in the teaching and learning of OTM in polytechnics in Niger State.

Because it deals with the availability and utilization of instructional facilities in the teaching and learning of OTM in Polytechnics, the study is relevant to the current work. The quality assurance components, on the other hand, are not included in the study. The study did not look at the relationship between instructional facility availability and utilization and OTM course teaching and learning.

A study was done to look into the availability and use of instructional resources in Geography classes in Kathmandu district community secondary schools[19]. The study's sample consisted of 174 students from various high schools. Primary data was acquired using survey and observation methods, and the data was analyzed using percentages. The findings revealed that instructional tools for teaching geography are readily available and widely used. The study is similar to the current one in that it evaluated teaching and learning facilities, but it differs in that it did not look at the relationship between instructional facilities and teaching and learning.

In Akwa Ibom State, a research was conducted to look into Information and Communications Technology (ICT) and the teaching of business topics at the secondary school level[31]. The study was conducted using a survey research design. In Akwa Ibom State, there were 166 teachers and 2296 SS3 Business Education students in 232 secondary schools that offered business-related subjects. 246 kids were chosen using the cluster sample

technique, and all of the teachers were involved in the study. A total of 412 respondents were used in the study. The data was gathered using a questionnaire devised by the researchers titled "ICT and the Teaching of Business Subjects" (ICTTBSQ). The Cronbach alpha formula was used to evaluate and test the instrument for reliability. The reliability coefficient was found to be 0.71. The independent t-test was used to analyze the data. The findings found that in Akwa Ibom State, there were insufficient ICT instructional facilities for teaching and studying business topics in secondary schools. The study is similar to the current one in that it looks at instructional ICT facilities for teaching and learning business-related subjects, but it differs in that quality assurance elements were not included. The study did not look at the relationship between instructional facilities and teaching and learning.

A study examines the effects of instructional facilities on teaching and learning of Business Education related subjects in Ede South Local Government Area of Osun State[86]. The study adopted pre-post test control group quasi-experimental design. Besides, a survey method was also adopted to elicit information on the instructional facilities needed and factors affecting the operation of instructional facilities by teachers. Three research questions and two null hypotheses guided the study. The target population of this study comprise of teachers of business education subjects and junior secondary school students in Ede South Local Government Area of Osun State Junior Secondary Schools. The sample for this study comprises of 70 students selected from two junior secondary schools and 10 teachers of business education subject.

Two schools were randomly selected from stratified schools that fall into: schools with permanent business education teachers and schools with some instructional facilities related to the teaching and learning of business education subjects. A block of JSS 3 arm was randomly selected from each of the two schools for the study. One served as experimental

group and the other as control group. For the reliability of this study, the instruments were pre-tested in two other schools outside the local government area and split-half technique was applied. This yielded a correlation coefficient of 0.70 which was considered high enough to ascertain the reliability of the instruments. The mean and standard deviation were used to analyze the research questions while inferential statistics of t-test was used to test the hypotheses at 0.05 level of significance.

The findings of the study revealed that the use of instructional facilities for teaching and learning has positive influential effect on students' interest and improve academic performance. It was also revealed that lack of adequate funds for provision of facilities are major factors affecting the operation of instructional facilities for teaching and learning of business education subjects in junior secondary schools. The study is related to the present work because it deals with effects of availability and utilization of instructional facilities in the teaching and learning of Business Studies in Secondary schools. The study highlighted the benefits of using instructional facilities in teaching and learning of business related courses of which OTM is one. However, it differs in that the quality assurance components are not included in the study and more so it was limited to junior secondary school level.

Infrastructural facilities and Business Education (OTM option) were evaluated in a study[13]. The research was conducted using a descriptive research approach. The study's population consisted of 220 people who were chosen at random. A systematic questionnaire was used to collect data. Infrastructure and Business Education (OTM option) were explored in a study. A descriptive research design was used in this study. A total of 220 people were chosen at random for the study. Structured questionnaires were used to collect data. This study was similar to the current one in that it looked at infrastructural facilities for OTM teaching and learning, but it differed in that it did not analyze the relationship between

infrastructural facilities and OTM teaching and learning. The subject of quality control was also not looked into.

It was investigated the availability and use of instructional materials for teaching Chemistry in senior secondary schools[21]. The research was conducted using a descriptive survey design. The study's population consisted of 36 randomly selected teachers from 30 secondary schools that were purposefully chosen for the study. Data was collected using two instruments: a checklist of instructional materials availability and a teacher questionnaire. Simple percentage, mean, and standard deviation were used to examine the data. The findings revealed that a large number of instructional facilities existed, but that they were underutilized for teaching and learning. This study was relevant to the current study since it looked into the availability and use of instructional facilities for teaching and learning. However, unlike this study, that study did not include quality assurance, which is one of the primary variables in this analysis.

In Borno State22, a study was done on the appraisal and utilization of infrastructure materials in tertiary institutions. The study was conducted using a survey research design. The data was collected using a 5-point likert scale questionnaire. The study's 40 students and 60 professors were chosen using a stratified random sampling technique. The data was evaluated using the statistical mean. The findings demonstrated that infrastructural elements aided in the acquisition of skills by pupils. It was also discovered that due to the lack of operational stand-by generators, some infrastructural facilities provided for teaching and learning are underutilized. The study is similar to the current one in that it looked at instructional facilities for teaching and learning in tertiary institutions, but it differs in that the current one focuses on instructional facilities and quality assurance in place to monitor teaching and learning in the OTM program.

A study of the adequacy and use of ICT resources for effective instructional delivery in Business Education programs at universities in South West Nigeria was undertaken[24]. The study employed a descriptive survey research approach. The study included 52 business education lecturers as participants. The data collection instrument was a questionnaire. The reliability of the instrument was determined using the measure of internal consistency approach, with a Cronbach Alpha reliability coefficient of 0.94. To answer the study questions, the mean and standard were utilized to examine the data. The findings found that ICT resources for business education programs in universities were insufficient, and that lecturers' use of them for excellent instructional delivery was limited. The study is similar to the current research in that it looked at the sufficiency and use of ICT instructional resources in universities for quality teaching and learning, but it differs in that it didn't look at the relationship between instructional facilities, teaching, and learning.

A study was done to look into the availability and use of instructional facilities and resources in Ebonyi State Technical Colleges for successful teaching of Basic Electricity[25]. The study was conducted using a survey research design. The study had a total population of 150 people, including technical professors and students. The data collection instrument was a questionnaire. To answer research questions, frequency counts and percentages were used. Many essential facilities and tools for teaching and learning fundamental electricity were found to be unavailable, while those that were present were not being used properly. The study is similar to the current one in that it looked at the availability and usage of instructional facilities for effective teaching, but it varies in that it didn't state the relationship between instructional facilities and teaching and learning. The issue of quality control was also ignored.

A study was conducted on the use of instructional resources as perceived by student midwives at the School of Midwifery in Asaba, Nigeria[33]. The method used was a descriptive

survey design. The study included 100 out of 136 student midwives, using a proportionate stratified random sample technique. A data gathering instrument was a validated questionnaire. The mean and standard deviation of the data were calculated using SPSS version 20. According to the findings, student midwives believed that using instructional resources improved their concentration and helped them retain knowledge to a large extent. The study is similar to the current one in that it looked at the relationship between instructional resources and student learning, but it differs in that it did not reveal whether there is a low or high level of instructional facilities for teaching and learning. The study also focused solely on the education of student midwives.

In Niger State, Nigeria, a study was done on factors affecting the availability of instructional resources at teaching and learning Office Technology and Management in Polytechnics[6]. The research was conducted using a descriptive survey design. The study's population consisted of 327 teachers and students from OTM Polytechnics in Niger State. The data collection instrument was a questionnaire. The study questions were analyzed using mean and standard deviation, whereas the null hypotheses were tested using the student t-test. The findings found that polytechnics in Nigeria State lacked instructional facilities for teaching and learning office technology and management programs. The study is pertinent to the current study since it looked at factors affecting the availability of instructional materials in polytechnics in Niger State, Nigeria. However, the current study differs in that it focuses on the availability, utilization, and quality assurance measures of instructional facilities in the teaching and learning of office technology and management in Polytechnics in South West Nigeria.

The availability of instructional facilities in the Business Education Department's teaching and learning was investigated at Rivers State University[5]. Two research questions motivated the study, which used a survey research approach. A total of 1,310 business

professors and students made up the study's population. Using stratified random sampling procedures, a sample size of 316 business professors and students was randomly determined. The data collection instrument was a questionnaire. The mean and standard deviation were used to analyze the data. The findings found that the Business Education Department at Rivers State University lacked suitable instructional facilities for teaching and learning. The study is similar to the current study in that it looked into the availability of instructional facilities in teaching and learning at Rivers State University's business education department, but it differs in that the current study focuses on instructional facility availability, utilization, and quality assurance measures in teaching and learning of office technology and management in Polytechnics in South West Nigeria.

A study was done on the evaluation of instructional resources and the use of the Office Technology and Management (OTM) program at polytechnics in Edo and Delta States[87]. Ex-post facto and descriptive research designs were used in this study. Three research questions led the investigation. The study's participants were 68 lecturers from OTM departments at Polytechnics in Edo and Delta States. Questionnaires and observation methods were used to obtain data. Frequency counts, percentages, and ratio analyses were used to examine the research issues. The findings found that all of the Polytechnics' office practice and model laboratories lacked essential equipment and supplies. The study is similar to the current one in that it evaluated instructional facility utilization in OTM at Polytechnics, but it differs in that it did not include availability and quality assurance measures.

A study was conducted to analyze the availability and utilization of ICT facilities in the teaching and learning of OTM courses in Polytechnics in Nigeria's South Eastern States[4]. The investigation was conducted in the form of a survey. The study was led by five research questions. The study included 88 OTM lecturers as participants. Data was gathered via a questionnaire. The data in the research questions were analyzed using arithmetic mean and

standard deviation. According to the findings, ICT facilities for teaching office technology and management courses are limited. The study is similar to the current one in that it evaluated the availability and use of ICT facilities in the teaching and learning of OTM courses in Polytechnics, but it differs in that it included quality assurance measures in the teaching and learning of OTM courses in Polytechnics in South West Nigeria.

A study was done to ascertain the opinions of Business Educators on the suitability of instructional facilities and equipment for Business Education programs in Nigeria's Eastern States Colleges of Education[88]. The study employed a sample of 113 business professors and 19 administrators. The mean and t-test statistics were used to analyze the data. According to the findings of the survey, business education departments in Nigerian colleges of education are under-equipped. Despite the fact that the study was conducted in the Eastern States of Nigeria, it shares some similarities with the current study, which is being conducted in the South West States of Nigeria to determine the availability, utilization, and quality assurance measures in the teaching and learning of OTM programs in Polytechnics.

A study was conducted on the "evaluation of instructional resources for teaching Business Education at Colleges of Education in Edo and Delta States of Nigeria[89]. Five research questions led the study, which used an ex-post facto research design. The study's participants were all instructors and students in Business Education departments at Nigerian colleges of education in Edo and Delta states. Direct observation was used to collect data for the study, which was then analyzed using ratio and percentage scores. In all of the colleges studied, the equipment and supplies in the typing laboratories, shorthand studios, and model offices were found to be woefully inadequate. As a result, the study advised that the administrators of the College of Education offer suitable physical facilities for business education in accordance with NCCE requirements. The study is similar to the current one in that it evaluates instructional resources for teaching Business Education in Nigerian colleges

of education in the Edo and Delta states, whereas the current one focuses on the availability and use of instructional resources in teaching and learning, as well as quality assurance measures put in place in the teaching and learning of Office Technology and Management courses in Polytechnics.

In the Delta North Senatorial District, a research was conducted to analyze the availability and use of current instructional resources for teaching Business topics in secondary schools[90]. The participants in the study were 250 business teachers from Delta North's public high schools. The study included a survey approach and four research questions. The questionnaire served as the data gathering tool. The study questions were also answered using mean statistics and standard deviation, whereas the null hypotheses were tested using the z-test. The study's findings revealed that the only current instructional tools accessible for teaching business subjects were an electronic typewriter and a smart board; business subject teachers claim to have appropriate competences in the usage of modern instructional materials. However, it was suggested that the government work to ensure that schools have enough current instructional materials so that teaching and learning can be effective. Despite the fact that the study was performed in Delta North, it is relevant and similar to the current study, which is focused on the availability and use of instructional material in teaching and learning OTM in polytechnics in the South West.

In Taraba State, a research was done on the availability and use of instructional materials in the execution of the Nomadic Education Programme[91]. Based on the study's five objectives, five research questions and five null hypotheses were proposed. One hundred and eleven respondents were chosen at random from nineteen nomadic elementary schools in the state's three senatorial zones. In Taraba State, there were 613 nomadic primary school instructors working in 95 nomadic primary schools. The data was collected from the respondents using a structured questionnaire and observation. The study's data was

examined utilizing statistical computations such as frequencies, percentages, and chi square. No suitable educational materials were provided to nomadic schools, according to the findings. Teachers lacked adequate knowledge of how to use instructional materials, nomadic schools were severely understaffed, and the government failed to provide adequate instructional facilities. According to the report, the government should give electronic instructional materials to nomadic primary schools that are relevant to the curriculum and the age of the students. Workshops and seminars on Information Technology (IT) for nomadic primary school teachers should be held to familiarize them with how to use educational resources. Because it evaluates the availability and usage of instructional resources, it is similar to the current study. The current study differs in that quality assurance metrics were included as an additional variable.

At Moshood Abiola Polytechnic, Abeokuta, and Federal Polytechnic, Ilaro, Ogun State a study on infrastructural facilities in business education. office technology and management perspectives was conducted[92]. A total of 220 people participated in the study, which was directed by four research questions. The data gathering instrument was a questionnaire. The majority of infrastructural (instructional) facilities required for teaching and learning OTM were not present, according to the study's findings. It was also discovered that a lack of instructional resources would be detrimental to both OTM students and graduates. As a result, it was suggested that the NBTE create a policy emphasizing the dis-accreditation of Polytechnics without teaching facilities. Because it concerns instructional facilities in OTM in Polytechnics, this study was related to the current one.

A study on the assessment of the use of infrastructural materials in tertiary institutions in Borno State was conducted to determine the opinions of both lecturers and students on the use of instructional materials in tertiary institutions[22]. Ramat Polytechnic in Borno State provided a sample of 100 respondents. The investigation discovered, among other things, that

lecturers and students had access to and were making good use of instructional facilities. As a result, it was suggested that students take advantage of the resources and make proper use of them. This research was pertinent to the current study since it looked at how infrastructure materials may be used to help students learn more effectively. The purpose of this study was to determine the availability of facilities, their use, and quality assurance measures in the teaching and learning of OTM in South West Nigeria.

In Delta State Polytechnics, a study was undertaken on the availability and use of new technology in Business Education for teaching Office Technology and Management[93]. The study included 34 OTM lecturers as participants. The study was directed by two research topics and two null hypotheses. The data gathering instrument was a questionnaire. The mean and standard deviation were used to examine the data, whereas ANNOV was employed to test the null hypotheses. The findings demonstrated that new technology required for efficient OTM teaching was insufficient, and as a result, adoption was hampered. As a result, it was suggested that the government and Polytechnic administration provide appropriate funding for new technology needed in teaching the OTM program in order to ensure effective instruction. This study, which was done in Delta State, Nigeria, to evaluate the availability and use of modern technology in Business Education for teaching Office Technology and Management courses in Polytechnics, is related to the current study, which is being conducted in Nigeria's South West States to determine the availability and usage of instructional facilities, as well as quality assurance measures in the teaching and learning of office technology and management in polytechnics, however this study differs in that it is conducted in a different zone..

Students' academic progress in Office Technology and Management at Federal Polytechnic, Ede was impacted by the learning environment and suitable instructional materials. The state of Osun was investigated[18]. The questionnaire was written in a

descriptive style. Two research questions guided the investigation. The study's population consisted of 318 full-time National and Higher National Diploma students at the Federal Polytechnic, Ede's Department of Office Technology and Management during the 2015/2016 academic term. A designed questionnaire titled Environment and Instructional Resources as Predictor of Students' Academic Achievement was used to collect data for the study (E&IRPSAA). To address the research questions, the data was analyzed using an arithmetic mean. Students from schools with a calm learning atmosphere and well-equipped instructional facilities did better than those from schools with fewer facilities and a less enabling climate, according to the study's findings. According to the findings, school administration should, among other things, provide a learning environment that is suitable to teaching and learning, resulting in students' academic accomplishment in Office Technology and Management. The study is similar to the current one, which is being conducted to establish the availability, utilization, and quality assurance procedures in OTM teaching and learning in South West State, but it differs in that the quality assurance content was not included in the previous study.

Issues of Information and Communication Technology (ICT) Assessment in the Teaching and Learning of Business Education Courses was the subject of a study[65]. The study's goal is to look into concerns of information and communication technology (ICT) assessment in Delta State's Business Education teaching and learning. The 1337 respondents were 50 business education teachers and 1287 regular business education students from four Delta State tertiary institutions, and the researcher utilized a survey study design. There were 179 responses in total, comprising 50 teachers and 129 pupils. The study's instrument was a questionnaire. There are considerable concerns with the availability and utilization of ICT facilities for teaching business education courses, according to the findings. It was also proved that ICT aids students in their learning of business courses. The study is relevant to

the current study in the sense that it demonstrated the extent to which business educators are knowledgeable in the use of ICT facilities. The current study focuses on the availability, utilization, and quality assurance mechanisms in the teaching and learning of OTM in Polytechnics in South West Nigeria, whereas the previous study focused on the availability, utilization, and quality assurance mechanisms in the teaching and learning of OTM in Polytechnics in Nigeria.

In Benue State, Nigeria, a study looked into the impact of instructional materials on the teaching and learning of Social Studies[94]. Four goals, four research questions, and a hypothesis led the study. The population for the study was made up of both students and teachers, and the survey design was used. A total of 200 students were chosen from five schools and given questionnaires. For the study question, a simple percentage (percent) was used, and for the hypothesis, a chi square was used. The study discovered that the availability of suitable instructional resources, as well as the teacher's ability to improve, all had a substantial impact on the teaching and learning of Social Studies in Benue State's Oju local government region. It was suggested that the government and school leaders ensure the availability of visual aids such as wall charts, illustrated photos, pictorial materials, textbooks, and so on. The study is similar to the current one, which is being conducted to establish the availability, utilization, and quality assurance procedures in OTM teaching and learning in South West State, but it differs in that the quality assurance content was not included in the previous study. The relationship between instructional facility availability and utilization was not addressed in that study, which is now included in this one. When compared to merely abstract mathematics symbols, a study was done to determine the impact of instructional materials on academic achievement in public primary schools in Siaya County[68]. The project had four goals: to determine the impact of concrete materials on money measurement achievement, to determine the impact of Geo board on Geometry achievement,

to determine the impact of Algebra tiles on Algebra achievement, and to determine the impact of place value blocks on mathematics number treatment and control groups. The study was conducted in public primary schools in Siaya County. The sample size was 392 students and 8 mathematics instructors, with a target population of 20564 children and 696 standard four teachers. The research project's findings revealed that teachers had been educated on the importance of knowing when, why, and how to use manipulative effectively in the classroom, as well as opportunities to observe the first-hand impact of allowing students to learn through exploration with concrete objects. The control group of schools had a mean and standard deviation of 52.70 and 13.57, respectively, while the experimental group of schools had a mean and standard deviation of 74.30 and 8.74, respectively, according to the data. There was a statistically significant difference in performance between children in the control and experimental groups of schools. ($t(8) = -5.482$, $p = .004$, two tailed). This shows that children who are taught mathematics through instructional materials outperform youngsters who are solely taught mathematics through abstract mathematical symbols. The experimental group of schools received interventions (treatment) that resulted in a difference in performance. In monetary measurements, instructional material had a greater impact on achievement. Further data reveal that when children in the control group used place value blocks, they scored higher than children in the experimental group who used instructional materials. When compared to learning mathematics using solely mathematical symbols, the use of a geo board as an educational resource had a significant impact on geometry achievement. In comparison to merely mathematical symbols, Algebra tiles had the largest impact on achievement in Algebra as a concept in Mathematics. These data reveal that children in the experimental group had higher grades than children in the control group who did not get any educational materials. According to the findings, children who are taught mathematics using instructional materials perform better than those who are taught

mathematics using only abstract mathematics symbols. They should be taught using instructional materials for higher math performance. The study is comparable to the current one, which is being conducted to establish the availability, utilization, and quality assurance measures in OTM teaching and learning in South West State, but it differs in that the quality assurance content was not included in the previous study. The relationship between instructional facilities availability and utilization was also not treated in that study which form part of this present study. A study was conducted to investigate the extent of instructional aids' availability, implementation, and influence on improving academic performance of Physics students in secondary schools in Abuja, the Federal Capital Territory[95]. Participants in the study were limited to secondary schools in three FCT Area Councils. A total of 3,150 students and 163 teaching staff members were enrolled in the study. Senior secondary physics students in classes SS2 and SS3 as well as their teachers participated in the study. The questionnaire for this study used a descriptive survey method, including 60 items for students and 15 items for teachers. Six research questions were posed, with frequency counts and percentages used to assess the results. The data was analyzed and interpreted to come to the conclusion that Physics teachers in FCT secondary schools employed instructional aids, and that there was a significant difference in academic achievement between students taught with instructional aids and those taught without them. The research also indicated that some materials were hard to come by. The government should develop a policy statement for the availability, distribution, selection, and upkeep of instructional aids in secondary schools in the FCT. The study is relevant to the present since it is being conducted to determine the availability of facilities. The utilization and quality assurance measures in the teaching and learning of OTM in South West State differ from the previous study in that the quality assurance material was not included. The relationship between instructional facility availability and utilization was also not addressed in that study,

which is now incorporated into this one. A study was conducted on the use of instructional materials as methods for improving student academic performance44. The study employed the survey research method, with a total of 100 respondents drawn from five secondary schools. Data was collected using a questionnaire created by the researcher and restructured by two experts. The split-half approach was used to confirm the reliability, with a 0.63 alpha level of significance. With the help of the school leaders, the questionnaire was distributed to the respondents. The findings found that most teachers in schools do not make efficient use of teaching resources, and that the majority of teachers are unaware of the value of using instructional materials while teaching. Those who agreed to the practice did not put it into practice correctly. The study is comparable to the present one, which is looking at the availability, use, and quality assurance methods in the teaching and learning of OTM in Nigeria's South West States, but it differs in that the current one is taking place in Nigeria's South West States. The relationship between instructional facility availability and utilization was not addressed in that study, which is now included in this one.

A study was conducted on Information and Communication Technology Strategies among Nigerian Polytechnics' Office Technology and Management Educators[4]. The study looked at the extent to which ICT was being used, as well as the problems and solutions for repositioning OTM programs in Nigerian polytechnics. To drive the investigation, three research questions were established, as well as three null hypotheses. A total of 85 OTM educators were included in the study. Data was collected using a 45-item questionnaire. The Cronbach Alpha reliability test yielded a reliability coefficient of 0.82. Seventy-eight (78) copies of the questionnaire were collected and analyzed out of a total of eighty-five (85) copies. The hypotheses were assessed using t-test statistics at the 0.05 level of significance, whereas the research questions were addressed using mean and standard deviation. Because of numerous challenges, it was discovered that

ICT was not effectively used in the institutions evaluated. The study is similar to the current study, which is being conducted to investigate the availability, use, and quality assurance procedures in the teaching and learning of OTM in South West State, but differs in that the current study is being conducted in Nigeria's South West States. The relationship between instructional facility availability and utilization was not addressed in that study, which is now included in this one. In Rivers State University, a research study was undertaken to analyze the availability of instructional facilities in the teaching and learning of Business Education courses[5]. The study used a survey research design and was led by two research questions and null hypotheses that were assessed at a significance level of 0.05. The study's participants were 1,210 business educators and students from Rivers State University's Business Education Department. Using stratified random selection procedures, a sample size of 316 Business Educators and Students was randomly determined. The questionnaire designed by the researcher based on the insights gained from the review of empirical studies was employed as the study instrument. The instrument was designed on a four point. The consistency and reliability was assured. For research questions, mean and standard deviation were used, and for hypotheses, a t-test was used. According to the recommendations, adequate funds should be made available for the provision of instructional facilities, internet and other modern facilities should be installed in the department, and the population of students in the department should be considered in addition to the instructional facilities. The study is similar to the current study, which is being conducted to investigate the availability, use, and quality assurance procedures in the teaching and learning of OTM in South West State, but differs in that the current study is being conducted in Nigeria's South West States. The relationship between the availability of instructional facilities and their utilization was also ignored. The relationship between instructional facility availability and utilization was not addressed in that study, which is now included in this one.

A study was done on the availability and use of instructional resources for teaching Chemistry in senior secondary schools in Kogi State's Ankpa Local Government Area[50]. The study was guided by four research questions. It used a descriptive survey method. A study was done on the availability and use of instructional resources for teaching Chemistry in senior secondary schools in Kogi State's Ankpa Local Government Area[50]. The study was guided by four research questions. It used a descriptive survey method. Data was collected using two instruments: a checklist of instructional materials availability and a teachers' questionnaire named utilization and inhibiting factors chemistry questionnaire. Simple percentage, mean, and standard deviation were used to examine the data. The findings found that a significant amount of laboratory equipment and audio instructional resources were available but underutilized, and that audio visual materials for chemistry training were neither available nor used. Lack of funds, bad implementation policies, and a lack of motivation, among other things, were shown to be barriers to effective implementation. of instructional materials for Chemistry instruction. It was suggested that Chemistry teachers make every effort to use available instructional materials, and that the government secure enough funding for instructional material procurement. The study is similar to the current study, which is being conducted to investigate the availability, use, and quality assurance measures in OTM teaching and learning in South West State, but it differs in that the current study is being conducted in South West.

In the Yakurr local government area of Cross Rivers State, a study was done on the impact of instructional materials in the teaching and learning of biology in senior secondary schools[96]. Four research questions were established to lead the study in order to make it more effective. To determine the impact of a teacher's efficacy, the descriptive statistical method was used. To represent the study's population, five comparable secondary schools were chosen. To verify the research questions developed for the study, the

data was examined using a basic percentage technique. The findings revealed that students taught by highly trained Biology professors and those exposed to instructional materials during lessons attain higher levels of accomplishment. It was suggested that the government make basic instructional resources available to schools, as this would help to improve the teaching and learning process. The study is similar to the current study, which is being conducted to investigate the availability, use, and quality assurance procedures in the teaching and learning of OTM in South West State, but differs in that the current study is being conducted in Nigeria's South West States.

In Edo State, Nigeria, a study was conducted on the availability and use of tools and equipment for teaching and learning the garment making trade in senior secondary schools[54] .A descriptive survey was used in the study. This study enlisted the help of 72 teachers and 345 pupils. In Edo State, Nigeria, a study was conducted on the availability and use of tools and equipment for teaching and learning the garment making trade in senior secondary schools54. A descriptive survey was used in the study. This study enlisted the help of 72 teachers and 345 pupils. In Edo State, Nigeria, a study was conducted on the availability and use of tools and equipment for teaching and learning the garment making trade in senior secondary schools54. A descriptive survey was used in the study. This study enlisted the help of 72 teachers and 345 pupils. As a result, it was suggested that the government provide secondary schools with new equipment and tools for garment making teaching and learning. The variables of availability, utilization, and quality assurance were not addressed in depth in this study.

In the Ikwuano Local Government Area of Abia State, Nigeria, a research study was done to examine the impact of teachers' access to and use of instructional resources on secondary school students' academic achievement[97]. The sample size was determined using a multi-stage sampling technique. The sample size for students

was 120, while the sample size for teachers was also 120. The questionnaire, as well as a pre- and post-test when needed were used to collect data. The data was examined using the mean and simple percentage. The researchers discovered that teachers' attitudes influenced access to and use of instructional tools, and students who were taught with materials did better than those who were not. Based on the findings, it was suggested that teachers be required to attend frequent trainings to keep up with current instructional technology trends. Teachers should be able to easily access an instructional material bank set up by local, state, or national education resource centers. The study is relevant to the present study which is being carried out to determine the facilities availability, utilization and quality assurance measures to monitor teaching and learning of Office Technology and Management in South West.

Evaluation and assessment: Implications for Effective Teaching and Learning in Business Education was the subject of a study[98]. To drive the investigation, two research questions were given, and one hypothesis was generated and tested at the 0.05 level of significance. There were 138 people in the study. The study was designed with a specific purpose in mind. A questionnaire titled Issues with Evaluation and Assessment: Implications for Effective Teaching and Learning in Business Education was used to collect data for the study (IEAIETLBE). 125 lecturers returned their instruments in all. The questionnaire used a four-point Likert scale that ranged from Highly Effective to Not Effective and Strongly Agreed to Strongly Disagreed. The reliability of the items with face and content validity was tested using the test-retest approach. The validity was done by six lecturers. Mean rating and standard deviation was used to analyze the research questions while t-test for large group mean was used to test the hypothesis. Finding revealed that adequate and periodical evaluation and assessment is necessary for effective teaching and learning in business education. Also it was discovered that effective teaching and learning in business education is necessary since the programme is skill acquisition in nature. The study

is relevant to the present study which is being carried out to determine the facilities availability, utilization and quality assurance measures in the teaching and learning of OTM in South West State but differ in that the present study is in South West States of Nigeria. The relationship between instructional facilities availability, utilization and quality assurance was not treated in the study but only concentrated on assessment and evaluation which form a part of quality assurance measures in the current study.

The assessment of Business Education (OTM) in Nigeria: Challenges and Changes was the subject of a study[99]. The study's emphasis on a true evaluation method should serve as the foundation and true value of educational accomplishments, allowing for sensitive and viable decisions. As a result, the main challenge is that academics in the field of business education are still in desperate need of a viable method, procedure, and means of measurement for high-quality business education graduates who can turn the world of business education around. The aim of assessment, areas requiring review in business education programs, criteria for evaluation, hurdles to effective evaluation, challenge of business education in Nigeria, and chances of business education in Nigeria are all discussed in this article. It suggests, among other things, that evaluations be consistent and based on a behavioral outcome or program aim. The research is pertinent to the current study, which is being conducted to investigate the availability, use, and quality assurance measures in OTM teaching and learning in South West State. The current study, however, is in Nigeria's South West States. The relationship between instructional facility availability, utilization, and quality assurance, which was a variable in this study, was not thoroughly examined.

In Enugu State, a research study on the evaluation of equipment for the teaching and learning of business courses in public junior secondary schools was conducted[100]. A descriptive survey method was used. There were two research questions and one null hypothesis that was tested at the 0.05 level of significance. Data was collected using a

standardized questionnaire with reliability ratings of 0.86 and 0.90. The z-test, mean, and standard deviation were utilized in the analysis. The findings found that the business studies equipment essential for successful teaching and learning of business studies is generally missing in most schools, and even those that are available are grossly inadequate. It was advised that the State government make arrangements for the distribution of Business Studies equipment to schools where the subject is taught, among other things, in order to enable successful teaching and learning. The study is comparable to the present one, which looked into the availability, use, and quality assurance measures in OTM teaching and learning in Nigeria's South West States, but it varies in that the current one was done in Nigeria's South West States. The current study is comparable to the current study, which was performed to evaluate the availability, use, and quality assurance measures in OTM teaching and learning in South West State, however the current study is undertaken in Nigeria's South West States.

A study was conducted to determine the level of instructional material usage for ICT application in business programs at Rivers State Universities[101]. The study was conducted using a survey research design. The study was conducted using a survey research design. The sample size was 97 people, including 34 teachers and 63 students taken from business education departments at several tertiary institutions in Rivers State. The data gathering instrument was a questionnaire titled: The extent to which information and communication technology is available and functional in the teaching of business subjects. Three specialists from the Department of Business Education at Rivers State University of Science and Technology, Port Harcourt, validated the instrument's 11 items. The data collected was examined using the mean. Based on the study's findings, it was required to point out that there are no ICT facilities in the teaching of business education programs in tertiary institutions in Rivers State, and it was suggested that private groups and individuals work together to address this issue. Government and industry should collaborate to make ICT

equipment and facilities available for effective program teaching and learning. The study is similar to the current study, which is being conducted to investigate the availability, use, and quality assurance procedures in the teaching and learning of OTM in South West State, but differs in that the current study is being conducted in Nigeria's South West States.

In Anambra State, a research was done on business educators' use of multimedia and hypermedia technology in tertiary business school classrooms[102]. The study was guided by three research questions and two hypotheses. The study was designed as a descriptive survey. All 75 business educators in the department of vocational education at five tertiary institutions in Anambra State were included in the study. Data was collected using a 47-item questionnaire prepared by the researcher and validated by specialists in the field. The cronbach Alpha coefficients for sections A, B, and C revealed c-efficient values of.76,.68, and.70, respectively, with overall co-efficient values of.89, indicating that the instrument was deemed reliable for the study. The collected data was analyzed using the mean. At the 0.05 level of significance, the Z-test was utilized to assess the two hypotheses.

According to the findings, business educators in Anambra State's tertiary institutions do not use multi-media and hypermedia technology in their business education courses. The study is similar to the current study, which is being conducted to investigate the availability, use, and quality assurance procedures in the teaching and learning of OTM in South West State, but differs in that the current study is being conducted in Nigeria's South West States. The relationship between instructional facility availability, utilization, and quality assurance, which was a variable in this study, was not examined in depth.

A research was conducted on the use of modern technologies in the preparation of Business Education students for self-reliance[103]. The study used a descriptive survey research design. Two research questions and two null hypotheses were assessed at the 0.05 level of significance to guide the study. The study's participants were postgraduate students, lecturers,

and 400-level students from Kwara State University, Malete's school of business and entrepreneurial education. The respondents were polled using a structured questionnaire that included 30 items on a 5-point likert scale. Respondents were sent 93 questionnaires, 90 of which were completed and returned, and were used in the analysis. The data was analyzed using mean and standard deviation, and the hypotheses were tested using the t-test parametric test at the 0.05 level of significance. The findings revealed, among other things, that the only way to make graduates fit in society is for business educators to use new technology in the preparation of business school students for self-reliance. One of the recommendations was that new technology be appropriately offered and efficiently used to allow business graduates to be creative and innovative. The research is important to the current study, which is being conducted to identify the availability, use, and quality assurance procedures in the teaching and learning environment of OTM in South West State but differ in that the present study is in South West States of Nigeria. The relationship between instructional facility availability, utilization, and quality assurance, which is a variable in this study, was not examined in depth.

A research was undertaken at Sa'adatu Rimi College of Education in Kano to analyze the availability of educational electronic appliances for the Office Technology and Management (OTM) program[104]. The group consisted of five business educators and thirty NCE students. The study included the entire population. The instrument utilized to collect data was a structured questionnaire. The null hypotheses were tested using t-test statistics, while the data was analyzed using mean and standard deviation. The findings revealed that educational technology appliances such as e-mail, computer, uninterrupted power supply, local area networking, and ICT support persons are fairly good, while other items mentioned as available, such as projector, teleconferencing, and cybercafé, are considered inadequate. The research is pertinent to the current study, which was conducted to determine instructional

facilities and quality assurance measures in OTM teaching and learning in Nigeria's South West States. The relationship between instructional facility availability, utilization, and quality assurance, which was a variable in this study, was not thoroughly examined.

A study was performed on issues and trends in the implementation of modern technologies in teaching Business Education in Nigerian Universities in the South-South States[105]. A survey research design was used in this study. The population of the South-South State of Nigeria consisted of 72 business instructors from Nigerian colleges. Three research areas and three null hypotheses guided the investigation. The study used a four-point rating scale questionnaire with 15 items in each of three categories. To address the study objectives, the data was analyzed using mean and standard deviation, as well as a t-test at a significance threshold of 0.05 to assess the null hypotheses. The study's findings revealed that new technologies in Business Education for instructional delivery are underserved, inhibiting Business Educators from effectively implementing these new technologies in their teaching of Business Education courses in Nigerian universities. The research is pertinent to the current study, which was conducted to determine instructional facilities and quality assurance measures in OTM teaching and learning in Nigeria's South West States. The relationship between instructional facility availability, utilization, and quality assurance, which was a variable in this study, was not thoroughly examined.

A study was conducted on the use of information technology to improve the teaching and learning of Business Education subjects in secondary schools[106]. After being evaluated using Conbach Alpha, the instrument was certified by three specialists and had a reliability coefficient of 0.86. The data was analyzed using mean and standard deviation to answer the research questions and a t-test to assess the null hypotheses at a significance level of 0.05. The study's findings revealed that new technologies in business education for instructional delivery are underserved, deterring business educators from effectively implementing these

new technologies in teaching business education in Nigeria's South-South states. The study is similar to the current study, which is being conducted to investigate the availability, use, and quality assurance procedures in the teaching and learning of OTM in South West State, but differs in that the current study is being conducted in Nigeria's South West States. The relationship between instructional facility availability, utilization, and quality assurance, which is a variable in this study, was not examined in depth.

A study was done on the adequacy and use of ICT resources for effective instructional delivery in Business Education in universities in South-West Nigeria[24]. Four null hypotheses were evaluated and two research questions were employed. The study employed a descriptive survey research approach with a population of 52 business education lecturers. The data gathering instrument was a questionnaire. The instrument's reliability was determined using the measure of internal consistency technique, with Cronbach Alpha yielding reliability values of 0.85 and 0.94 for the two parts and an overall reliability of 0.90. The mean and standard deviation were used to evaluate data and establish whether or not respondents' views were homogeneous, while the t-test was utilized to test the hypotheses at the 0.05 level of significance. The findings demonstrated that ICT resources were insufficiently available for business education programs in universities, and that lecturers' use of them for high-quality instructional delivery was limited. As a result, it was suggested that the university administration and the government offer appropriate ICT resources for the program, and that professors endeavor to gain skills so that they may make full use of them. The study is similar to the current study, which is being conducted to investigate the availability, use, and quality assurance procedures in the teaching and learning of OTM in South West State, but differs in that the current study is being conducted in Nigeria's South West States. The relationship between instructional facility availability, utilization, and quality assurance, which is a variable in this study, was not examined in depth.

A study was conducted on the issues of full utilization for using ICT/Internet services in teaching Business Education courses[107]. Its main focus was on teacher and student ICT education. The importance of ICT education for teachers was highlighted in detail. The article examines how ICT might be used to improve and expand existing teaching practices. Teachers were discovered to be developing and testing new technologies aimed at assisting students' learning. One of the recommendations was to improve students' motivation by providing both desktops and laptops, as well as a conducive teaching and learning environment. The study is similar to the current study in that it focuses on facilities and quality assurance in the teaching and learning of the OTM program, but it differs in that it does not address the lack of instructional facilities in most of the schools.

A study was conducted on the challenges and technological developments in Business Education on teaching and learning[125]. It emphasized new technology in business education, technological advances, and certain barriers to effective business education teaching and learning. The extent to which e-learning technologies are used in the delivery of business school teaching was also outlined and addressed. The conclusion reached was that business educators should re-think their teaching approaches in order to achieve high-quality teaching and learning. To improve their instruction delivery, business educators should refresh their knowledge and abilities with new technology, according to the article. The study is comparable to the current study in that it focuses on facilities and quality assurance in the teaching and learning of OTM programs, but it differs in that it does not consider the lack of instructional facilities. The study did not address the perceived benefits of instructional facilities to quality assurance and student learning.

In the states of Kwara and Oyo, a study was undertaken on the use of Internet-based social media as a tool for improving teaching and learning in Business Education disciplines[108]. The study used a descriptive research methodology, with a population of 1,402

respondents made up of business education professors and 1,373 business education students from four tertiary schools in the states of Kwara and Oyo. A total of 160 people were surveyed, with 23 academics making up the sample size. The researchers devised a ten-item questionnaire for the investigation. The data was analyzed using the mean, and the null hypotheses were tested using the pearson product moment correlation. The study discovered a link between social media on the internet and the teaching and learning of Business Education subjects. Based on the findings, it was suggested that he create an enabling environment and provide the required facilities to improve the use of internet-based social media for teaching and learning business education, among other things. The study is similar to the current study in that it focuses on facilities and quality assurance in the teaching and learning of the OTM program, but it differs in that it does not address the lack of instructional facilities in most of the schools. It also differs in that the research is conducted in a separate location.

In Delta State Polytechnics, a study was undertaken on the availability and use of new technology in Business Education for teaching Office Technology and Management[109]. The survey research method was used. In Delta State Polytechnics, 34 OTM lecturers made up the population. The study was directed by two research topics and two null hypotheses. A four-point likert rating scale questionnaire with 20 items in two clusters was utilized in the study. After being examined with Cronbach Alpha, the instrument was certified by two professionals and had a reliability coefficient of 0.86. The data was analyzed using mean and standard deviation to answer the study questions and ANOVA to test the null hypotheses at a significance level of 0.05. The study's findings suggested that the Polytechnics' administration and the government should sufficiently supply new technologies in business education required for the success and effective teaching of the OTM program in order to assure a successful instructional process. The study is comparable to the current study in that

it focuses on facilities and quality assurance in the teaching and learning of OTM programs, but it differs in that it was conducted in the South-South, whereas the current study is conducted in the South-West. The study did not take into account the lack of instructional facilities in majority of the schools.

In Kwara State, a research was done on the impact of modern technology on the teaching of business courses in tertiary institutions[110]. The study was directed by two research questions and one null hypothesis. The survey was designed in a descriptive manner. The study's participants were 37 business educators employed by Kwara State Polytechnic. The data gathering instrument was a questionnaire. The percentages mean score was utilized to analyze the study's data. The data analysis revealed that lecturers had access to modern technology for teaching business education, with a reliability coefficient of 0.81. Technology has also been found to have a favorable impact on the teaching of business education courses. The study is similar to the current study in that it focuses on instructional facilities and quality assurance in the teaching and learning of the OTM program, but it differs in that it does not address the lack of instructional facilities in most of the schools. The research area is also distinct from that of the current study.

A study was conducted on the need for new learning tools to be adopted in the teaching and learning of Business Education programs[111]. It also considers the concept of new learning technologies in relation to the study of business education, as well as its application and problems. The study was conducted using a survey research design. The study was also directed by two research questions and two null hypotheses. The survey included 30 Business Education lecturers from two Abia State post secondary schools. Data was collected using a questionnaire that was approved by two experts and tested for reliability using test-retest. The study determined that a mean rating of 3.5 or higher was accepted, while a rating of 3.4 or lower was rejected. Some new technologies have been

embraced and are being used in the teaching and learning of business education programs, according to the findings.

In Katsina State, Nigeria, a study was conducted on the imperatives of new technologies in the teaching and learning process in Business Education in tertiary institutions[30]. The study outlined the characteristics of teachers who will aid in the acquisition of knowledge as well as the educational ideas and processes for such teachers. It also specified the modes of teaching and learning, among other things. It discussed the necessity for new technology in business education for successful teaching and learning, the benefits of new technologies for teachers and students, and technological advances and problems in business education. It exposed Katsina state's pitiful state of inadequate infrastructural facilities and their use in teaching office technology and management in polytechnics. The study has some parallels to the current study, which is focused on instructional facilities and quality assurance in the teaching and learning of OTM programs in Nigerian polytechnics, but it differs in that quality assurance measurements were not included in the study. The research area is also distinct from that of the current study.

A research study was undertaken on the use of technology in teaching software application courses and its impact on the performance of Secretarial Education students[112]. The goal of the study was to see if incorporating technology into the teaching of a software application course had an impact on the performance of Secretarial Education students. The study used a comparative research approach, with the results of students in the course from four distinct years (2012–2015) analyzed. To drive the investigation, one research question was posed and three null hypotheses were created. A total of 163 secretarial education students from the Rivers State University of Science and Technology in Port Harcourt, Nigeria, made up the population and sample size. The study questions were answered using mean and standard deviation, while the hypotheses were tested using the z-test and Pearson

product moment correlation. The findings showed that secretarial education students who were taught the software application course without the use of technology performed better than those who were taught with technology in delivering their lectures, which will help reduce the number of students who are taught with technology. It was suggested that business education professors start using technology in their lectures, as this will assist students overcome their fear of technology integration in the teaching and learning process. The study is similar to the current study in that it focuses on instructional facilities and quality assurance in the teaching and learning of the OTM program, but it differs in that it does not address the lack of instructional facilities in most of the schools. The research field was also distinct from that of the current study.

A study was done in Kogi State to assess the effects of technology advancements and effective secretarial and office administration service delivery in tertiary institutions[113]. The study was led by three research topics and three null hypotheses. The study was conducted using a survey design. The population consists of 246 secretaries recruited from Kogi State's nine tertiary institutions. The population as a whole was analyzed. Data was collected using a standardized questionnaire. The item was tested for face and content validity by three experts. They employ the Cronbach Alpha reliability test to examine the internal consistency of the questionnaire items, which yielded a reliability index of 0.83. The research questions were answered using the mean and standard deviation. It was discovered, for example, that the secretarial studies (OTM) curriculum should be revised to accommodate more modern technology. The study is similar to the current study in that it focuses on instructional facilities and quality assurance in the teaching and learning of the OTM program, but it differs in that it does not address the lack of instructional facilities in most of the schools. The research area is also distinct from that of the current study.

A study was undertaken on establishing quality assurance in tertiary institutions'

Office Technology and Management programs[67]. According to the findings, several programs in most Polytechnics, Universities, and other similar higher institutions do not strictly adhere to the prescribed norms and course specifications in order to maintain standards. As a result, the majority of its graduates lacked the necessary skills, knowledge, and competences to function in the workplace. The survey also found that OTM was designed to assist students in gaining important information in office skills and competences for self-actualization and long-term sustainability. That quality assurance is a planned and systematic review process carried out by organizations or institutions to determine whether standards are being met, and that it is the only panacea for ensuring confidence, standards, acceptable norms and practices for maximum academic excellence and achievement in the OTM program and other educational programs. The study is similar to the current study, which is being conducted to investigate the availability, use, and quality assurance procedures in the teaching and learning of OTM in South West State, but differs in that the current study is being conducted in Nigeria's South West States. The relationship between instructional facility availability and utilization was not addressed in that study, which is now included in this one.

For Sustainable National Development, a study on quality assurance and skill acquisition in Office Technology and Management was conducted[59]. In order to achieve long-term national growth, the report looked at quality assurance and talent building in OTM. It went over the definition of quality assurance, skill acquisition, OTM objectives, qualitative OTM program strategies, sustainable national development, OTM and national development, and forces working against quality assurance in OTM for sustainable national development. The non-sustainability of the Nigerian economy is a result of the government's disregard of vocational and technical education, which includes office technology and management as a viable choice, according to the study. The study advised, among other things, that Polytechnics and OTM departments avoid window dressing for accreditation and establish

monitoring teams to monitor and supervise the OTM program's teaching process to ensure excellent teaching and learning. The study is similar to the current one, which is being conducted to determine the availability, use, and quality assurance procedures in the teaching and learning of OTM in South West States, but it differs in that the current study is being conducted in Nigeria's South West States.

A study was conducted on quality assurance implementation, management methods, and staff performance at the Sultanate of Oman's Technical Colleges[68]. In order to meet the research objectives, a quantitative research approach and a correlational research design were deemed necessary. The study's respondents included various academics, employees, and administrators from several Technical Colleges. In terms of general higher education standards and the application of norms of good practice in higher education, it was discovered that there was a highly satisfactory degree of quality assurance implementation. All of the null hypotheses were rejected in favor of the study hypotheses, indicating that there was a substantial link between quality assurance implementation and staff performance, as well as quality assurance implementation and management practices and staff performance.

The study is similar to the current study, which is being conducted to investigate the availability, use, and quality assurance procedures in the teaching and learning of OTM in South West State, but differs in that the current study is being conducted in Nigeria's South West States. The connection between instructional facility availability, utilization, and quality assurance was not discussed in depth.

A study was conducted on the adoption of internal quality assurance in purposefully selected Ghanaian polytechnics[60]. In-depth interviews were conducted as part of a qualitative technique based on a case study research design. Internal quality assurance policies, teaching and learning processes, curriculum design, evaluation and review, research performance, extension activities, students' assessment practices, student-lecturer assessment, and student

support services were all mentioned as areas where the Polytechnics had internal quality assurance systems and practices in place. Infrastructure issues, money and budget limits, human capacity constraints, and a lack of a quality culture were discovered to be barriers to quality assurance implementation in polytechnics. Ghanaian Polytechnics should have clear rules and procedures in place to ensure the quality and standards of their programs and awards, according to the report. Polytechnics should also provide the appropriate learning facilities, resources, and support systems to enable high-quality teaching and learning. The study is similar to the current study, which is being conducted to investigate the availability, use, and quality assurance measures in OTM teaching and learning in South West State, but differs in that the current study is being conducted in Nigeria.

It was investigated Towards Quality Assurance in Business Education in Nigeria: Constraints and Control[67]. The paper examines the notion of quality assurance in Nigerian business education programs, focusing on its limits and control measures. The importance of quality assurance in business education was emphasized in order to enhance and improve the system's effectiveness and efficiency in meeting the established standards. However, evidence abounds in recent times that Nigeria's education system (including Business Education) is operating below expectations, according to the report. Although various issues, such as a bad assessment program, insufficient money, poor supervision, and attitudinal failure, have compromised the quality assurance of the Business Education program, the situation may be remedied and remodelled to ensure quality.

As a result, the paper came to a conclusion for the subject matter, recommending, among other things, that a positive attitude change, internal integrity, and dedication by all stakeholders to the entire topic of education be ensured in order for quality to be assured in Nigerian business education. The study is similar to the current study, which is being conducted to investigate the availability, use, and quality assurance procedures in the

teaching and learning of OTM in South West State, but differs in that the current study is being conducted in Nigeria's South West States. The relationship between instructional facility availability, utilization, and quality assurance, which is a variable in this study, was not examined in depth.

For long-term national growth, a study on quality assurance and skill acquisition in Office Technology and Management was done[59]. The study looked at the definition of quality assurance, skill acquisition, office technology and management objectives, strategies for a qualitative OTM program, sustainable national development, OTM and national development, and factors that impede quality assurance in OTM for sustainable national development. The report found that the Nigerian economy's non-sustainability is due to the government's failure to invest in vocational and technical education, among which office technology and management is a feasible choice. The study recommended that polytechnics and OTM departments avoid window dressing for certification and instead establish monitoring teams to monitor and supervise the teaching and learning process in order to ensure high-quality output. The study is similar to the current study in that it focuses on instructional facilities and quality assurance in the teaching and learning of OTM programs, but it differs in that it only focuses on quality assurance without a thorough examination of what might lead to skill acquisition in OTM programs. The research area is also distinct from that of the current study.

A study was undertaken on how to improve the culture of quality assurance in higher education from the standpoint of controlling institutional accountability[76]. The role of academic leadership in quality improvement, stakeholder involvement, and entrepreneurialism management was explored in the study. The descriptive survey was used by the researcher since it was a good fit for this investigation. They used a questionnaire and a structured interview. The population of the study consists of all six universities of technology. In addition, a

questionnaire was created to assess several areas of quality assurance methods, processes, and procedures. It was recommended that putting together diverse parts will help them in their quest for quality assurance. The study is comparable to the current one, which focuses on instructional facilities and quality assurance in OTM course teaching and learning.

2.4 Conceptual Framework

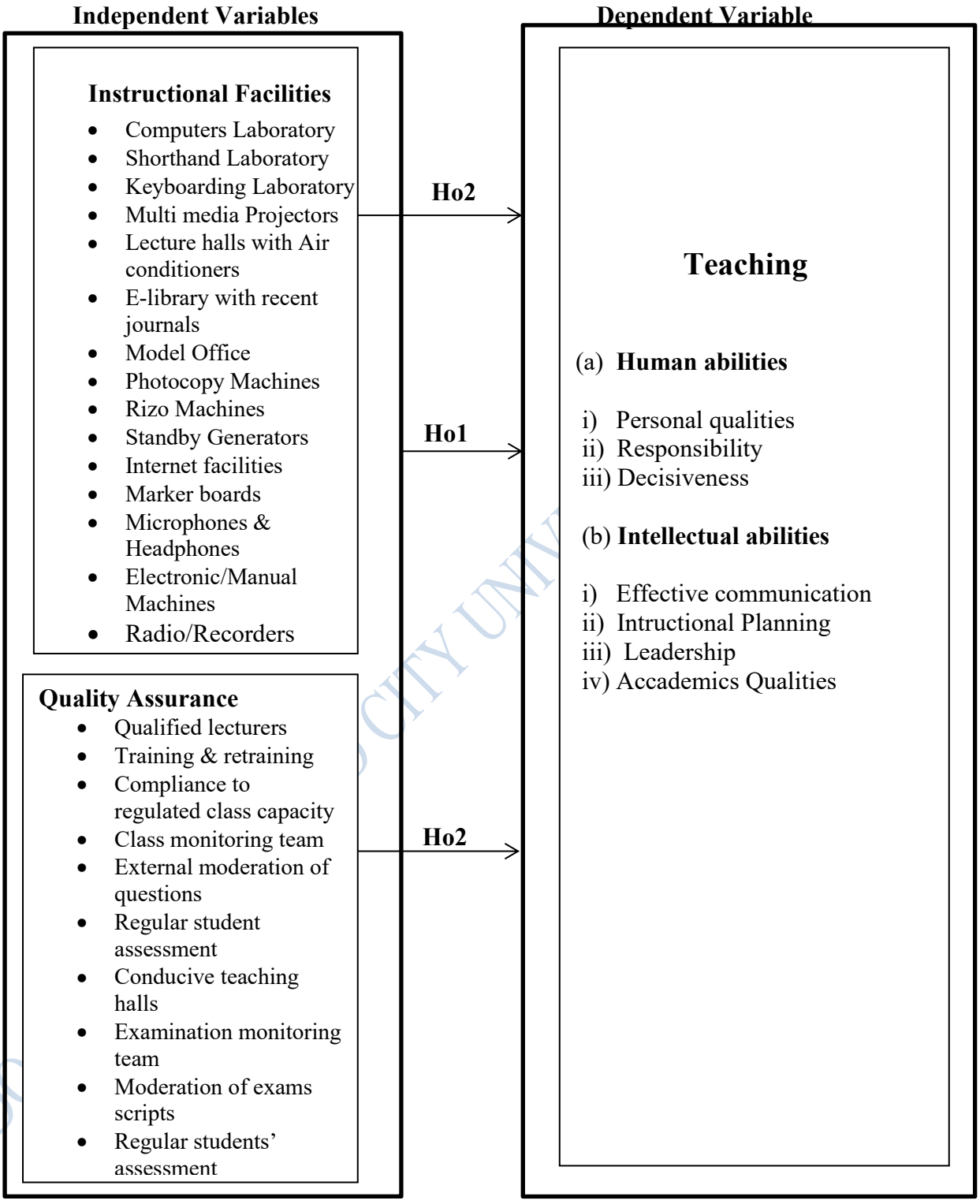

Fig 2.2: Conceptual framework

Source: Akasi, S.E. 2021

Figure 2.2 displays the model's conceptual structure, which includes three variables: instructional facilities, quality assurance, and teaching. Teaching of Office Technology and Management courses with measurements of human and intellectual talents is the study's dependent variable. Personal traits, responsibility, and decisiveness are markers of human abilities, whereas effective communication, instructional planning, leadership, and academic qualities are signs of intellectual talents. These metrics are adapted from a study on educational services, teacher quality, and student academic success that established two metrics that are relevant to this research[1]. This method is used to assess instruction in this study. to determine Computer laboratories, shorthand laboratories, keyboarding laboratories, multi-media projectors, model offices with (TV, Radio, photocopying machines, rizo machines), standby generators, Internet facilities, and maker boards were adapted from the Office Technology and Management program's course manual[78]. For the purposes of this study, qualified lecturers, instructors, technologists, lecturer training and retraining, class monitoring team, conducive teaching environment, timely dissemination of information, examination monitoring team, moderation of examination questions, and standby generator were used to measure quality assurance are based on a study titled "Quality assurance implementation, managerial methods, and employee performance[68].

Hypothesis 1 was used to check the combined influence of instructional facilities and quality assurance measures on teaching of Office Technology and Management courses in public polytechnics in South West, Nigeria while hypothesis 2 was to reveal the relative influene of instructional facilities and quality assurance measures on teaching of Office Technology and Management courses in public polytechnics in south West Nigeria.

2.5 Summary of Gaps in Literature

Effective teaching is viewed as a necessary component for OTM graduates to be relevant in the workplace. Any organization's existence and relevance are determined by the quality of its employees' knowledge, skills, and attitudes, including OTM graduates. As a result, in order for OTM graduates to be employed and self-sufficient, they must have completed all of the key skill courses outlined in this study. As a result, teaching OTM courses is a crucial component of polytechnic life. This is currently being aided by irresistible technical forces, as the curriculum signals a shift toward Information and Communication Technology. The world is a global village, and technology is changing at a breakneck pace; only OTM graduates who can integrate technology with efficient business skills will be able to keep up.

The review of literature explained concept of instructional facilities as it relates to the present study under investigation. It went further to explain learning theories about instructional facilities in the teaching of OTM courses in Polytechnics. Concept of quality assurance and its impact on teaching of OTM courses was also exhaustively discussed. The impact of quality assurance measures in the teaching of OTM courses was fully explained. The review also examines Office Technology and Management programme, the origin of OTM programme in Nigeria and the change in both name and curriculum from Secretarial Studies to the present Office Technology and Management programme.

The review examines some critical issues for consideration in the teaching of OTM courses; such as lack of instructional facilities, funding, electricity, compromise on the part of school management and government regarding provision of enabling environment, training and re-training of lecturers on modern technologies.

Conclusively, while previous studies conducted by other researchers have been helpful in the organisation of this research, none has focussed on instructional facilities and

quality assurance measures for the teaching of OTM courses in public Polytechnics in South West Nigeria. The former studies only served as guides and were not reproduced either fully or partly in this research work. To the best of the researcher's knowledge, no study has been conducted on Instructional Facilities and Quality Assurance on Teaching of OTM courses in public Polytechnics but not specifically public Polytechnics in South West, Nigeria. This is the gap this research work has filled which all of the previous studies reviewed failed to deal with.

Table 2.1: Summary of Gaps in Literature

S/N	Author's Name & Year	Research Title	Findings	Gaps
1.	Erwat, E.A. & Akasi, S. E. 2020	Effects of Instructional facilities on the teaching and learning of Business studies in Ede South Local Government Area, Osun State	Findings show that instructional facilities for teaching has positive influential effect on students' academic performance.	Limited to Ede South Local Government, Osun State
2.	James E. Ogbu,2018	Availability and Utilization of Instructional Facilities for the teaching of basic electricity in Technical Colleges in Ebonyi State	The study revealed the use of facilities for teaching and learning are moderately utilized.	Limited to Technical Colleges in Ebonyi State.
3.	Sokyes Hannatu Lapak, Wetnwan Priscilla Moris & BewaranYongsun Shikfu, 2018	Quality assurance and skill acquisition in office technology and management for sustainable national development.	The results showed that most facilities for teaching are available at low extent.	The study is limited to Quality Assurance and Skill Acquisition..
4.	John Michael V. Faller, 2018	Quality Assurance Implementation Management Practices and Staff Performance in the Technical Colleges of the Sultanate of Oman, Middle East.	It was discovered that there was a very satisfactory level of quality assurance in terms of general standards in higher education.	The study is limited to Technical Colleges of the Sultanate of Oman.

5.	Musa Aminu R, & Bah Ladi Fatima, 2018	Impact of availability and utilization of Bio/Chem Laboratory facilities and Students Academic Achievement in Secondary Schools in Yobe State, Nigeria.	The results revealed that instructional facilities have influential effect on the teaching and learning.	The study was limited to teaching and learning of Biology/Chem.in Secondary schools.
6.	Toyosi O., 2018	Lack of instructional materials and teaching methods as factors hindering effective teaching and learning of physical education in Ondo State, Nigeria	This finding indicated that method of teaching hinders effective learning in Junior Secondary Schools in Akoko Local Government Area of Ondo State.	The study was limited to Akoko South/West Local Government Area of Ondo State.
7.	Odeniyi Olujinmi Adebayo Zamani, and Saladin Quadri Adigun, 2018	Impact Of Instructional Aids On Students' Academic Performance In Physics In Secondary Schools In (FCT) Abuja, Nigeria	Findings demonstrated that the Physics' teachers in FCT secondary schools were using instructional aids that had significant influence in student's performance.	The study was limited to FCT, Abuja.

8.	Ekawarna, Ade Kusmana, & Martinis Yamin, 2018	Effects of Instructional Materials on Student's Achievement in Fkip Jambi Universitas.	The results show that those taught with instructional materials performed better than those taught without instructional materials	The study findings was limited to Fkip Jambi Universitas.
9	Vera Idaresit Akpan and Ugo Agamnetochi Ono, 2017	Effects of the Utilization of Instructional Materials on the Academic Performance of Senior Secondary School Students in Ikwuano Local Government, Abia State.	Results revealed that the disposition of the teachers affected the accessibility and utilization of instructional materials.	The study was limited to Senior Secondary Schools in Ikwuano Local Government, Abia State
10.	Lawrence Achimugu, 2017	Availability and Utilization of Instructional Materials for Teaching Chemistry in Senior Secondary Schools in Kogi State.	The study revealed that good number of laboratory equipment were available but not adequately utilized.	The study finding was limitd to Senior Secondry Schools in Kogi State.
11.	Rafiu Ademola Olatoye, 2017	Effect of teaching using charts, real specimens and videos on senior secondary school students' achievement in Katsina State.	Findings from the study showed that there is significant effect of treatment on students' achievement in their studies.	The study finding was limited to some selected senior secondary schools in Katsina State.

12.	Keshav Raj Dhakal1, 2017	Availability And Utilization Of Instructional Materials In Teaching Geography In Secondary Schools in Kathmandu District.	The results showed that instructional materials for teaching geography in secondary schools are available and their utilization is of high extent.	The study finding was limited to Kathmandu District.
13.	Ikwuka, O, Kanikwu Nwamaka,&Ikwuka David Chibuike 2016,	Utilization of Instructional Resources as Perceived by Student Midwives in School of Midwifery, Asaba, Nigeria.	Results showed that tutors utilized instructional resources at a low extent in teaching.	The study finding was limited to students' opinions
14.	Comfort Enibokun Ihionkhan and Quincy A. Braimah 2017	Assessing the Implementation of Instructional Resources and Utilization of OTM Curriculum in Edo and Delta States Polytechnics.	The findings revealed that equipment and supplies in office practice and model laboratories were grossly inadequate.	The study was limited to lecturers in OTM departments of the Polytechnics in Edo and Delta States.

15.	BabayoYakubu Adamu, 2017	Assessment of Schools Facilities and Utilization Time-Rate at Technical College Level within Bauchi States.	The results revealed that the four technical colleges within Bauchi zone failed to comply with the recommended class-size. .	The study was limited to Technical Colleges within Bauchi State.
16.	Lawrence Achimugu, 2017	Availability and Utilization of Instructional Materials for Teaching Chemistry in Senior Secondary Schools in Ankpa Local Government Area, Kogi State.	The results showed that good number of laboratory equipment were available but not adequately utilized.	The study was limited to Ankpa Local Government Area, Kogi State.
17.	Yu-Ping Hsu, 2017	The Development and Impact of the Quality Assurance System on Higher Education in Taiwan	Study revealed that the process of quality assessment resulted in altering organisational structures and academic profession within institutions	The study was limited to Taiwan in East Asia.
18.	Musah, Aminu & Bah Ladi Fatima, 2017	Impacts of Availability and Utilization of Laboratory Facilities and Students Academic Achievements.	The research revealed that biology/chemistry laboratory facilities are not available entirely.	The study was limited secondary schools in Yobe State.

19.	Solomon I. Agholor, 2017	Impact of National Board for Technical Education Accreditation Exercise on Office Technology and Management Programme.	This study revealed that NBTE accreditation exercise has positive impact on quality of personnel, adequacy of facilities and equipment in schools.	The study was limited to lecturers in OTM Departments in Polytechnics in South-South.
20.	Enonche Adalole, Kennedy A & Nnaji Florence, 2016	Factors affecting availability of instructional materials in teaching and learning OTM in polytechnics in Niger state, Nigeria	The study revealed that inadequate funding, poor maintenance culture, erratic power supply, lack of technical manpower are factors hindering effective teaching of OTM.	The study was limited to Polytechnics in Niger State.
21.	Utoware, Jude Daniel Amakaino and Kren-Ikidi, P. Chamberlain 2016	New Technologies in Business Education for Instruction and Practice: Imperatives for Quality Assurance in Niger Delta University, Bayelsa.	The results showed that in order to achieve quality assurance business educators need to re-strategize in their methods of instruction.	The study was limited to Niger Delta University, Bayelsa.
22	Abdullahi A. Bakare & Esther Temitope Olaniyi, 2017	Use and Application of ICT in Teaching and Learning for Quality Higher Education in Nigeria: A Literature Analysis	This paper concluded that appropriate use of ICT for teaching can fill the gap in higher institutions in Nigeria.	This study was restricted to literature analysis.

23.	Bukoye R. Olufunke, 2018	Utilization of Instructional Materials as Tools for Effective Academic Performance of Students in Senior Secondary Schools in Niger State.	The research revealed that there is inadequate facilities in most schools and that teachers did not know the importance derived from. .	The study was limited to Senior Secondary Schools in Niger State..
24	Francis Ansah, Patrick Swanzy and Hope Pius Nudzor 2017	Balancing the Focus of Quality Assurance Frameworks of Higher Education Institutions in Africa: A Ghanaian Context	The results indicated that the least attention is given to facilities in the quality assurance frameworks.	The study was limited to Ghanaian Context.
25	Homayoon Taheryar 2017	Perceptions of Quality in Higher Education in Afghanistan: A Case Study of Shaheed Rabbani Education University, Kabul Afghanistan	The results showed that academic staff at SREU perceived the fulfilment of standards mainly as the need for more inputs and resources.	Study was limited to Shaheed Rabbani Education University, Kabul Afghanistan.
26.	John Lawrence Tety 2016	Role of instructional materials in academic Performance in community secondary schools in Rombo District, Kaduna	The research revealed that instructional materials are the key to teachers/ students' performance.	The study finding was limited to Rombo District, Kaduna
27.	Rose Kangyang CHONG, 2016	Effects of instructional materials on performance of social	The study revealed differences between the pre-test and post-test	This study was delimited to two LGA in the State.

		studies students in junior secondary schools in kaduna north and south	scores of the respondents in the experimental group.	
28.	Adakole Enonche 2016	Availability and Utilization of Instructional Materia in Teaching and Learning of OTM in Polytechnics in Niger State.	Study findings revealed low extent of Instructional Materials in teaching of OTM in Polytechnics in Niger State.	The study was restricted to two Polytechnics in Niger State.
29	Abdu-Raheem Bilqees Olayinka 2016	Effects of Instructional Materials on Secondary Schools Students' Academic Achievement in Social Studies in Ekiti State, Nigeria.	It was revealed that there was a significant difference in the pre-test and post-test of students in the experimental group.	The study finding was delimited to Social Studies in Ekiti State.
30	James E. Ogbu, 2015	Influence of inadequate instructional materials in teaching and learning of electrical/electronics technology in Abakaliki, Ebonyi State.	The study revealed that inadequate instructional facilities influence teaching/learning of courses.	The finding was limited to Abakaliki, in Ebonyi State.

31	Amiaya, Anita Ogheneovo, 2016	ICT Challenges and Strategies among OTM Educators in Polytechnics in South-South, Nigeria	The study revealed that ICT was not sufficiently utilized.	The study was limited to South-South, Nigeria.
32	Boma Peter Briggs (2016)	Availability of Instructional facilities in Teaching and Learning in Business Education Department in Rivers State University, PortHarcourt, Nigeria	The research revealed inadequate instructional materials for teaching of Business Education subjects	The study was limited to Department of Business Education, Rivers State University, PortHarcourt.
33.	Ile, C. M, Nwogu Ugonwa, Udoye Nneka & Oru Patricia, 2013.	Quality assurance in Business Education through effective funding of tertiary educational institutions in Anambra State.	Findings revealed that there should be public/private collaboration in the funding of higher institutions.	The study was limited to tertiary institutions in Anambra State.
34.	Wamalwa Erastus Juma, 2016	Utilization of instructional media to enhance students' Learning of English in bungoma north district's secondary Schools, bungoma county, Kenya	The results revealed that apart from text books other materials were not adequate.	The study was limited to Bungoma North District, Kenya.

35.	Micheal Ayodele Fakomogbon, Olatayo Solomon Olanrewaju and Aderonke Kofo Soetan 2016.	Lecturers' Awareness And Utilization Of Instructional Media in The State-Owned Colleges of Education, South-West Nigeria	Results revealed that there are adequate materials but that lecturers have moderate awareness	The study was limited to lecturers. It cannot be generalized.
36	Lawrence Achimugu and Peter K. Onojah 201	Factors Hindering Effective Production and Utilization of Teacher-Made Instructional Materials in Teaching Senior Secondary Chemistry in Federal Capital Territory, Abuja, Nigeria	The results showed that inadequate training, poor funding, lack of functional workshops, lack of supervision of was among the factors hindering effective production and utilization of teacher-made instructional materials.	The study finding was limited to teachers in FCT Abuja only.
37	Mary Afi Mensah 2016	Implementation of Internal Quality Assurance in Polytechnics: Evidence from Ghana	It was revealed that the Polytechnics involved in the study have their respective internal quality assurance policies in place.	The study finding was limited to Ghana.
38.	Ejeka Charles A & Mgbonyebi Dickson C., 2016.	Towards Achieving Quality Assurance in OTM programme in Delta State Polytechnics	The study revealed that OTM is a programme of study meant to help its entrant to acquire the relevant knowledge and	The study was limited to OTM programme in Delta State Polytechnics.

			skills for self sustainability and actualization.	
39.	Uwameiye Bridget E., 2015.	Availability and utilization of tools and equipment for teaching and learning of garment making trade in Edo State.	Findings revealed that there is inadequate tools and equipment for garment making in the institutions studied.	The study was delimited to Edo State.
40.	Elizabeth Waithira Ngeru, 2015	Influence of teacher characteristics on utilization of instructional resources in teaching number work in preschools in westlands sub – county, nairobi county.	The study revealed that all the teachers in the pre-schools in the sub county adopted the use of instructional facilities in their subjects.	The study was limited to the instructional practices pre-schools in Westland Sub-County, Nairobi.
41.	Effiong, Oji Ekpo, Igiri Charles E. 2015	Impact of instructional materials in teaching and learning of biology in senior secondary schools in yakurr Local Government Area, Cross River State.	The results revealed that there is a positive achievement in students taught by highly qualified teachers and those exposed to instructional materials during lessons.	The study was limited to Yakurr Local Government Area, Cross River State.
42.	Ezenwafor, J. I. & Soneye, G. M.,	Adequacy and utilization of ICT	The study showed that ICT resources were not	The study was limited to

	2018.	resources for quality instructional delivery in Business Education in Universities in South West Nigeria.	adequately available for business education programme.	Business Education in Universities in South West.
43	Peggy Szymenderski, LiliyaYagudina& Olga Burenkova, 2015	The Impact of an Assurance System on the Quality of Teaching and Learning—Using the Example of a University in Russia and One of the Universities in Germany.	The results revealed that special organizational culture is not the only condition that must be met for effective evaluation efforts.	The study was limited to only two Universities in two countries
44.	Joseph Attiah Seniwoliba & Richard NalarbYakubu, 2015	An analysis of the quality assurance policies in a Ghanian University	The research revealed that the Directorate of Academic Quality Assurance (DAQA) undertakes many activities geared towards quality assurance enhancement in the University.	The study was delimited to Ghanian University.
45.	Oyelotan, I. O & Sholagbade, F.A. 2014	Instructional facilities and Business Education: OTM perspective in Ogun State.	The study revealed that facilities needed are not available for teaching of OTM courses.	The study was limited to Ogun State.

46.	Orheruata, J, E., Abubakar I. M. & Aminu, Y.M., 2015	Assessment and utilization of infrastructural materials in tertiary institutions in Borno State	It was discovered that instructional facilities enhanced students' performance in schools.	The study was limited to tertiary institutions in Borno State.
47.	Fadare, Grace O., 2015.	Utilization of new technology in OTM programme: Prospects and problems.	The study revealed that utilization of technology in teaching OTM courses influenced students' performance.	The study was limited to OTM Departments in South West States.
48.	Amesi Joy, 2015	Issues in evaluation and assessment: Implication for effective teaching and learning of Business Education in the Niger Delta.	Results revealed that adequate and periodic evaluation and assessment are effective for teaching of OTM courses.	The study was limited to Niger Delta.
49.	Enyekit, E.O., Obayi, A.U. & Enyekit, K.E.O., 2015.	Extent of instructional material usage for ICT application in Business Education programme in Rivers State Universities.	It was revealed in the study that there are no adequate ICT facilities in the teaching and learning of Business Education.	The study was limited to Rivers State Universities.
50.	Vin-Mbah, F. I., 2015	Business Educators'Utilization	The study discovered that Business Educators in	The study was limited to

		of multimedia and hypermedia technologies in the tertiary business education classroom in Anambra State.	Anambra State do not use multimedia and hypermedia technologies in teaching of business education courses	Anambra State.
51.	Utoware, J.D, Kren-Ikidi, C. P., & Apreala, I. O. 2016.	Issues and Trends in the application of new technologies in teaching Business Education in Nigerian Universities in South-south states.	The study showed that new technologies for effective instructional delivery are inadequate in Nigerian Universities.	The study was limited to Universities in South-South..
52.	John, F.N. & Saleh, M.A., 2016.	Availability of educational technological appliances for Office Technology and Management programme in Sa'adatu Rimi College of Education, Kano.	Educational technological appliances for teaching and learning OTM are not available, the study discovered.	The study was limited to Saádatu Rimi College of Education, Kano.
53.	Umoru Titus & Nnaji, F.O., 2017.	Utilizing new technologies in preparation of Business Education students at KWASU	Research revealed that utilizing new technologies for the teaching of Business Education is a sure way for self-reliance.	The study was limited to Kwara State University, Malete.

		for self-reliance.		
54	Yusuff, S., 2016.	Challenges and technological changes in Business Education on teaching and learning in Kwara State.	The results revealed that for standard and quality teaching and learning, Business Educators should re-strategies in their methods of teaching	The study was limited to Kwara State
55	Ogundele, I. S. & Lawal, L., 2016.	Influence of new technologies on the teaching of Business Education courses in tertiary institutions in Kwara State.	The study concluded that lecturers and students have access to new technologies in teaching of Business Education courses in Kwara State University, Malete.	The study was limited to Kwara State University, Malete.
56	Eneogwe, V.N., 2015	Adoption of the use of new technologies in Business Eduction and its challenges in Abia State.	It was revealed that new technologies for teaching and learning business education are being put to use in the State.	The study was delimited to Abia State.
57.	Ali, Y. & Fidelis, A.U., 2016.	Technological innovations and effective secretarial service delivery in	The study showed that modern office technology impact on the performance of secretaries in the area of	The study was restricted to Kogi State.

		tertiary institutions in Kogi State.	record management, word processing and communication.	
58.	Akasi, S.E. 2020.	Assessment of Instructional facilities for the teaching and learning of OTM in Polytechnics in Osun State	The study revealed inadequate instructional facilities in the teaching of OTM in Osun State.	The study was limited to Osun State
59.	Akasi, S. E., 2016	Environment and instructional facilities as predictor of students' academic performance in OTM programme in Osun State	The study showed that environment and instructional facilities are very germane to high achievement in OTM programme.	The study was delimited to OTM programme in Polytechnics in Osun State.
60.	Babayo Y. Adamu, 2017.	Assessment of schools facilities and utilization time-rate at Technical college level within Bauchi State.	It was revealed that the Technical Colleges in Bauchi zone did not comply with the recommended class capacity for effective learning.	The study was delimited to Technical Colleges in Bauchi State
61.	Wogboroma, N.,	Assessment of Internet usage on	The research revealed that the use of internet has	The study was limited to

	2015	business education students: Implication for effective teaching and learning in Rivers State.	positive effect on Business Education students' academic achievement.	teaching and learning of Business Education in Rivers State
62.	Igori, W, O, Ogaga, G.A. & Egbodo, B. 2016.	Effects of instructional materials on the teaching and learning of social studies in secondary schools in Oju Local Government Area, Benue State	The study discovered that instructional materials play crucial role in the teaching process.	The study was limited to Oju Local Government Area, Benue State.
63.	Ran, Yao Meixi & Zhang Tengyue, 2016.	ICT Integration in Education: Incorporation for teaching & learning improvement in Primary Schools in Klang Valley, Malaysia.	It was discovered that most of the teachers are regular users of ICT in their offices rather than for teaching in the classroom.	The study was delimited to primary schools in Klang Valley, Malaysia.
64.	Eze, O., 2015.	The imperatives of new technologies in teaching and learning process of Business Eduction in tertiary institutions in Katsina State, Nigeria.	The research revealed that the state of utilization of new technologies in the tertiary institutions were very unsatisfactory.	The study was limited to tertiary institutions in Katsina State.

65.	Okoro, Patience E., 2016	Facilities for stimulating the teaching of new technologies in Business Education as perceived by lecturers in Universities in South-South, Nigeria	The findings revealed that provision of adequate internet facilities can help to stimulate the teaching of Business Education.	The study was delimited to Universities in South-South, Nigeria.

Source: Akasi, S.E. 2021

Endnotes

1. Mary Ronke Arinde. Educational services, teacher quality and students' academic performance in public senior secondary schools, North central zone, Nigeria. *An unpublished Ph.D Thesis* submitted to the Department of Educational Management, Faculty of education, University of Ilorin, Ilorin, 2010.

2. Enonche Adakole. Availability and utilization of instructional materials in the teaching and learning of office technology and management courses. *Unpublished M.Sc (Ed) thesis* submitted to the Department of Business and Entrepreneurship Education, Kwara State University, Malete, 2016.

3. Ganiyu Titi Oladunjoye & Timothy Olusegun Eebo. Teaching and learning business education: evaluation strategies for keyboarding mastery. *Association of Business Educators of Nigeria, Conference Proceedings* 2(1), 135-142, 2015.

4. Christian Chukwu Okolocha & Collins Nwadiani. Assessment of utilization of ICT resources in teaching among tertiary istitutions business educators in South South Nigeria. *Journal of Education and Learning,* 109-118, 2016.

5. Peter Briggs Boma. Availability of instructional facilities in teaching and learning in business education Department in Rivers State University. *International Journal of Innovative Education Research,* 7 (2) 1-11, 2019.

6. Enonche Adakole, Kennedy Arebamen Eiriemiokhale & Florence Oluchi Nnaji. Factors affecting availability of instructional materials in teaching and learning of office technology and management programme in Polytechnics in Niger State, Nigeria. *American Journal of Research Communication,* vol. 4(10) 19-27, 2016.

7. Enonche Adakole Assessing the effectiveness of information technology in teaching business education in Nigerian tertiary institutions. *ABEN Conference Proceeding* 2(1) 223-229, 2016.

8. Charity Nneka Emeasoba. An evaluation of equipment for the teaching and learning of office technology and management in Abia State. *Association of Business Educators of Nigeria. Conference Proceeding,* 162-174, 2015.

9. Micheal Okpara. Teachers'self regulatory skills as correlate of students'achievement in integrated science. *Journal of Science Teachers'Association of Nigeria,* 46, 115-120, 2017.

10. David Zakka & Priscilla Matthew. Critical issues in the teaching and learning competencies of office technology and management. *Journal for the promotion/advancement of office management/secretarial profession,* (4) 22-29, 2018.

11. Ojo Adioye Adebayo. Effective utilization of equipment and machines: a means of improving teaching. *Journal of contemporary issues in education,* 1(1) 144-155, 2017.

12. Caroline Adeyemi. Competencies required by teachers of business education for effective teaching of entrepreneurship. *Business Education Journal* (1) 192-205, 2016.

13. Arthur Ajah. Evaluation of the training facilities and competencies for business studies in Polytechnics in the Southern States of Nigeria. *Journal of Business and Management* 1(1) 52-60, 2016.

14. Sunday Ebhodaghe Akasi & Taiwo Omoleye Adebayo. Office technology and management: a catalyst for youth employment and self-reliance. Conference paper delivered at School of Business Studies Annual Conference held at the Federal Polytechnic, Ede, Osun State, 2016.

15. Federal Republic of Nigeria. National Policy on education Lagos; NERDC Press. 2004.

16. Isaac Oluwole Folorunso. Alternative sources of funding ICT resources for OTM programme in Polytechnics in Osun State. *Abeokuta Journal of Association of Secretarial Staff of Nigeria,* 2(1) 59-67, 2015.

17. Sunday Ebhodaghe Akasi.. Assessment of instructional materials in teaching office technology andmanagement courses in Polytechnics in Osun State. Seminar paper presented to the Department of Information Management, Lead City University, Ibadan, 2020.

18. Sunday Ebhodaghe Akasi. Environment and instructional resources as predictor of students'academic achievement. *Journal of Eduction and Human Development,* vol. 6 (1), 26-36, 2016.

19. Keshav Raj Dhakal. Availability and utilization of instructional materials in teaching geography in secondary schools. *The Third Pole: Journal of Geography,* pp 51-58, 2017.

20. Rafiu Ademola Olatoye. Effect of teaching using charts, real specimens and videos on secondary school students' achievement in Mammalian skeletal system concepts. *ENSAYOS, Revista de la facultad de educacion de Albacete,* 32 (2), pp 63-75, 2017.

21. Lawrence Achimugu. Availability and utilization of instructional materials for teaching chemistry in senior secondary schools. *International Journal of Novel Research in Education and Learning* vol. 4 (3) pp 33-43, 2017.

22. Joyce Orheruata & Maman Abubakar. Assessment of utilization of instructional material in tertiary institutions in Borno State. *ABEN Conference Proceeding,* 1(1), 73-77, 2016.

23. Grace Olufunke Fadare. Assessment of instructional facilities and equipment available for teaching of office technology and management courses in Nigerian Polytechnics. *Nigerian Journal of Business Education,* 2 (3) 200-212, 2016.

24. Justina Ezenwafor & Gbolade Soneye Adequacy and utilization of ICT resources for teaching business education in Universities in South-West, Nigeria. *International Journal of Innovative Information System and Technology Research* 6 (1), 28-37, 2018.

25. James Ogbu. Availability and utilization of instructional facilities for teaching of basic electricity in Ebonyi State Technical Colleges. *ISSN 2224-607X (paper)mISN 2225-0565 (online)* 162-168, 2015.

26. Yongsun Bewaran, Daniel Dazan & Priscilla Moris Teachers' attitude towards teaching of the office technology and management in Nigerian Polytechnics. *Nigerian Journal of Business Education* 2 (3) 109-118, 2015.

27. Jude Daniel Utoware, Chamberlain Kren-Ikidi. New technologies in business education for instruction and practice: Imperatives for quality teaching. *American International Journal of Contemporary Research,* vol. 3 No. 9, 124-130, 2013.

28. David Smith. Competence in transition. Journal of European industrial training 45 (1) 44-50, 2018.

29. Faith Tony-Okeme Acharu & Solomon Ebiloma. Influence of infrastructure on the teaching and learning of office education in Polytechnics. *Nigeria Journal of Business Education* 2 (3) 78-88, 2014.

30. Samuel Igboke & Chinedu Okoro Imperativeness of educational infrastructures in the production of competent business teachers. *Nigerian Journal of Business Education* 2(3) 89-98, 2014.

31. Uyai Emmanuel Akpanobong, Eno Ukpong & veronica Ekpedeme Etim. Information and communication technology and the teaching of business subjects at the secondary school level in Akwa Ibom State. *Nigerian Journal of Business Education* 1(3) 268-278, 2014.

32. Alfred Obogbai Afeidia.. Challenges of office technology and management courses and its implications on the secretarial profession. *Nigerian Journal of Business Education* 1(3) 279-288, 2014.

33. Obiageli Ikwuka, Phoebe Kanikwu & David Ikwuka. Utilization of instructional resources as perceived by student midwives in school of midwifery, Asaba Nigeria. *Internal Journal of Science and Research* pp 23-27, 2016.

34. Taiwo Omoleye Adebayo An assessment of education resources available for office technology and management programme in Polytechnics in the South West zone of Nigeria. A paper presented at the conference for academic staff of higher and further education institutions organized by ACME professional (UK) in Aston University, Aston Triangle, Birmingham, 2017.

35. Frank Okoro. Strategies for enhancing the accessibility and use of information and communication technology in the colleges of education in Enugu State of Nigeria. *Nigerian Vocational Journal* 14 (2) 104-114, 2016

36. Frank Okoro & Mary Okoro. Polytechnic teachers' perception of the relevance of componenets of office technology and management programme in meeting the ICT needs of contemporary office. *Business Education Journal* VII (1) 46-61, 2015.

37. Joseph Ajiboye Fadare. Introduction to fundamental of modern office equipment/machinery for students of tertiary institutions. *New Deal Publications Ltd.,* Ikirun Road, Osogbo, Osun State, 2018.

38. Chris Ogbebor. Office education in Nigeria. The challenges and strategies. *Journal of Professional Secretaries and Administrators*, 8 (2) 10-17, 2017.

39. Sunday Osibor. Identification of the gaps in office technology and management in Nigeria. *Business Education Journal* 6(2) 143-155, 2014.

40. Isaac Okoh. Information and the new challenges in records management. *Workshop proceeding of Association of Professional Secretarial Staff of Nigeria*, 29-37, 2017

41. Comfort Enibokun Ihionkhan & Quincy Braimah.. Assessing the implication of instructional resources and utilization of office technology and management curriculum in Edo and Delta States Polytechnics. *Journal of Educational Policy and Entrepreneurial Research,* 49-57, 2017.

42. Charity Nneka Emeasoba & Onyeka Nweke. Level of availability and utilization of ICT facilities in teaching and learning of OTM in Polytechnics of Abia State. *Journal of Emerging Trends in Educational Research and Policy Studies,* 7(6) 404-413, 2016.

43. Joseph Adeyinka. Teachers' perception of the effects and use of learning materials. Unpublished teaching materials, Kwara State University, Malete, Nigeria, 2016.

44. Roseline Olufunke Bukoye. Utilization of instructional materials as tools for effective academic performance of students: Implications for counseling, 2018.

45. Thomas Isineyi.. Challenges of office education in the era of globalization. *Journal of professional secretaries and Administrators,* 12 (3) 4-16, 2017

46. Isaac Maduabuchi. A critique of the new curriculum in office technology and management and instructional facilities. *Business Education Journal* 6 (2) 209-220, 2016.

47. Isaac Adeyemi Komolafe. Advanced technology: An enhancement of secretarial practice. *Journal of professional secretaries and Administrators,* 12 (3) 93-103, 2017

48. Folahunmi Ibrahim Jimoh. Influence of inadequate instructional materials and facilities in teaching and learning of OTM in Polytechnics. *Business Education Journal* 6 (2) 101-109, 2016

49. Peter Iredia. Vocational and technical education: in Nigeria. Lecture paper delivered at Auchi Polytechnic, Auchi, Edo State, 2015.

50. Lawrence Achimugu Availability and utilization of instructional materials for teaching chemistry in senior secondary schools. *International journal of Novel Research in Education and learning*, vol. 4, 51-62, 2017.

51. Beatrice Arisa Arop. Effect of instructional materials on the teaching and learning of basic science in junior secondary schools in cross Rivers State, Nigeria. *Global Journal of Educational Research* vol. 14, 67-73, 2015.

52. Peter Eya. Instructional material procedures in a challenge education system. Paper presented at the annual conference organized by curriculum development and instructional material centre, University of Nigeria, Nsukka, 2017.

53. Igori Wallace. Effects of instructional materials on the teaching and learning of OTM in Polytechnics. *Business Education Journal* 6 (2) 221-240, 2016.

54. Bridget E. Uwameiye. Availability and utilization of tools and equipment for teaching and learning of garment making trade in the senior secondary schools in Edo State. *International journal of Humanities, Social Sciences and Education* vol. 3 12-18, 2016

55. Eghe Adwin Agbongiasede. Office technology and management curriculum in Polytechnics. *Nigerian Journal of Business Education* vol. 3, 30-45, 2016.

56. Abimbola Olanike Adegbenjo. Challenges of using emerging technology in the teaching of office technology and management courses in tertiary institutions in the South West of Nigeria. *Nigerian Journal of Business Education* vol. 1 No. 3 46-62, 2016.

57. Bukky Mandara and Vincent Paul. Utilization of information and communication technology in teaching office education for quality assurance of office education graduates in Adamawa State tertiary institutions. *Journal of Education and Policy Review* pp 11-20, 2016.

58. Smith Benjamin. Understanding and expanding multicultural competence in teaching. A faculty guide. Office of Teaching Resources in Psychology. *Retrievedfromhttp:/teachpsy.org.resources/Documents/otrp/resources*, 2016.

59. Hannatu Lapak Sokyes, Priscilla Moris Wetnwan & Yongsun Shikfu Bewaran. Quality assurance and skill acquisition in office technology and management for sustainable national development. *Nigerian Journal of Business Education* vol. 5 (1), 71-75, 2018.

60. Mary Afi Mensah. Implementation of internal quality assurance in Polytechnics: Evidence from Ghana. *European Scientific Journal*, vol. 12 No. 19, 221-241, 2016.

61. Fred Ansah. A strategic quality assurance framework in an African higher education context. *Quality in higher education* 21 (2) 1-19, 2015.

62. Oluwole Oyewole Developing quality assurance systems in African Universities. AAU initiatives. The quality assurance situation and capacity building needs of higher education in Africa 1-16, 2012.

63. James Okoro. Stategies for enhancing quality assurance in business teacher education programme in Nigerian Universities. *Journal of Education and Practice*, 202-208, 2015.

64. Beatrice Anioke Towards the changing role of contemporary office, challenges of quality assurance in skill development in Universities. *Nigerian Journal of Business Education* 1 (2) 57-6, 2015.

65. Justina Ezenwafor, Gbolade Micheal Soneye. Adequacy and utilization of ICT resources for quality instructional delivery in business eduction in Universities in South-West, Nigeria. *International Journal of Innovative Information Systems & Technology Research* 6(1) 28-37, 2018.

66. Immanuel Ajayi & Lukman Akintunde. The Universal issues of quality assurance in Nigerian Universities. *Journal of Sociology and Education in Africa,* 6(1) 168-183, 2017.

67. Moses Onyesom & Nze Kingsley Ashibogwu. Towards quality assurance in business education in Nigeria: Constraints and control. *Asian Journal of Business Management* 5(3) 306-312, 2013.

68. John Michael Faller Quality assurance implementation, management practices and staff performance in the technical Colleges of the Sultanate of Oman: Inputs for a quality intervention program. *Academic Journal of Interdisscipliнary Studies,* vol. 7 No. 2 49-60, 2018.

69. Aghatise Justus Osawaru & Dorcas Okungbowa. Quality assurance in business education in tertiary institutions. *Nigerian Journal of Business Education* vol.1(3), 1-8, 2014.

70. Moses Onyesom. Strategies considered effective for quality assurance in business education at the tertiary institutions in Anambra State, Nigeria. A paper preented at the International Conference of the Institute of Education, Delta State University, Abraka. 2015.

71. Solomon Ehindero. Accountability and quality assurance in Nigerian Education. Paper preented at the International conference of the Institute of Education, Olabisi Onabanjo University, Ago-Iwoye, 2014.

72. Oladipo Adeosun. Quality assurance and sustainable university education in Nigeria. Retrieved from http//aadice Hiroshima u.ac/(accessed on 24/2/2020).

73. Segun Ogunsaju. Nature and purpose of educational management. *The craft of educational management,* Ibadan Reginason books publishers, 2016

74. Matthew Arikewuyo.. Effective funding and quality assurance in the Nigerian education system. A paper preented at the 1st National conference of the Institute of Education, Olabisi Onabanjo University, Ago-Iwoye, 2011.

75. Esther Chukwudi Onouha. Quality assurance in teacher education. A discussion paper presented at the NTI 25th anniversary celebration, Osogbo, 2018.

76. Jacob Selesho. Enhancing the culture of quality assurance in higher education: perspectives of managing institutional accountability. *Mediterranean Journal of Social Sciences MCSER Publishing, Rome-Italy* vol. 5 No. 1, 12-16, 2014.

77. Tricia Ryan. Quality assurance in higher education: A review of literature. *Higher learning research communications*, 5 (4) 1-12, 2015.

78. National Board for Technical Education. Office technology and management curriculum and course specifications, Kaduna, Nigeria, 2004.

79. Sunday Adegbesan. Establishing quality assurance in Nigeria education system: Implication for educational managers. *Educational Reseach and Reviews* Vol. 6(2) 147-151, 2011.

80. Henry Azemikhah. The 21st century, the competency era and competency theory. Open learning Institute of TAFE. Retrieved on the 10th of August, 2015 from wwwww.avetra.org.au/ABSTRACTS2006/PA%20058.pdf.

81. B. F'. Skinner in B. T. Ajayi.. *Fundamentals of human learning, Ilorin:* Babjii Printing Works, 2015.

82. K. Wolfgang, C. E. Tolman in B.T. Ajayi.. *Fundamentals of human learning, Ilorin:* Babjii Printing Works, 2015

83. Ade Oyedijo Management theory. Paramount Books Limited, Ibadan, 1998.

84. Avy Donal. *Introduction to research in education.* USA Holt, Rineheat and Winston, Inc. 1979.

85. J. O. Nwachokor & R. N. Udoye Assessment of the use of ICT in the teaching and lerning of business education in Colleges of Education in Delta State. *Conference proceedings of ABEN,* vol. 2 (1) 348-354, 2015..

86. Elizabeth Omone Ojo & Abiose Ekpe Akhademe New technologies in teaching and learning of office technology and management. *Nigeria Journal of Business education* vol, 3 (2) 89-97, 2016.

87. Isaac Olufemi Ayelotan & Folaghade Sholagbade. Infrastructural facilities and business education: office technology and management perspective. *ABEN Conference Proceedings* 1 (1) 88-97, 2016

88. Chukwuemeka Mike Ile. Adequacy of instructional facilities and education programme in College of Education: Evidence from the Eastern States of Nigeria. *Business Education Journal* 3 (4) 168-188, 2014.

89. Moses Onyesom. Assessment of instructional resources for teaching business eduction at the Colleges of Education in Edo and Delta States of Nigeria. (Unpublished Thesis) Nnamdi Azikiwe University, Awka, 2016.

90. . John Uluabia.. Assessment of availability and utilization of modern instructional materials for teaching business subjects in secondary schools in Delta North. (Unpublished thesis) Nnamdi Azikiwe University, Awka, 2017.

91. Musa Abba. Instructional materials in the implementation of normadic education programme in Taraba State, Nigeria (Unpublished Master Degree Thesis), ABU, Zaria, 2017.

92. Isaac Olufemi Ayelotan & Folaghade Sholagbade. Infrastructural facilities and business education: office technology and management perspective. *ABEN Conference Proceedings* 1 (1) 88-97, 2016.

93. Anita Ogheneovo Amiaya.. Availability and utilization of new technology in business education for teaching office technology and management in Delta State Polytechnics. *Nigeria Journal of Business Education.* Vol.3 No. 2, 64-72, 2016

94. Wallace Igori.. Effects of instructional materials on the teaching and learning of social studies in secondary schools in Benue State. *International journal of current research,* vol.8 Issue 7, pp 859-863, 2016

95. Adebayo Olujinmi Odeniyi. Impact of instructional aids on students'academic performance in physics in secondry schools in Federal Capital Territory (FCT) Abuja, Nigeria. *European Scientific Journal*. Vol. 14, 4, 366-376, 2018.

96. Charles Igiri & Oji Ekpo Effiong. Impact of instructional materials in teaching and learning of OTM in senior secondary schools in Yakurr Local Government Area Akamkpa, Cross Rivers State, Nigeria. *Intrnational letters of Social and Humanistic Sciences,* vol. 62, 27-33, 2015.

97. Vera Idaresit Akpan & Ugo Agamnetochi Onoh. Effects of utilization of instructional materials on the academic performance of senior secondary school student in Ikwuano, Abia State. *International journal of scholarly and educational research in Africa*, vol, 12 (4), 1-11, 2017.

98. Joy Amesi.. Issues in evaluation and assessment: Implications for effective teaching and learning in business education in Niger Delta. *Conference proceeding* 2 (1) 143-152, 2015.

99 Gabriel Ogwuche Shaibu, Ameh Okpe & Sunday Barinem. Evaluation of business education in Nigeria: Challenges and chances. *Conference proceeding* 2 (1) 153-161, 2015.

100. Charity Nneka Emeasoba.. An evaluation of equipment for the teaching and learning of business studies in public junior secondary schools in Enugu State. *Conference proceeding* 2 (1) 162-169, 2015

101. waji Enyekit, Tony Obayi & Kate Ebenezer Owaji. Extent of instructional materials usage for ICT application in business programme in Rivers State University. *Conference proceeding* 2 (1) 175-182, 2015.

102. Fidelia Ifeoma Vin-Mbah. Business Educators' utilisation of multimedia and hypermedia technologies in tertiary business education classrooms in Anambra State. *Conference proceedings,* 2 (1), 183-190, 2015.

103. Titus Umoru & Florence Oluchi Nnaji. Utilizing new technologies in the preparation of business education students for self reliance. *Conference proceedings of ABEN,* vol. 2 (1) 191-200, 2015.

104. Felicia John & Matthew Saleh. Availalability of educational technological appliances for office technology and management programme in Saádatu Rimi College of Education, Kano. *Conference proceedings of ABEN,* vol.2 (1)201-212, 2015

105. Jude Utoware, Chamberlain Kren-Ikidi & Isreal Apreala. Issues and Trends in the application of new technologies in teaching business education in rian universities in South-South States, Nigeria. *Nigeria Journal of Business Education.* Vol.3 No. 2, 52-63, 2016.

106 Omotayo Adeoti & Titus Umoru The use of information and communication technology for the enhancement of teaching and learning of business subjects in secondary schools. *Conference proceedings of ABEN,* vol. 2 (1) 230-240, 2015..

107. Afees Gbadegesin.. Problems of full utilization for using ICT/Internet services in teaching business education courses. *Conference proceedings of ABEN,* vol. 2 (1) 276-281, 2015

108. John Folorunso Oyedele & Dauda Oladeji. Use of Internet-based social media as a tool for enhancing teaching and learning in business education. *Conference proceedings of ABEN,* vol. 2 (1) 287-294, 2015.

109. Anita Ogheneovo Amiaya.. Availability and utilization of new technology in business education for teaching office technology and management in Delta State Polytechnics. *Conference proceedings of ABEN,* vol. 2 (1) 295-302, 2015.

110. Israel Segun Ogundele & Lasun Lawal.. Influence of new technologies on the teaching of business education courses in tertiary institutions in Kwara State. *Conference proceedings of ABEN,* vol. 2 (1) 303-309, 2015

111.. Victoria Nwamara Eneogwe.. Adoption of the use of new learning technologies in business education and its challenges. *Conference proceedings of ABEN,* vol. 2 (1) 310-317, 2015.

112 Bupo Godwin Omoni. The use of technology in teaching software application course and its impact on secretarial education students' performance. *Conference proceedings of ABEN,* vol. 2 (1) 330-337, 2015.

113 Ali Yakubu & Fidelis Anni Ugwu.. Technological innovation and effective secretarial service delivery in tertiary institutions in Kogi State. *Conference proceedings of ABEN,* vol. 2 (1) 338-346, 2015

Chapter Three

Methodology

This section of the study presents the procedures that were used in carrying out the research. This is described under the following sub-headings:

3.1 Research Design

3.2 Population of the Study

3.3 Sample/Sampling Techniques

3.4 Description of Instruments

3.5 Validation of the Research Instrument

3.6 Reliability of Research Instrument

3.7 Method of Data Collection and

3.8 Methods of Data Analysis.

3.1 Research Design

Cross-sectional survey design was used in this study because it studied subset of a population at a point in time and to determine the functional relationship between the instructional facilities, quality assurance and teaching of OTM courses. Researches based on this design are conducted to assess the status quo of a particular phenomenon. The design is suited for this study because the population consist of three categories of academic staff in the Polytechnic; namely: lecturers, instructors and technologists since it involves gathering data in order to test hypotheses or assumptions, as well as answer questions about the study subject's condition[1]. Similarly, the design is a study in which the subjects are observed in their native habitats without being treated[2]. This study falls into that category.

3.2 Population of the Study

The target population of the study was all the 184 academic staff; lecturers, instructors and technologists teaching OTM courses in ten (10) public Polytechnics offering the course in South West, Nigeria. These Polytechnics and the target respondents are as detailed in Table 3.1

Table 3.1: Population of the Study

S/N	Name of Institution	No.of Lecturers	No.of Instru-tors	No.of Techno-Logists
1.	The Federal Polytechnic, Ado-Ekiti, Ekiti State	12	09	02
2.	Rufus Giwa Polytechnic, Owo, Ondo State	09	04	03
3.	The Federal Polytechnic, Ede, Osun State	16	07	05
4.	Osun State Polytechnic, Iree, Osun State	09	05	02
5.	The Polytechnic, Ibadan, Oyo State	10	06	01
6.	The Polytechnic, Eruwa, Oyo State	05	02	01
7.	The Federal Polytechnic, Ilaro, Ogun State.	14	06	03
8.	Moshood Abiola Polytechnic, Abeokuta, Ogun State	08	05	01
9.	Yaba College of Technology, Yaba, Lagos State.	13	06	02
10.	Lagos State Polytechnic, Ikorodu, Lagos State	10	05	03
	Total:	**106**	**55**	**23**

Source: OTM Department of each of the Polytechnics for 2019/2020 academic session.

3.3 Sample and Sampling Techniques

The sample of the study is all the academic staff in ten public Polytechnics in South West Nigeria which is 184. Total enumeration sampling technique was used because the population is of manageable size.

3.4 Description of the Instrument

The study used five tools that were adopted, adapted, and verified by the researchers. This change was produced following a thorough evaluation of relevant literature and consultation with specialists both inside and outside the Department of Information Management, Lead City University, Ibadan, Oyo State. The instrument was divided into five divisions (Sections A to E). Data on the factors under study was collected using self-reported questionnaires titled: "Instructional Facilities, Quality Assurance, and Teaching of OTM Courses in Public Polytechnics in South West, Nigeria".

Section A: Demographic Data of the Respondents

The researcher developed this section to collect demographic information from the respondents, such as polytechnic, gender, academic degrees, cadre, and years of experience.

Section B: Teaching Abilities (TAS)

This section was on teaching abilities of academic staff, teaching Office Technology and Management courses in the public Polytechnics. The instrument was adapted from previous studies[4,5]. The instrument consists 29 items spread across two sections of human abilities and intellectual abilities. The first section had 13 questions while the second had 16 questions. Examples of questions asked; were academic staff teaching OTM courses possess the following teaching abilities: neat appearance always, perseverance to teach effectively, initiative to achieve class objectives just to mention, but a few with options of strongly agree (SA) 4, agree (A) 3, disagree (D) 2 and strongly disagree (SD) 1. The scales had been used in the past for assessing Teacher Quality and Students' Academic Performance in public Senior

secondary Schools, North Central Zone, Nigeria and Lecturers' Teaching Competences as Predictor of Students' Academic Performance in OTM in Polytechnics in Osun state, Nigeria with reported Cronbach Alpha Coefficient Values of = 0.78 and = 0.84 respectively, while the reliability score for this study after pilot study was with a Reliability Coefficient Value of = 0.74.

Section C: Availability of Instructional Facilities (AIFS)

This section dealt with the availability of instructional facilities in public polytechnics for teaching OTM courses. The National Board for Technical Education established curricula for Technical Colleges and Polytechnics, and these facilities were implemented[6]. It has 18 questions, and respondents were asked to choose the option on the scale that best suited their opinion. The scales had previously been used to assess the availability and usage of instructional material for teaching and learning OTM courses in Niger State polytechnics, with a Cronbach Alpha Coefficient Value of 0.71. It used a 4-point Likert scale with responses of 4 (often), 3 (often), 2 (rarely), and 1 (never)[7]. After the pilot study, the Cronbach Alpha Reliability Coefficient Value calculated for this study was = 0.80.

Section D: Extent of Utilization of Available Instructional Facilities (EUAIFS)

This section focused on the extent to which accessible instructional facilities were used in public polytechnics to offer OTM courses. The instrument was adapted from the National Board for Technical Education's approved curricula for Technical Colleges and Polytechnics[6]. It has 18 questions, and respondents were asked to choose the option on the scale that best suited their opinion. It was previously utilized in a study titled Availability and Utilization of Instructional Material for Teaching and Learning OTM Courses in Polytechnics in Niger State, which yielded a Cronbach Alpha Coefficient Value of 0.71. It used a 4-point likert scale with 4 being very high, 3 being high, 2 being low, and 1 being very

low[7]. After the pilot study, the Cronbach Alpha Reliability Coefficient Value calculated for this study was = 0.80.

Section E: Quality Assurance Measures (QAMS)

This section discusses quality assurance measures to ensure that OTM courses are taught effectively in public polytechnics. Previous studies were used to create the instrument. It had previously been utilized in studies such as Developing Quality Assurance Systems in African Universities and Developing Quality Assurance Systems in African Universities, Assessing Quality Assurance Inputs for Business Teacher Education in Selected Colleges of Education in South-South Nigeria, and Quality Assurance in Business Education through Effective Funding of Tertiary Educational Institutions in Anambra State, with Cronbach Alpha Coefficient Values of = 0.71, = 0.74, and = 0.73, respectively[8,9,10]. It utilized 4-point likert type scale of 4 (strongly agree), 3 (agree), 2 (disagree), 1 (strongly disagree). Respondents were asked to indicate the option that best suits their opinion on the scale. After the pilot investigation, the Cronbach Alpha Reliability Coefficient Value calculated for this study was = 0.72.

3.5 Validation of the Research Instruments

For the goal of guaranteeing legitimate content and face validity, the draft of the research instruments was submitted to supervisor, co-supervisor and other specialists in OTM field. They were given the opportunity to carefully criticize the basic instruments and to alter and modify where necessary. Their comments, corrections, and inputs were used to improve the instruments. All changes were made when the final copies of the study instruments were printed for administration.

3.6 Reliability of the Instruments

In ensuring the reliability of the data, the data collection instruments (questionnaire) was tested by subjecting it to the scrutiny of experienced experts in OTM who expressed their

opinions as to whether the constructs used to measure the concepts were valid so as to ensure it covers all variables under study. The researcher subjected the instruments to a reliability test to check the internal consistency of all items measuring each variable in the study. The reliability of the study was done through a pilot study, administering twenty (20) copies of the questionnaire at the Department of OTM, Federal Polytechnic, Offa. The members of this unit did not participate in the main study. Data collected from the pilot study were subjected to Cronbach's Alpha Reliability Test to determine the internal consistency of the items. From the results obtained, the items in the scales displayed sufficient reliability value satisfying the rule of thumb for internal consistency with a Cronbach Alpha Value of above = 0.7.

The results of Cronbach Alpha analysis is shown in Table 3.3:

Table 3.3 Results of Pilot Study

Variable	Cronbach Alpha
Teaching Abilities	0.747
Availability of Instructional Facilities	0.804
Extent of Utilization of Instructional Facilities	0.804
Quality Assurance Measures	0.724

Source: Researcher's compilation, 2021

3.7 Method of Data Collection

Primary data was obtained to address the objectives of the study through a structured questionnaire. A letter of introduction was obtained from the Department of Information Management, Lead City University, Ibadan which was used to gain permission and Project

Attestation Form to verify data collection. Due to the number of Polytechnics to be covered in South West, Nigeria, a three-day training was conducted for five (5) Research Assistants to ease the administration, retrieval and initial sorting of copies of the research instruments. The researcher also established contact with the Heads of Departments and academic staff in the Department of OTM in the Polytechnics under investigation. In all, 184 copies of the questionnaire were administered to the academic staff in the ten (10) public Polytechnics in South West Nigeria. The administration and retrieval of the instruments lasted twelve weeks.

3.8 Method of Data Analysis

The researcher analysed the data collected using Descriptive and Inferential Statistics for the items in all the sections in the questionnaires. The use of the Descriptive Statistics is appropriate because it helps to describe and summarize data in terms of frequency distribution, percentage of response about variables under study thereby, answering the research questions. To test the hypotheses formulated for the study, the inferential statistics using simple regression analysis was used to reveal whether there is any significant combined influence of instructional facilities and quality assurance on teaching of OTM courses in public Polytechnics in South West, Nigeria. Hypothesis 2 was examined using multiple Regression analysis to see if instructional facilities and quality assurance measures have any significant relative influence on teaching of OTM courses in public Polytechnics in South West Nigeria. The Statistical Package for Social Sciences (SPSS) version 25 was used to analyse the data collected for the study. The two hypotheses were tested at 0.05 level of significance.

Endnotes

1. Titus Umoru. *Basic research methods: competencies and application* (2nd ed.) Lokoja Onaivi Printing & Publishing Co. Ltd, 2015.

2. Raheem Adisa Oloyo. *Fundamentals of research methodology for social and applied sciences.* ROA Eductional Press, 2017.

3. Solomon Olufemi Omotosho.. *Understanding research methodology*. Kingdom Heir Publishers, 2016.

4. Mary Ronke Arinde. Educational services, Teacher Quality and Students' Academic Performance in public Senior secondary Schools, North Central Zone, Nigeria. Being unpublished Ph.D thesis submitted to the Department of Educational Management, University of Ilorin, Kwara State, 2010.

5. Sunday Ebhodaghe Akasi. Lecturers' Teaching Competencies as Predictor of Students' Academic Performance in OTM in Polytechnics in Osun state, Nigeria. Being unpublished M.Sc thesis submitted to the Department of Business and Entrepreneurship Education, Kwara State University, Malete, 2016.

6. National Board for Technical Education. Office technology and management curriculum and course specifications, Kaduna, Nigeria, 2004.

7. Adakole, Enoche. Availability and utilization of instructional materials in the teaching and learning of office technology and management courses. *Unpublished M.Sc (Ed) thesis* submitted to the Department of Business and Entrepreneurship Education, Kwara State University, Malete, 2016.

8. Oluwole Oyewole.. Developing quality assurance systems in African Universities. AAU initiatives. The quality assurance situation and capacity building needs of higher education in Africa 1-16, 2012.

9. Undie, S. Bepeh, Ewuru, Agnes Awoli & Enenwan, Akwuowo Evanson.. Assessing quality assurance inputs for the teaching of business teacher education in selected colleges of Education in South-South, Nigeria. *Nigerian Journal of Business education*, Vol.1, No. 2 pp 173-186, 2013.

10. Ile, Chika M, Nwosu Ugonwa, Udoye, Nneka & Oru, Patricia. Quality Assurance in Business Education through effective funding of tertiary educational institutions in Anambra State. *Nigerian Journal of Business education,* vol. 1, No. 2, pp.215-219, 2013.

Chapter Four

Results and Discussion of Findings

The data presentation, analysis, and presentation of the results were all covered in this chapter. The analysis is driven by the study's precise objectives and hypotheses, which were established in chapter one. The descriptive analysis is presented in the first section using tables with percentages and explanations below the tables. Inferential statistics are presented in section two, which includes a model summary and multiple regression tables, as well as a discussion of the findings at the end of the chapter. The findings were based on the research questions and hypotheses that the study was designed to explore and investigate. One hundred and eighty-four (184) questionnaires were distributed to OTM academic personnel, including lecturers, instructors, and technicians, throughout all ten public polytechnics in South West Nigeria, with one hundred and seventy-five (175) returned full. This resulted in a 95% return rate on the questionnaires. To answer the study questions and test the research hypotheses, the returned surveys were analyzed. When the p-value was greater than 0.05, the null hypotheses were accepted; otherwise, the null hypotheses were rejected. SPSS version 25 was used to analyze the data.

4.1 Demographic Characteristics of Respondents

The data collected from the field were analysed and presented as follows:

Table 4.1 Socio-demographical data of respondents

Variables	Items	Frequency (%)
	Male	89 (50.9)
Gender	Female	86 (49.1)
	Total	**175 (100.0)**
Academic	HND	40 (22.9)
Qualifications	BSc	66 (37.7)
	M.Sc.	64 (36.6)
	PhD	5 (2.9)
	Total	**175 (100)**
	1 – 5 years	24 (13.7)
Work Experience	6 – 10 years	65 (37.1)
	11 – 15 years	24 (13.7)
	16 – 20 years	34 (19.4)
	21 years and above	28 (16.0)
	Total	**175 (100)**

Source: Field survey, 2021

Table 4.1 reveals the demographical information of the respondents. Out of 175 academic staff that participated in the survey, 89 (50.9%) were male, while 86 (49.1%) were female. This implies that male academic staff respondents are in the majority teaching OTM courses in public polytechnics in south west, Nigeria.

The frequency distribution of the respondents by qualifications on Table 4.1 indicates that 40 (22.9%) were HND. holders; 66 (37.7%) were Bachelor degree holders; 64 (36.6%) were MSc degree holder; and 5 (2.9) were PhD holders. This shows that majority of the respondents were B.Sc degree holders followed by M.Sc holders. This revealed that B.Sc is a basic qualification for academic staff teaching in the polytechnics. The Table also revealed that 24 (13.7%) have between 1 to 5 years work experience; 65 (37.1%) have between 6 – 10 years of work experience; 24 (13.7%) have between 11 – 15 years of work experience; 34 (19.4%) have between 16 – 20 years of work experience, while 28 (16%) have 21 years and above of work experience.

This profile emphasizes the fact that Ph.D is not a major prerequisite qualification for employment and promotion in the polytechnic system. It was also revealed that academic staff with 6 – 10 years working experience are in the majority with 65 (37.1%) followed by 16 – 20 years working experience with 34 (19.4%), 21 and above working experience with 28 (16.0), 11 – 15 years working experience with 24 (19.4%). This clearly demonstrates that the employment of academic personnel in these polytechnics considered for this survey follows a succession plan.

4.2 Presentation of Data

Research question 1: What are the teaching abilities of Academic Staff Teaching Office Technology and Management courses in public Polytechnics in South West, Nigeria?

Table 4.2: Frequency Distribution of the Teaching Abilities of Academic Staff Teaching Office Technology Management Courses in South West Nigeria Polytechnics

Human Abilities Personal Qualities	**SA (%)**	**A (%)**	**D (%)**	**SD (%)**	**Mean**
Neat Appearance always	2 (1.1)	138 (78.9)	35 (20.0)	0 (0)	2.81
Perseverance to teach effectively	2 (1.1)	172 (98.3)	1 (0.6)	0 (0)	3.01
Initiative to achieve class objective	2 (1.1)	173 (98.9)	0 (0)	0 (0)	3.01
Self-control while relating with students	1 (0.6)	174 (99.4)	0 (0)	0 (0)	3.01
Humour to carry students along in class	0 (0)	170 (97.1)	5 (2.9)	0 (0)	2.97
Average Mean					**2.96**
Responsibility					
Accountable for students' knowledge in class	3 (1.7)	172 (98.3)	0 (0)	0 (0)	3.02
Unbiased in relating with students	2 (1.1)	173 (98.9)	0 (0)	0 (0)	3.01
Committed to institutional values	2 (1.1)	173 (98.9)	0 (0)	0 (0)	3.01
Can be trusted with effective teaching	4 (2.3)	171 (97.7)	0 (0)	0 (0)	3.02
Adherence to academic calendar in my institution	1 (0.6)	173 (98.9)	1 (0.6)	0 (0)	3.00
Average Mean					**3.01**
Decisiveness					
Ability to make firm decision	3 (2.3)	70 (40.0)	102 (58.3)	0 (0)	2.43
Ability to make quick decision	4 (2.3)	95 (54.3)	76 (43.4)	0 (0)	2.59
Ability to prevent crisis during class interactions	6 (3.4)	157 (89.7)	12 (6.9)	0 (0)	2.97
Average Mean					**2.66**

Intellectual Abilities					
Effective Communication					
Good listening skills to teach students	1 (0.6)	174 (99.4)	0 (0)	0 (0)	3.01
Clear expression while teaching students	4 (2.3)	171 (98.7)	0 (0)	0 (0)	3.02
Courteous speech when interacting with students	5 (2.9)	169 (96.6)	1 (0.6)	0 (0)	3.02
Attention to non-verbal signs from students	4 (2.3)	171 (97.7)	0 (0)	0 (0)	3.02
Average Mean					**3.01**
Instructional Planning					
State aim and objectives of their various subjects	2 (1.1)	173 (98.9)	0 (0)	0 (0)	3.01
Used various devices to enhance lecture delivery	0 (0)	174 (99.4)	1 (0.6)	0 (0)	2.99
Used various teaching strategies to hold students attention during class	1 (0.6)	174 (99.4)	0 (0)	0 (0)	3.01
Consciously manage time within teaching period	2 (1.1)	173 (98.9)	0 (0)	0 (0)	3.01
Maintain effective class monitoring to achieve course objectives	2 (1.1)	173 (98.9)	0 (0)	0 (0)	3.01
Average Mean					**3.00**
Leadership					
Maintain honesty while dealing with students	2 (1.1)	172 (98.3)	1 (0.6)	0 (0)	3.01
Motivates student while interacting with students	3 (1.7)	172 (98.3)	0 (0)	0 (0)	3.02
Uphold impeccable character to retain dignity	2 (1.1)	173 (98.9)	0 (0)	0 (0)	3.01
Average Mean					**3.01**

Academic qualities					
Go through students' questions with intelligence	3 (1.7)	172 (98.3)	0 (0)	0 (0)	3.02
Display adequate subject matter knowledge	2 (1.1)	173 (98.9)	0 (0)	0 (0)	3.01
Display practical knowledge	1 (0.6)	174 (99.4)	0 (0)	0 (0)	3.01
Be passionate about helping students gain literacy	2 (1.1)	173 (98.9)	0 (0)	0 (0)	3.01
Average Mean					**3.01**
Source: Field survey, 2021		**Grand Mean**		**=**	**2.95**

Key: Strongly Agreee (SA)= 4, Agree (A)= 3, Disagree (D)= 2, Strongly Disagree (SD)= 1.

Decision Rule: Strongly Agree = 3.50 – 4.00, Agree = 2.50 – 3.49, Disagree = 1.50 – 2.49, Strongly Disagre = 1.00 – 1.49.

According to results in Table 4.2, grand mean for all the items was 2.95 which agreed with regards to teaching abilities of academic staff teaching Office Technology and Management courses in public polytechnics in South West Nigeria under investigation. It revealed that 80% agreed, while 20% disagreed that neat appearance always is a teaching abilities of academic staff teaching OTM courses. On the average, the respondents indicated that neat appearance always enhance teaching abilities, showing mean value of 2.81. In the same manner, 99.4% agreed, while 0.6% disagreed that perseverance to teach effectively is a personal teaching ability for teaching OTM courses in public polytechnics in South West, Nigeria, showing a mean value of 3.01. Similarly, all (100%) the respondents agreed that initiative to achieve class objective and self-control while relating with students are personal teaching qualities being utilized in teaching OTM courses in public polytechnics in South West, Nigeria. On average, the respondents indicated that initiative to achieve class objective and self-control while relating with students are teaching abilities, showing mean value of 3.01 each. Also 97.1% agreed, while 2.9% disagreed that humour to carry students along in

class while teaching is a personal quality for teaching OTM courses, showing a mean value of 2.97. With average mean of 2.96 for personal qualities of teaching abilities of academic staff teaching OTM courses in public polytechnics in South West, Nigeria, the respondents agreed with the measures indicated in the instrument.

All (100%) the respondents agreed that accountable for students' knowledge in class, biasedness in relating with students, committed to institutional values, and ability to be trusted with effective teaching are abilities for teaching OTM courses in public polytechnics in South West, Nigeria. On average, accountable for students' knowledge in class, biasedness in relating with students, committed to institutional values, and ability to be trusted with effective teaching are rated with mean value, 3.02, 3.01, 3.01, and 3.02, respectively. Also, 99.5% agreed, while 0.5% disagreed that staffs adhere to academic calendar of their institution. On average, the respondents rated adherence to calendar high, showing a mean value of 3.00. With average score of 3.01 for responsibility being measure for teaching ability, this suggested that the respondents agreed with the indices as being potent for enhancing teaching of academic staff in the polytechnics.

Result shows that 41.7% agreed, while 58.3% disagreed that ability to make firm decision is one of the teaching abilities of Office Technology and Management courses. Also, 56.6% agreed, while 43.4% disagreed that ability to make quick decision is one of the teaching abilities of Office Technology and Management courses. On average, the respondents moderately rated the ability to make quick decision as one of the teaching abilities, showing mean value 2.59. Likewise, 93.1% agreed, while 6.9% disagreed that ability to prevent crisis during class interactions is one of the teaching abilities of Office Technology and Management courses in public polytechnics. On average, the respondents highly rated the ability to prevent crisis during class interactions as one of the teaching abilities, showing mean value 2.97. With average mean of 2.66 for decisiveness as quality

for teaching ability of Office Technology and Management academic staff, the respondents are in accord with the measures as being able to achieve teaching objectives.

All (100%) the respondents agreed that good listening skills to teach students, clear expression while teaching students and attention to non-verbal signs from students are teaching abilities of academic staff teaching Office Technology and Management courses in public polytechnics. On average, the respondents highly rated good listening skills to teach students, clear expression while teaching students and attention to non-verbal signs from students are teaching qualities, showing mean value 3.01, 3.02, and 3.02, respectively. Also, 99.4% agreed, while 0.6% disagreed that courteous speech when interacting with students is a teaching ability of academic staff teaching Office Technology and Management courses in public polytechnics. On average, the respondents highly rated courteous speech when interacting with students as one of the teaching abilities, showing mean value 3.02. With average mean of 3.01 for measures of effective communication as teaching ability for academic staff teaching OTM courses, it suggested that the measures enumerated in the instrument are capable of aiding effective teaching of academic staffers.

All (100%) the respondents agreed that stating aim and objectives of their various subjects, the use of various teaching strategies to hold students attention during class, consciously manage time within teaching period, and maintain effective class monitoring to achieve course objectives are teaching abilities of Office Technology and Management courses in public polytechnics. On average, the respondents highly rated stating aim and objectives of their various subjects, the use of various teaching strategies to hold students attention during class, consciously manage time within teaching period, and maintain effective class monitoring to achieve course objectives are teaching abilities, showing mean value 3.01 each. Also 99.4% agreed, while 0.6% disagreed that the use various devices to enhance lecture delivery in public polytechnics. On average, the respondents highly rated the

use of various devices to enhance lecture delivery as one of the teaching abilities, showing mean value of 2.99. This concord with other researchers on the same issue that if instructional facilities are available and fully utilized students' level of skill acquisition will be high and unemployment rate will be minimized.

All (100%) the respondents agreed that going through students' questions with intelligence, displaying adequate subject matter knowledge, displaying practical knowledge, and being passionate about helping students gain literacy are teaching abilities of Office Technology and Management courses in public polytechnics. On average, going through students' questions with intelligence, displaying adequate subject matter knowledge, displaying practical knowledge, and being passionate about helping students gain literacy are teaching abilities with mean value, 3.02, 3.01, 3.01, and 3.01, respectively. The average mean of 3.00 for instructional planning being ability for effective teaching of OTM courses indicated that the respondents are in agreement with the measures as indicators for effective teaching ability of OTM academic staff.

All (100%) the respondents agreed that motivating student while interacting with them and upholding impeccable character to retain dignity are teaching abilities of OTM courses. On average, the respondents highly rated motivating student while interacting with them and upholding impeccable character to retain dignity are teaching qualities, showing mean value 3.02, and 3.01, respectively. Also, 99.4% agreed, while 0.6% disagreed that maintaining honesty while dealing with students is a teaching ability of Office Technology and Management courses in public polytechnics. On average, the respondents highly rated maintaining honesty while dealing with students is a teaching ability, showing mean value 3.01.

From the aforementioned results, it was revealed that the respondents; lecturers, instructors and technologists teaching in public polytechnics in South West, Nigeria are in agreement that in other to be able to impact positively on the students perseverance to teach effectively, initiative to achieve class objective, self-control, humour, biasedness, adherence to academic calendar, ability to make quick decision, good listening skills, teaching with clear expression, courteous, attention to signs, use of various strategies, honesty, motivation, adequate subject knowledge, and practical knowledge are the teaching abilities of academic staff teaching Office Technology and Management courses.

Research question 2: What are the instructional facilities available for teaching Office Technology and Management courses in public Polytechnics in South West, Nigeria?

Table 4.3: Frequency Distribution of the Instructional Facilities available for teaching of Office Technology and Management courses in public Polytechnics in South West, Nigeria

Item	FA (%)	OA (%)	RA (%)	NA (%)	Mean
Computer with uninterrupted power supply	5 (2.9)	168 (96.0)	2 (1.1)	0 (0)	3.02
Internet facilities	0 (0)	4 (2.3)	147 (84.0)	24 (13.7)	1.89
Standby generator	0 (0)	0 (0)	38 (21.7)	137 (78.3)	1.22
Microphone	2 (1.1)	0 (0)	61 (34.9)	112 (64.0)	1.38
Headphones	2 (1.1)	1 (0.6)	59 (33.7)	113 (64.6)	1.38
Electronic machines	2 (1.1)	1 (0.6)	98 (56.0)	74 (42.3)	1.61
Manual typewriters	2 (1.1)	2 (1.1)	100 (57.1)	71 (40.6)	1.63
Multimedia projectors	1 (0.6)	168 (96.0)	5 (2.9)	1 (0.6)	2.97
Marker boards	3 (1.7)	169 (96.6)	3 (1.7)	0 (0)	3.00
Air conditioners	1 (0.6)	33 (18.9)	132 (75.4)	9 (5.1)	2.14
Good furniture	0 (0)	5 (2.9)	119 (68.0)	51 (29.1)	1.74
Scanning machines	1 (0.6)	3 (1.7)	72 (41.1)	99 (56.6)	1.46
Television	1 (0.6)	2 (1.1)	71 (40.6)	101 (57.7)	1.45
Radio/Recorder	0 (0)	3 (1.7)	70 (40.0)	102 (58.3)	1.43
Photocopying machines	2 (1.1)	1 (0.6)	52 (29.7)	120 (68.6)	1.34
Rizo machines	1 (0.6)	1 (0.6)	52 (29.7)	121 (69.1)	1.33
Recent textbooks	1 (0.6)	1 (0.6)	15 (8.6)	158 (90.3)	1.11
Recent journals	0 (0)	2 (1.1)	15 (8.6)	158 (90.3)	1.11
Source: Field survey, 2021			**Grand Mean =**		**1.67**

Key: Frequently Available (FA)= 4, Often Available (OA)= 3, Rarely Available (RA)= 2, Never Available (NA)= 1.

Decision Rule: Frequently Available = 3.50 – 4.00, Often Available = 2.50 – 3.49, Rarely Available = 1.50 – 2.49, Never Available = 1.00 – 1.49.

From table 4.3, the results show that 2.9% respondents indicated that computers with uninterrupted power supply are frequently available, 96% indicated that it is often available, while 1.1% indicated that it is rarely available. With a mean value of 3.02, there is an indication that computer with uninterrupted power supply is one of the instructional facilities available for teaching Office technology and Management (OTM) courses in public polytechnics in the South West, Nigeria. In the same manner as above, 0.6% respondents indicated that multimedia projectors are frequently available, 96% indicated that they are often available, 2.9% indicated that they are rarely available, while 0.6% indicated that they are never available. With a mean value of 2.97, there is an indication that multimedia projectors is one of the instructional facilities available for teaching Office technology and Management (OTM) courses in public polytechnics in the South West, Nigeria. Also, the result shows that 1.7% respondents indicated that marker board is frequently available, 96.6% indicated that it is often available, while 1.7% indicated that it is rarely available. With a mean value of 3.00, there is an indication that marker boards is one of the instructional facilities available for teaching Office technology and Management (OTM) courses in public polytechnics in the South West, Nigeria.

With a grand mean of 1.67, the researcher found that the level of availability of instructional facilities for teaching of OTM courses in public Polytechnics in South West Nigeria is rarely available except for computers with uninterrupted power supply, multimedia projectors, and marker boards which are often available for teaching of OTM courses in public polytechnics in South West Nigeria. These findings revealed that public polytechnics

in South West Nigeria's are not equally well equipped. While some instructional facilities, like internet facilities, air conditioners, rizo machines, good furniture, and electronic machines are available in few public polytechnics, they are not available in majority of the public polytechnics in South west, Nigeria.

Research question 3: What is the level of utilization of available instructional facilities for teaching of Office Technology and Management courses in public Polytechnics in South West, Nigeria?

Table 4.4: Level of utilization of available instructional facilities for teaching of Office Technology and Management courses in public Polytechnics in South West, Nigeria

Item	VHE (%)	HE (%)	LE (%)	VLE (%)	Mean
Computer with uninterrupted power supply	2 (1.1)	164 (93.7)	5 (2.9)	4 (2.3)	2.94
Internet facilities	0 (0)	2 (1.1)	131 (74.9)	42 (24.0)	1.77
Standby generator	0 (0)	3 (1.7)	9 (5.1)	168 (93.1)	1.05
Microphone	0 (0)	3 (1.7)	9 (5.1)	163 (93.1)	1.09
Headphones	2 (1.1)	6 (3.4)	96 (54.9)	71 (40.6)	1.65
Electronic machines	2 (1.1)	5 (2.9)	102 (58.3)	66 (37.7)	1.67
Manual typewriters	2 (1.1)	8 (4.6)	100 (57.1)	65 (37.1)	1.70
Multimedia projectors	2 (1.1)	157 (89.7)	8 (4.6)	8 (4.6)	2.87
Marker boards	4 (2.3)	151 (86.3)	14 (8.0)	6 (3.4)	2.87
Air conditioners	0 (0)	34 (19.4)	110 (62.9)	31 (17.7)	2.02
Good furniture	0 (0)	6 (3.4)	114 (65.1)	55 (31.4)	1.72
Scanning machines	0 (0)	3 (1.7)	93 (53.1)	79 (45.1)	1.57
Television	0 (0)	3 (1.7)	84 (48.0)	88 (50.3)	1.51
Radio/Recorder	0 (0)	2 (1.1)	80 (45.7)	93 (53.1)	1.48
Photocopying machines	2 (1.1)	2 (1.1)	73 (41.7)	98 (56.0)	1.47
Rizo machines	1 (0.6)	3 (1.7)	72 (41.1)	99 (56.6)	1.46
E-library recent textbooks	0 (0)	2 (1.1)	67 (38.3)	106 (60.6)	1.41
E-library recent journals	1 (0.6)	2 (1.1)	62 (35.4)	110 (62.9)	1.39
Source: Field survey, 2021			**Grand Mean**		**1.76**

Key: Very High Extent (VHE)= 4, High Extent (HE)= 3, Low Extent (LE)= 2, Very Low Extent (VLE)= 1.

Decision Rule: Very High Extent = 3.50 – 4.00, High Extent = 2.50 – 3.49, Low Extent = 1.50 – 2.49, Very Low Extent = 1.00 – 1.49.

From Table 4.4 results, 1.1% of the respondents indicate that computers with uninterrupted power supply is utilized to a very highly extent, 93.7% indicated that it is utilized to a high extent, 2.9% indicated that it is utilized in a low extent, while 2.3% indicated that the level of utilization is very low extent. With a mean value of 2.94, it is evident that computers with uninterrupted power supply is utilized to high extent for teaching Office technology and Management (OTM) courses in public polytechnics in the South West, Nigeria. In the same manner as above, 1.1% of respondents indicated that multimedia projectors is utilized to a very highly extent, 89.7% indicated that it is utilized to a high extent, 4.6% indicated that it is utilized in a low extent and that the level of utilization is to a very low extent. With a mean value of 2.87, it is evident that multimedia projectors is utilized to high extent for teaching Office technology and Management (OTM) courses in public polytechnics in the South West, Nigeria. Likewise, 2.3% of respondents indicated that marker boards is utilized to a very highly extent, 86.3% indicated that it is utilized to a high extent, 8.0% indicated that it is utilized in a low extent, while 3.4% indicated that the level of utilization is to a very low extent. With a mean value of 2.87, it is evident that marker boards is utilized to high extent for teaching Office technology and Management (OTM) courses in public polytechnics in the South West, Nigeria.

With grand mean of 1.76, it was revealed from the findings that the level of utilization of instructional facilities for teaching of OTM courses in public Polytechnics in South West Nigeria is very low. However, the level of utilization of computer with uninterrupted power supply, multimedia projectors and marker boards for teaching of OTM courses in public

polytechnics in South West, Nigeria is high. This indicated that other instructional facilities for teaching of OTM courses as enumerated in the instrument are not being utilized in the public polytechnics in South West Nigeria which could be because of the unavailability of these instructional facilities and other factors hindering its availability.

Research question 4: What are the quality assurance put in place to ensure effective teaching of Office Technology and Management courses in public Polytechnics in South West, Nigeria?

Table 4.5: Quality assurance for effective Teaching of Office Technology and Management Courses in South West Nigeria Polytechnics

Item	SA (%)	A (%)	D (%)	SD (%)	Mean
Qualified lecturers/instructors/technologists	19 (10.9)	154 (88.0)	1 (0.6)	1 (0.6)	3.09
Training and retraining of academic staff	0 (0)	8 (4.6)	126 (72.0)	41 (23.4)	1.81
Compliance to regulated class capacities	0 (0)	0 (0)	168 (96.0)	7 (4.0)	1.96
Class monitoring teams	0 (0)	12 (6.9)	158 (90.3)	5 (2.9)	2.00
External moderation of examination questions	1 (0.6)	171 (97.7)	3 (1.7)	0 (0)	2.99
Moderation of examination scripts	1 (0.6)	168 (96.0)	6 (3.4)	0 (0)	2.97
Examination monitoring team	1 (0.6)	158 (90.3)	14 (8.0)	2 (1.1)	2.90
Conducive teaching environment	0 (0)	3 (1.7)	128 (73.1)	44 (25.1)	1.77
Regular students' assessment by academic staff	0 (0)	10 (5.7)	111 (63.4)	54 (30.9)	1.75
Prompt dissemination of information to staff and student	0 (0)	1 (0.6)	73 (41.7)	101 (57.7)	1.43
Source: Field survey, 2021			**Grand Mean**		**2.35**

Key: Strongly Agree (SA)= 4, Agree (A)= 3, Disagree (D)= 2, Strongly Disagree (SD)= 1.

Decision Rule: Strongly Agree = 3.50 – 4.00, Agree = 2.50 – 3.49, Disagree = 1.50 – 2.49, Strongly Disagree = 1.00 – 1.49.

From the results presented in table 4.5, regarding the quality assurance put in place to ensure effective teaching of Office Technology and Management courses in public Polytechnics in South West, Nigeria, 98.9% agreed, while 1.1% disagreed that qualified lecturers, instructors, and technologists are available for teaching OTM courses. On average,

respondents indicated that there are availability of qualified academic staff, showing a mean of 3.09. In the same manner as above, 4.6% agreed, while 95.4% disagreed that training and retraining of academic staff are ensured to enhance teaching abilities of OTM courses in public polytechnics in South West, Nigeria. Similarly, all (100%) the participants disagreed that there is compliance to regulated class capacities in public polytechnics in South West, Nigeria. Also 6.9% agreed, while 93.2% disagreed that there are class monitoring teams ensuring effective teaching of OTM courses in public polytechnics in South West, Nigeria. Moreover, 98.3% agreed, while 1.7% disagreed that there is external moderation of examination questions in public polytechnics in South West, Nigeria. On average, respondents indicated that their examination questions were subjected to external moderation, showing a mean of 2.99. Furthermore, 96.6% agreed, while 3.4% disagreed that moderation of examination scripts are practiced in public polytechnics in South West, Nigeria. On average, participants indicated that examination scripts are moderated in their institutions, showing a mean of 2.97. Also 90.9% agreed, while 9.1% disagreed that there is examination monitoring team in place during examination period in public polytechnics in South West, Nigeria. On average, respondents indicated that there is effective examination monitoring team formed during exams, showing a mean of 2.90. Likewise, 1.7% agreed, while 73.1% disagreed that there is conducive environment for teaching OTM courses in public polytechnics in South West, Nigeria. Also, 5.7% agreed, while 94.3% disagreed that there is regular students' assessment by academic staff in public polytechnics in South West, Nigeria. Lastly, 0.6% agreed, while 99.4% disagreed that there is prompt dissemination of information to staff and students of OTM in public polytechnics in South West, Nigeria.

Based on the above information and with a grand mean of 2.35, it was revealed that the respondents disagreed that there is effective quality assurance for teaching of OTM courses in public Polytechnics in South West Nigeria. However, they agreed that qualified

academic staff, external moderation of examination questions, moderation of examination scripts, and examination monitoring team are the quality assurance measures put in place to ensure effective teaching of OTM courses in public polytechnics in South West, Nigeria That suggested that other mechanisms for effective teaching of OTM courses in public Polytechnics in South West Nigeria are not being enforced..

4.3 Test of Hypotheses

The hypotheses formulated to guide this study were tested using regression analysis based on the data collected from the field survey. The results were presented as follows.

Hypothesis One: There will be no combined influence of instructional facilities and quality assurance measures on teaching of Office Technology and Management courses in public Polytechnics in South West, Nigeria

Table 4.6 Showing Multiple Regression analysis for combined Influence of instructional facilities and Quality assurance measures on teaching of OTM courses

4.3 Test of Hypotheses

The hypotheses formulated to guide this study were tested using regression analysis based on the data collected from the field survey. The results were presented as follows.

Hypothesis One: There will be no combined influence of instructional facilities and quality assurance on teaching of Office Technology and Management courses in public Polytechnics in South West, Nigeria

Table 4.6 Showing Regression analysis for combined Influence of instructional facilities and Quality assurance on teaching of OTM courses in public Polytechnics in South West, Nigeria

ANOVA

Model	Sum of Squares	Df	Mean squares	F	P-value
Regresssion	156417.924	2	78208.962	44.875	0.000
Residual	64485.051	37	1742.839		
Total	220902.975	39			

Model Summary

R = 0.841

R Square = 0.708

Adjusted R Square = 0.692

Standard Error of the estimate = 41.747

Dependent Variable: Teaching Abilities

Predictors: (constant), Instructional Facilities and Quality Assurance

F-value is significant at 0.05

Source: Researcher's Field Survey Results 2021

Table 4.6 shows the model summary and coefficients of regression analysis for the combined influence of instructional facilities and quality assurance on teaching of Office Technology and Management courses in public Polytechnics in South West Nigeria. The table shows that the ANOVA value of ($F_{2,37} = 44.874$, $P < 0.05$) is significant which means that the regression model is a good fit of the data. This suggests that instructional facilities and quality assurance significant influence teaching abilities of academic staff teaching Office Technology and Management courses in public Polytechnics in South West Nigeria. The model summary shows that the coefficient of determination (R) value is 0.841 which

indicates a good correlation between the predictor variables and the criterion (dependent variable). An R-value of 0.000 is taken for further analysis. In this case, the value is 0.841 which is good. The R^2 value of 0.708 shows that 70.8% variation in teaching abilities (dependent variable) could be explained by the predictor variables (instructional facilities and quality assurance). The remaining 29.2% could be due to other factors that were not considered in the study. An R^2 value greater than 0.05 means that the model is effective enough to determine the relationship. In this case, the value is 70.8%, which is also good. The adjusted R^2 value which gives a more honest report of the data shows that 69.2% of the variance in teacher's qualities is explained only by the independent variables (instructional facilities and quality assurance) which are kept in the model. This, therefore mean that the remaining 31.8% could be as a result of other predictors included or added to the model that do not have a significant prediction on teaching abilities of academic staff teaching OTM courses in public Polytechnics in south west, Nigeria..

Hypothesis Two: There will be no significant relative influence of instructional facilities and quality assurance on teaching of Office Technology and Management courses in public Polytechnics in South West, Nigeria

Table 4.7 Showing Beta Coefficients for Relative Influence of Instructional Facilities and Quality Assurance on teaching of OTM courses in public Polytechnics in south West Nigeria.

Model	Unstandardized Beta	t	Sig.	R^2	Adj. R^2	Sig.
Constant	6.492	0.737	0.066			
Instructional Facilities	1.211	6.601	0.000	0.708	0.692	0.000
Quality Assurance	0.895	5.028	0.000			

Dependent Variable: Teaching Abilities

Predictors: Instructional Facilities and Quality Assurance

Source: Researcher's Field survey, 2021

Table 4.7 presents the relative influence of instructional facilities and quality assurance on teaching abilities of academic staff teaching OTM courses in public Polytechnics in South west, Nigeria. The adjusted R^2 was used to establish the predictive power of the study model. From the results, the adjusted coefficient of determination (Adj. R^2) of 0.692 showed that instructional facilities explained 69.2% of the variation in teaching abilities of academic staff teaching OTM courses in public Polytechnics in South West Nigeria while the remaining 30.8% variation in teaching abilities is explained by other exogenous variable different from instructional facilities for teaching OTM courses in public Polytechnics in South West Nigeria.

The path coefficient of each instructional facilities and quality assurance on teaching OTM courses in public Polytechnics in South West Nigeria represents the coefficient (B) that show the relative influence of instructional facilities and quality assurance on teaching of OTM courses in public Polytechnics in South West, Nigeria. Table 4.7 revealed that at 95% confidence level, instructional facilities 1.211, 6.601 and quality assurance (B = 0.895, 5.028) are statistically significant. This result shows that the relative influence of instructional facilities and quality assurance with their concomitant t-value are greater than the threshold of 1.96 suggesting a statistically significant relative influence. The result also indicates that taking quality assurance variable at constant, a unit change in instructional facilities will lead to 1.211 change in teaching abilities of academic staff teaching OTM courses in public Polytechnics in South West, Nigeria. Also, taking instructional facilities variable at constant, a unit change in quality assurance will lead to 0.895 change in teaching abilities of academic staff teaching OTM courses in public Polytechnics in South West, Nigeria.

On the strength of this, the result in table 4.7 (Ad) R^2 0.692, p = 0.000 with coefficient of 0.896 and t-value of 5.028, this study can conclude that instructional facilities and quality assurance influence teaching abilities of academic staff teaching OTM courses in public Polytechnics in south West, Nigeria hence, the study rejects the null hypothesis which states that there will be no significant relative influence of instructional facilities and quality assurance on teaching of Office Technology and Management courses in public Polytechnics in South West, Nigeria.

4.4 Discussion of Findings

This section discusses the findings of the study in relation with previous studies.

Hypothesis one examined the combined influence of instructional facilities and quality assurance measures on teaching of Office Technology and Management courses in public polytechnics in South West Nigeria. The result of the findings revealed that the combination

of instructional facilities and quality assurance measures jointly influenced significantly the teaching of OTM courses in public Polytechnics in South West, Nigeria. This implied that availability and utilization of instructional facilities for teaching of OTM courses and enforcement of internal quality assurance measures are considered critical success factors that drive knowledge and skill acquisition in OTM programme.

This result is in agreement with the previous findings of researchers who revealed that new technologies utilization in teaching and learning business courses have positive influence on the teaching and learning of business education courses (which includes Office Technology and Management)[1,2,3,4,5,6,7]..

The finding of the study regarding test of hypothesis 2 as shown in Table 4.7, with regard to relative influence of instructional facilities and quality assurance measures on teaching of Office Technology and Management courses, it was revealed that there is significant relative influence of instructional facilities and quality assurance measures on teaching of Office Technology and Management courses in public Polytechnics in South West, Nigeria.

The findings lend credence with researchers who assert that the need for quality assurance control in Nigerian schools cannot be overemphasized and that quality assurance serves as indispensable component of quality control strategy in education, ensure and maintain high standard of education at all levels, helps in monitoring and supervision of education, determine the quality of teachers, determine the number of classrooms needed and determine the level of adequacy of the facilities available for quality control[8,9,10].

According to the study's findings for research question 1 (Table 4.2), which analysed the teaching abilities of academic staff teaching OTM courses in public polytechnics in South West Nigeria, it revealed that the abilities used in teaching OTM courses in public polytechnics in the South West of Nigeria are human and intellectual abilities measured by

personal qualities, responsibility and decisiveness, effective communication, instructional planning, leadership, and academic qualities.

This finding is in line with the findings of a previous study, which found that a lecturer delivering OTM courses needs to improve his human and intellectual qualities in order to be a better lecturer. Such abilities include personality traits, physical stamina, perseverance, responsibility, initiative, self-control, decisiveness, humour, effective communication, good listening, instructional planning, classroom management, time management, loyalty, leadership and academic qualities, subject-matter knowledge, practical knowledge of the subject, time management, and vigour are some examples of qualities and abilities[11]. This by implication implied that academic qualifications are not enough to become a successful academic staff in OTM programme.

The findings of the study regarding research question 2 as shown in Table 4.3 which is on the instructional facilities available for teaching of OTM courses in public polytechnics in South West, Nigeria demonstrated that computer laboratories, multi-media projectors, and marker boards are the instructional facilities provided for teaching of OTM courses. Other instructional facilities, such as keyboarding laboratories, an E-library with current textbooks and journals, a shorthand laboratories, modern offices, photocopying machines, rizo machines, scanning machines, conducive lecture rooms, and good furniture and fittings, are not found in public polytechnics in South West Nigeria.

This revelation is consistent with findings from a study of the availability and use of instructional resources for teaching and studying OTM courses in Niger State polytechnics[12]. Insufficient instructional facilities for teaching and learning abilities of OTM courses in Polytechnics in Niger State were discovered in the study. However, this study differs from the findings of another researcher on availability of infrastructural materials in tertiary institutions in Borno State. The study revealed that there are infrastructural materials

available for effectively teaching and learning of OTM courses but could not be utilized due to non-availability of stand-by generators[13].

From the findings of the study regarding research question 3 as shown in Table 4.4, regarding level of utilization of instructional facilities for teaching of OTM courses in public polytechnics in South West, Nigeria, it revealed low level of utilization except for computer laboratories with un-interrupted power supply, multi-media projectors and marker boards that are highly utilized for teaching of OTM courses. The low level of utilization of other instructional facilities is as a result of the unavailability of these facilities.

This findings concord with earlier research on assessment of availability and utilization of instructional materials for teaching and learning OTM courses in Polytechnics in Niger State. The study found low extent utilization of instructional facilities for teaching and learning OTM courses in Polytechnics in Niger State[12]. However, this study differs from the findings of another researcher on utilization of infrastructural materials in tertiary institutions in Borno State. The study revealed that infrastructural materials available are not effectively utilized due to non-availability of stand-by generators[13].

From the finding of the study regarding research question 4 as shown in Table 4.5, on quality assurance measures for teaching of OTM courses in public polytechnics in South West Nigeria. It was discovered that external moderation of examination questions, examination monitoring team, and the use of qualified academic staff are the quality assurance measures practised to ensure quality teaching of OTM courses in public polytechnics in South West, Nigeria. This implied that other quality assurance indices are not being adhered to by Polytechnic management in South West, Nigeria.

The finding is in agreement with a researcher who found that most Polytechnics and Universities in Delta State do not observe religiously the specified guidelines and course

specifications in order to ensure standard[8]. It however, differs from another researcher who found out that there was a very satisfactory level of quality assurance implementation in terms of general standards of good practice in Technical Colleges of the Sultanate of Oman[9].

Endnotes

1. . David Zakka & Priscilla Matthew.. Critical issues in the teaching and learning of office technology and management. Journal for the promotion/advancement of office management/secretarial profession, (4) 22-29, 2018.

2. . Frank Okoro.. Strategies for enhancing the accessibility and use of information and communication technology in the colleges of education in Enugu State of Nigeria. Nigerian vocational journal 14(2) 104-114, 2016.

3. . Charity Nneka Emeasoba. An evaluation of equipment for the teaching and learning of office technology and management in Abia State. Association of Business Educators of Nigeria, Conference Proceedings 162-174, 2015.

4. Anita Ogheneovo Amiaya.. Availability and utilization of new technology in business education for teaching office technology and management in Delta State Polytechnics. *Nigeria Journal of Business Education.* Vol.3 No. 2, 64-72, 2016..

5. E. A. Erwat & Sunday Ebhodaghe Akasi.. Effects of instructional facilities on the teaching and learning of business studies in Ede South Local Government Area of Osun State. Journal for the promotion/advancement of office management/secretarial profession, vol. 13 No. 1, 69-81, 2020.

6. Isreal Segun Ogundele & Lasun Lawal.. Influence of new technologies on the teaching of business education courses in tertiary institutions in Kwara State. Conference proceedings of ABEN, vol. 2 (1) 303-309, 2015

7. Faith Tony-Okeme Acharu & Solomon Ebiloma. Influence of infrastructure on the teaching and learning of office education in Polytechnics. Nigerian Journal of Business education 2 (3) 78-88, 2014).

8. Moses Onyesom & Nze Kingsley Ashibogwu.. Towards quality assurance in business education in Nigeria: Constraints and control. *Asian Journal of Business Management* 5(3) 306-312. 2013.

9. John Michael Faller. Quality assurance implementation, management practices and staff performance in the technical Colleges of the Sultanate of Oman: Inputs for a quality intervention program. *Academic Journal of Interdisciplinary Studies,* vol. 7 No. 2 49-60., 2018.

10. Oluwole Oyewole. Developing quality assurance systems in African Universities. AAU initiatives. The quality assurance situation and capacity building needs of higher education in Africa 1-16, 2012.

11. Mary Ronke Arinde,. Educational services, Teacher Quality and Students' Academic Performance in public Senior secondary Schools, North Central Zone,

Nigeria. Being unpublished Ph.D thesis submitted to the Department of Educational Management, University of Ilorin, Kwara State, 2010.

12. Enonche Adakole.. Availability and utilization of instructional materials in the teaching and learning of office technology and management courses. Unpublished M.Sc (Ed) thesis submitted to the department of Business and enrepreneurship Education, Kwara State University, Malete, 2016..

13. Joyce Orheruata & Maman Abubakar.. Assessment of utilization of instructional material in tertiary institutions in Borno State. ABEN Conference Proceeding 1 (1), 73-77, 2016.

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Chapter Five

Conclusion

This chapter presents and discusses the summary of findings, conclusions and provides useful recommendations, contributions to knowledge and suggestions for further studies. It commences with summary of the content, coverage and scope of work, the objectives, research questions, hypotheses, review of literature relevant to the study and relevant applicable theories (Competency theory, Reinforcement theory of motivation by Skinner, cognitive Learning theory, System theory and Theory of Cognitive Flexibility). The six objectives of the study were addressed by the four research questions and two null hypotheses.

5.1 Summary of findings

The aim of this study was to examine the influence of instructional facilities and quality assurance on teaching of OTM courses in public polytechnics in South West Nigeria. The study has five chapters so as to achieve its main objective. Chapter one presented the background to the study which affirms that teaching abilities; human and intellectual have positive influential effect on the overall skill acquisition of students. Several studies have been done on instructional facilities and quality assurance on teaching of OTM courses in different research context. Also, empirical submission has been made about instructional materials and quality assurance in teaching and learning of OTM courses in tertiary institutions; polytechnics inclusive. However, scholars have recommended that more research be conducted in the polytechnic sector because of the gradual decline of skill acquisition of graduates from the polytechnics

It is worthy to note that polytechnic sector is battling with problems ranging from proper recognition by the federal Government on its role in nation building, poor funding, lack of instructional facilities, increase in students' enrolment and improper functioning of quality assurance unit in each polytechnic to ensure standards. It is against this backdrop of events that this study intends to investigate the influence of instructional facilities and quality assurance on teaching of OTM courses in public polytechnics in South West, Nigeria.

Literature review of existing relevant studies to the concept of instructional facilities and quality assurance on teaching of OTM courses was done. Instructional facilities in this study included dimensions such as computers with un-interrupted power supply, Internet facilities, standby generators, shorthand laboratory with microphones and headphones, keyboarding laboratories with electric machines and manual typewriters, multi-media projectors, marker boards, air conditioners, good furniture, scanning machine, television, radio/recorder, photocopying machines, rizo machines, e-library with recent text-books and journals. Quality assurance in this study was measured with qualified lecturers, instructors and technologists, training and re-training of academic staff, compliance to regulated class capacity, class monitoring team, external moderation of examination questions, moderation of examination scripts, conducive teaching environment, regular students' assessment and prompt dissemination of information to staff/students. Teaching abilities was measured with human abilities; personal qualities, responsibility and decisiveness and intellectual abilities; effective communication, instructional planning, leadership and academic qualities. The empirical review was done to capture the interaction between instructional facilities, quality assurance measures and teaching of OTM courses in public polytechnics in South West, Nigeria.

The study reviewed five different theories which are of specific relevance to the study. These are; Competency Theory by Azemikhah (2005), Cognitive learning Theory by Wolfgang and Tolman (1920), Reinforcement Theory of Motivation by Skinner (1938),

Theory of Cognitive Flexibility (Spiro et al, 1989) and System Theory by Ludwig Von Bertalanffy (1940). Competency theory by Azemikhah was used as a major anchor theory for the study. The relevance of this theory to the present study lies on the fact that the ability of academic staff to teach and make students to understand any OTM courses is contingent on the extent to which he/she is competent in that area. This is because the students' ability to strike a balance between the use of the intellectual (the conceptual element) and the hands also referred to as the (human abilities) is dependent on the ability of the teacher to use skills as an interplay element.

A cross-sectional survey design was employed as it studied a subset of the population at a point in time and to investigate the influence of instructional facilities, quality assurance measures on teaching of OTM courses in public polytechnics in South West, Nigeria. Cross sectional survey design was found appropriate for the study because the population consist of three different categories of academic staff in the polytechnics namely; lecturers, instructors and technologists. The study employed the use of an adopted and adapted questionnaires as the instruments to collect data from the respondents after they were scientifically certified to be valid and reliable for the intended purpose through the conduct of a pilot study. The population of the study was 184 made up of academic staff; lecturers, instructors and technologists who taught OTM courses during the 2019/2020 academic session in 10 public polytechnics in South West Nigeria. Total enumeration sampling technique was used. Both the descriptive and inferential statistics such as frequency distribution count and mean were used for data analysis. Specifically, the descriptive enhanced the analysis for all the study variables and it provided answers to the specific research questions of the study. The inferential statistics in form of multiple regression and simple regression were used to test the two null hypotheses at 0.05 level of significance to determine the rejection or acceptance of the hypotheses formulated in the introductory chapter.

The data analysis established the analytical technique adopted, interpretation of results and discussion of the research findings. In all, six research objectives, four research questions and two research null hypotheses were formulated and tested. The data analysis was carried out in line with the study's specific objectives and hypotheses from which the patterns were investigated, interpreted, and conclusion drawn. Frequency distribution tables and percentage presentation approach were employed in the analysis and interpretation of data collected using the Statistical Packages for Social Sciences (SPSS) version 25. The data generated were sorted, coded and analysed to establish the statistical significance of instructional facilities, quality assurance and teaching of OTM courses in public polytechnic in South west Nigeria. The results were extensively discussed in the context of the current research as well as extant literature.

Findings of the study can be summarized as follows:

1. The teaching abilities being used in teaching of OTM courses in public polytechnics in South West, Nigeria are human abilities with the measures of personal abilities, responsibility and decisiveness while the intellectual abilities are; effective communication, instructional planning, leadership and academic qualities.
2. The result indicated that computer laboratories, multi-media projectors and marker boards are the only instructional facilities available for teaching of OTM courses while other instructional facilities mentioned in the study are not available in majority of the public polytechnics in South West, Nigeria.
3. It was revealed that the rate of utilization of instructional facilities for teaching of OTM courses in public polytechnics in South West Nigeria is very low except for computer laboratories with computers and uninterrupted power supply, multi-media projectors and marker boards which are available. Academic staff and students of OTM have no access to other facilities since they are grossly inadequate.

4. The results indicated that external moderation of questions, examination monitoring team and the use of qualified academic staff are the internal quality assurance measures put in place to ensure quality teaching of OTM courses.
5. The study found that quality assurance measures are not religiously observed by Polytechnic managements in South West, Nigeria in ensuring optimal learning skills of OTM courses.
6. It was revealed that instructional facilities and quality assurance measures when provided have significant combined influenced on teaching of OTM courses in public Polytechnics in South West, Nigeria.
7. It was discovered that instructional facilities and quality assurance measures have relative influence on teaching of OTM courses in public polytechnics in South West Nigeria.

5.2 **Conclusion**

This study has empirically revealed that Office Technology and Management courses are skill-based. The only way of mastering this skill is through provision of instructional facilities and observance of quality assurance measures by appropriate Agencies of Government. The findings of the study concluded that Office Technology and Management programme which is responsible for production of effective and efficient secretaries and office managers are without necessary and adequate instructional facilities for teaching of the courses. The implication of the grossly inadequate facilities for teaching of Office Technology and Management courses will be ineffective and students will lack the skills and knowledge that will make them employable and self-reliance. The need for adequate provision and effective utilization of educational facilities is therefore paramount to the achievement of the lofty objectives of Office Technology and Management programme in public polytechnics.

It is therefore, the responsibilities of stakeholders; government, school managers and individuals to adequately provide educational facilities for the teaching and learning of OTM courses while academic staff and students have the responsibility of proper utilization and maintenance of available educational facilities.

Government knows the vital role instructional facilities play in the teaching and learning processes. It could lead to accreditation, reaccreditation and sometimes de-accreditation of academic programme in polytechnics. Thus, it is the responsibility of government to provide polytechnics with adequate instructional facilities for effective teaching of OTM courses to enable teachers impart into students the necessary skills and competencies needed in the world of work.

Lecturers in OTM department have the responsibility of utilizing the available instructional materials in their polytechnics for teaching OTM courses to encourage students to move beyond memorization to higher levels of learning that require application, clarification, expansion and generalization. Students on the other hand have the responsibility of making themselves available and accessible to learn to use instructional facilities which prepares and make them employable in order to be relevant to themselves and to the society otherwise they become half-baked and unemployable and become nuisance to the society.

The observed lack of practical skills by OTM graduates is due in part to unavailability and non-utilization of instructional facilities in teaching and learning of the skill courses of Office Technology and Management programme. The present theoretical method of teaching OTM courses in public Polytechnics in Nigeria should be replaced with practical based approach by making sure that provision is made of all that are required in teaching and learning skills of OTM courses. It is only through practical approach in teaching and learning that the aim and objectives of Office Technology and Management programme in polytechnics could be realized.

5.3 Recommendations

The essence of research activity is to find solution to identified problem or lingering phenomenon which needs to be addressed. Teaching is a deliberate and conscious effort of imparting the totality of education to learners at any level of education. Over the years, the teaching of secretarial studies (now Office Technology and Management) has changed dramatically. To be effective, teaching necessitates a foundation of knowledge. Individuals' competence or ability refers to characteristics they possess that help them meet a given set of criteria. Academic staff: lecturers, instructors and technologists teaching Office Technology and Management (OTM) courses need to develop both human and intellectual abilities which will enable them to be effective in their obligatory roles to their students in terms of imparting the necessary skills and knowledge which will help the graduates to be employable and useful to self and the nation at large. Office Technology and Management is information and communication technology inclined course of study and this necessitates the use of modern instructional facilities for effective teaching and learning of the programme.

Instructional facilities are the devices or equipment use for teaching and learning of OTM courses. Such facilities like computers with uninterrupted power supply, keyboarding laboratories with manual and electronic typewriters, shorthand laboratories with headphone and microphone, model offices with photocopying machine, rizo, tape recorder just to mention but few. These instructional facilities in OTM are very useful for imparting knowledge and skills on the students. Quality assurance measures which ensure that available facilities are judiciously applied are also very useful for the teaching of OTM courses. When instructional facilities and quality assurance measures are appropriately applied in teaching process, the resultant effect is optimal knowledge and skill acquisition.

Thus, the following are recommendations of this study:

1) Polytechnics running Office Technology and Management programme should acquire the necessary modern equipment, instructional facilities, and other educational facilities needed in the department. In other words, tertiary institution offering OTM programme should be well equipped for quality education.
2) Management of the various Polytechnics running OTM programme should establish a linkage with industrial based organisations where students will be exposed to various skills of office operation during their Students Industrial Work Experience Schemes and Industrial Attachment.
3) Quality assurance measures enumerated in this research work relating to academic staff of OTM programme should be implemented and taken seriously. Widow-dressing attitude of Polytechnic management during accreditation exercise by the National Board for Technical Education should be discontinued.
4) Quality Assurance Units in each of the Polytechnics in Nigeria should be strengthened and empowered by Management to function properly.
5) Office Technology and Management lecturers, instructors, and technologists should continue to be trained and re-trained in new technologies for teaching and learning.

5.4 Contributions to Knowledge

The study established the combined significant influence of instructional facilities and quality assurance measures on Teaching of Office Technology and Management courses in public Polytechnics in South West, Nigeria. The study also revealed that there is significant relative influence of instructional facilities and quality assurance measures on teaching and learning of OTM courses in Polytechnics. The study further revealed that computer laboratories with uninterrupted power supply, multi-media projectors and marker boards are

the only instructional facilities available for teaching of OTM courses in Polytechnics in South West, Nigeria; while other instructional facilities such as scanners, rizo machine and modern offices among others are not available. Moreover, the study shows that the rate of utilization of instructional facilities for teaching of OTM courses in Polytechnics in South West, Nigeria is very low because most of the facilities are not available and that quality assurance measures such as supervision, class monitoring, training and re-training of academic staff among others are not religiously enforced.

The study has immensely added to existing literature by providing additional data and reference guide on Instructional Facilities and Quality Assurance Measures on Teaching of OTM courses as well as the application of Competency Theory by Azemikhah (2005) to future researchers and investigators on related issues

The conceptual model used in this study is a contribution to the body of knowledge because it is unique to this research.

5.5 Suggestions for Further Research

This study focused on Instructional Facilities and Quality Assurance on Teaching of Office Technology and Management Courses in public Polytechnics in South West Nigeria. To further broaden the frontiers of knowledge, the following areas of study are hereby suggested for further research.

a) The present study was carried out in ten (10) public Polytechnics offering OTM as a course of study in South West Nigeria. The study can be replicated with a wider scope in other parts of the country using other measures of the variables. Descriptive research survey design could be adopted in collecting data for the study.

b) Study on Instructional Facilities and Quality Assurance Measures on Teaching of Office Technology and Management Courses can be conducted in Privately Owned Polytechnics in Nigeria

c) Study on Instructional facilities and Quality Assurance Measures can be conducted on skill related courses in Nigeria Polytechnics such as Mass Communication, Hospitality Management and Computer Engineering among others.

Bibliography

Journals

Acharu, F. T., & Ebiloma,.S. Influence of infrastructure on the teaching and learning of office education in Polytechnics. *Nigeria Journal of Business Education* 2 (3) 78-88, 2014.

Achimugu, L. & Onojah, P. Factors hindering effective production and utilization of teacher-made instructional materials in teaching senior secondary chemisgtry in Federal Capital Territory, Abuja, Nigeria. *International journal of scientific Research in Education,* vol. (3) 352-361, 2017.

Achimugu, L. Availability and utilization of instructional materials for teaching chemistry in senior secondary schools. *International journal of Novel Research in Education and learning*, vol. 4, 51-62, 2017.

Adakole, E. Assessing the effectiveness of information technology in teaching business education in Nigerian tertiary institutions. *ABEN Conference Proceeding* 2(1) 223-229, 2016.

Adakole, E., Eiriemiokhale K. A. & Nnaji., F. O. Factors affecting availability of instructional materials in teaching and learning of office technology and management programme in Polytechnics in Niger State, Nigeria. *American Journal of Research Communication,* vol. 4(10) 19-27, 2016..

Adebayo, O. A.. Effective utilization of equipment and machines: a means of improving teaching. *Journal of contemporary issues in education,* 1(1) 144-155, 2017.

Adegbesan, S. Establishing quality assurance in Nigeria education system: Implication for educational managers. *Educational Reseach and Reviews* Vol. 6(2) 147-151, 2011

Adegbenjo, A. O. Challenges of using emerging technology in the teaching of office technology and management courses in tertiary institutions in the South West of Nigeria. *Nigerian Journal of Business Education* vol. 1 No. 3 46-62, 2016.

Ademiluyi, L. F. Educational data to analyse students' performance. *International Journal of Advanced Science and Applications* 2 (6) 63-69, 2018.

Odeniyi, A. O. Impact of instructional aids on students' academic performance in physics in secondary schools in Federal Capital Territory (FCT) Abuja, Nigeria. *European Scientific Journal*. Vol. 14, 4, 366-376, 2018.

Adeoti, O. & Umoru,T.A.. The use of information and communication technology for the enhancement of teaching and learning of business subjects in secondary schools. *Conference proceedings of ABEN,* vol. 2 (1) 230-240, 2015.

Adeyemi, C. Competencies required by teachers of business education for effective teaching of entrepreneurship. *Business Education Journal* 8(1) 192-205, 2016.

Afeidia, A. O. Challenges of office technology and management courses and its implications on the secretarial profession. *Nigerian Journal of Business Education* 1(3) 279-288, 2014..

Agbongiasede, E. A. Office technology and management curriculum in Polytechnics. *Nigerian Journal of Business Education* vol. 3, 30-45, 2016

Agboola, J..Critical challenges confronting business education programmes in contemporary Nigeria. *Nigerian Journal of Business Education* vo. 2 No. 3, 1-13, 2015.

Agholor, S. Impact of National Board for Technical Education Accreditation Exercise on office technology and management programme of Polytechnics in Nigeria. *International Journal of Vocational Education and Training Research* vol.3 (2), 15-20, 2017.

Ajah A. Evaluation of the training facilities for business studies in Polytechnics in the Southern States of Nigeria. *Journal of Business and Management* 1(1) 52-60, 2016.

Ajayi, I. & Akintunde, L. The Universal issues of quality assurance in Nigerian Universities. *Journal of Sociology and Education in Africa,* 6(1) 168-183, 2017..

Akasi, S. E.. Environment and instructional resources as predictor of students'academic achievement. *Journal of Eduction and Human Development,* vol. 6 (1), 26-36, 2016.

Akpan, V. I. & Onoh, U. A. Effects of utilization of instructional materials on the academic performance of senior secondary school student in Ikwuano, Abia State. *International journal of scholarly and educational research in Africa*, vol, 12 (4), 1-11, 2017.

Akpanobong, U. E, Ukpong, E. & Etim `V. E.. Information and communication technology and the teaching of business subjects at the secondary school level in Akwa Ibom State. *Nigerian Journal of Business Education* 1(3) 268-278, 2014..

Anioke, .B. Toward the changing role of contemporary office, challenges of quality assurance in skill development in Universities. *Nigerian Journal of Business Education* 1 (2) 57-67, 2015.

Emeasoba, C. N. An evaluation of equipment for the teaching and learning of business studies in public junior secondary schools in Enugu State. *Conference proceeding* 2 (1) 162-169, 2015.

Amesi, J.. Issues in evaluation and assessment: Implications for effective teaching and learning in business education in Niger Delta. *Conference proceeding* 2 (1) 143-152, 2015.

Amiaya, A. O.. Availability and utilization of new technology in business education for teaching office technology and management in Delta State Polytechnics. *Nigeria Journal of Business Education.* Vol.3 No. 2, 64-72, 2016.

Anih, C. N.. Availability and utilization of emerging technology in teaching business education courses in colleges of education in South-East, Nigeria. *Journal of professional secretaries and office administrators* vol. 26 (1) 118-129, 2018..

Ansah, F.. A Strategic quality assurance framework in an African higher education context. *Quality in higher education* 21 (2) 1-19, 2015

Arop, B. A.. Effect of instructional materials on the teaching and learning of basic science in junior secondary schools in cross Rivers State, Nigeria. *Global Journal of Educational Research* vol. 14, 67-73, 2015.

Ayelotan, I. O. & Sholagbade, F. Infrastructural facilities and business education: office technology and management perspective. *ABEN Conference Proceedings* 1 (1) 88-97, 2016.

Babayo, Y. A. (2017). Assessment of schools' facilities and utilization time-rate at technical college level within Bauchi State. *International Journal of Education and Evaluation* vol.3 No. 5, 50-55.

Bewaran, Y., Dazan, D. & Moris, P. Challenges of implementation of the office technology and management in Nigerian Polytechnics. *Nigerian Journal of Business Education* 2 (3) 109-118, 2015.

Boma, P. B..Availability of instructional facilities in teaching and learning in business education Department in Rivers State University. *International Journal of Innovative Education Research,* 7 (2) 1-11, 2019.

Dhakal, K. R. Availability and utilization of instructional materials in teaching geography in secondary schools. *The Third Pole: Journal of Geography,* pp 51-58, 2017

Emeasoba, C. N & Nweke, O. Level of availability and utilization of ICT facilities in teaching and learning of OTM in Polytechnics of Abia State. *Journal of Emerging Trends in Educational Research and Policy Studies,* 7(6) 404-413, 2016.

Emeasoba, C. N. An evaluation of equipment for the teaching and learning of office technology and management in Abia State. *Association of Business Educators of Nigeria. Conference Proceeding,* 162-174, 2015.

Eneogwe, V. N. Adoption of the use of new learning technologies in business education and its challenges. *Conference proceedings of ABEN,* vol. 2 (1) 310-317, 2015.

Enyekit, O., Obayi, T. & Owaji K. E.. Extent of instructional materials usage for ICT application in business programme in Rivers State University. *Conference proceeding* 2 (1) 175-182, 2015.

Erwat, E. A. & Akasi, S. E. Effects of instructional facilities on the teaching and learning of business studies in Ede South Local Government Area of Osun State. *Journal for the promotion/advancement of office management/secretarial profession,* vol. 13 No. 1, 64-70, 2020.

Ezenwafor, J. & Soneye, G.. Adequacy and utilization of ICT resources for quality instructional delivery in business education in Universities in South-West, Nigeria. *International Journal of Innovative Information System and Technology Research* 6 (1), 28-37, 2018.

Fadare, G. O. Assessment of instructional facilities and equipment available for implementation of office technology and management programme in Nigerian Polytechnics. *Nigerian Journal of Business Education,* 2 (3) 200-212, 2016.

Faller, J. M. Quality assurance implementation, management practices and staff performance in the technical Colleges of the Sultanate of Oman: Inputs for a quality intervention program. *Academic Journal of Interdisciplinary Studies,* vol. 7 No. 2 49-60, 2018.

Folorunso, I. O. Alternative sources of funding ICT resources for OTM programme in Polytechnics in Osun State. *Abeokuta Journal of Association of Secretarial Staff of Nigeria,* 2(1) 59-67, 2015.

Gbadegesin, A.. Problems of full utilization for using ICT/Internet services in teaching business education courses. *Conference proceedings of ABEN,* vol. 2 (1) 276-281, 2015.

Gbolade, J. E &. Soneye, M. Adequacy and utilization of ICT resources for quality instructional delivery in business education in Universities in South-West, Nigeria. *International Journal of Innovative Information Systems & Technology Research* 6(1) 28-37, 2018.

Igboke, S. & Okoro, C. Imperativeness of educational infrastructures in the production of competent business teachers. *Nigerian Journal of Business Education* 2(3) 89-98, 2014.

Igori, W.. Effects of instructional materials on the teaching and learning of social studies in secondary schools in Benue State. *International journal of current research,* vol.8 Issue 7, pp 33859-33863, 2016.

Igiri, C. & Effiong, O. E. Impact of instructional materials in teaching and learning of OTM in senior secondary schools in Yakurr Local Government Area Akamkpa, Cross Rivers State, Nigeria. *International letters of Social and Humanistic Sciences,* vol. 62, 27-33, 2015..

Ihionkhan, C. E. & Braimah,.Q.. Assessing the implication of instructional resources and utilization of office technology and management curriculum in Edo and Delta States Polytechnics. *Journal of Educational Policy and Entrepreneurial Research,* 49-57, 2017.

Ikwuka, O., Kanikwu, P. & Ikwuka, D. Utilization of instructional resources as perceived by student midwives in school of midwifery, Asaba Nigeria. *Internal Journal of Science and Research* pp 23-27, 2016..

Ile, C. M. Adequacy of instructional facilities and education programme in College of Education: Evidence from the Eastern States of Nigeria. *Business Education Journal* 3 (4) 168-188, 2014.

Isineyi, T. Challenges of office education in the era of globalization. *Journal of professional secretaries and Administrators,* 12 (3) 4-16, 2017.

Jimoh, F. I. Influence of inadequate instructional materials and facilities in teaching and learning of OTM in Polytechnics. *Business Education Journal* 6 (2) 101-109, 2016

John, F. & Saleh, M. Availalability of educational technological appliances for office technology and management programme in Saádatu Rimi College of Education, Kano. *Conference proceedings of ABEN,* vol.2 (1)201-212, 2015.

Kolo, M. The challenges of using new technologies in business education. *Conference proceedings of ABEN,* vol. 2 (1) 318-32, 2015..

Komolafe, I. A. Office technology and management: a recipe for gaining employment. Journal of contemporary issues. Published by School of Business Education, Federal College of Education (Technical) Akoka, 2017..

Komolafe, I. A. Advanced technology: An enhancement of secretarial practice. *Journal of Professional Secretaries and Administrators*, 12 (3) 93-103, 2018.

Krejcie, Robert, V. & Morgan, Daryle .W, Determining Sample Size for Research Activities, Educational and Psychological Measurement, (30) 607-610, 1970.

Mandara, B. & Paul, V.. Utilization of information and communication technology in teaching office education for quality assurance of office education graduates in Adamawa State tertiary institutions. *Journal of Education and Policy Review* pp 11-20, 2016

Maduabuchi, I. A critique of the new curriculum in office technology and management. *Business Education Journal* 6 (2) 209-220, 2016..

Mensah, .M. A.. Implementation of internal quality assurance in Polytechnics: Evidence from Ghana. *European Scientific Journal*, vo. 12 No. 19, 221-241, 2016.

National Board for Technical Education. Office technology and management curriculum and course specifications, Kaduna, Nigeria, 2004.

Nnaji, F. O.. Critical issues in office technology and management and their emerging challenges. *ABEN Book of Readings* 2(1) 23-28, 2014.

Nwachokor, J. O. & Udoye, R. N. Assessment of the use of ICT in the teaching and lerning of business education in Colleges of Education in Delta State. *Conference proceedings of ABEN,* vol. 2 (1) 348-354, 2015.

Ogbebor, C..Office education in Nigeria. The challenges and strategies. *Journal of Professional Secretaries and Administrators*, 8 (2) 10-17, 2017.

Ogundele, I. S. & Lawal, L..Influence of new technologies on the teaching of business education courses in tertiary institutions in Kwara State. Conference proceedings of ABEN, vol 2 (1) 303-309, 2015.

Ojo, E. O. & Akhademe., A. E.. New technologies in teaching and learning of office technology and management. *Nigeria Journal of Business education* vol, 3 (2) 89-97, 2016.

Orheruata, J. & Abubakar, M. Assessment of utilization of instructional material in tertiary institutions in Borno State. *ABEN Conference Proceeding,* 1(1), 73-77, 2016..

Okoh, I. Information and the new challenges in records management. *Workshop proceeding of Association of Professional Secretarial Staff of Nigeria*, 29-37, 2017.

Okolo, C. Teaching business education in distance education programme: problems and strategies for improvement. *Business Education Journal* (11-20), 2016..

Okolocha, C. C & Nwadiani, C. Assessment of utilization of ICT resources in teaching among tertiary istitutions business educators in South South Nigeria. *Journal of Education and Learning,* 109-118, 2016..

Okoro, F. Assessment of office education skills required for entrepreneurial venture. *Business education Journal, 8 (2) 67-72* 2016*,*

Okoro, F. & Okoro, M. Polytechnic teachers' perception of the relevance of componenets of office technology and management programme in meeting the ICT needs of contemporary office. *Business Education Journal* VII (1) 46-61, 2015.

Okoro, F. Strategies for enhancing the accessibility and use of information and communication technology in the colleges of education in Enugu State of Nigeria. *Nigerian Vocational Journal* 14 (2) 104-114, 2016..

Okoro, J. Information and communication technology skills required of office education graduates as perceived by managers. *Delta Business Educators'Journal* 1 (5) 147-154, 2017.

Okoro, J. Stategies for enhancing quality assurance in business teacher education programme in Nigerian Universities. *Journal of Education and Practice*, 202-208, 2015.

Okpara, M. Teachers'self regulatory skills as correlate of students'achievement in integrated science. *Journal of Science Teachers'Association of Nigeria,* 46, 115-120, 2017.

Oladunjoye, G. T. Optimizing business education for national development. *Association of Business Eductors of Nigeria Workshop Proceeding,* 470-482, 2015.

Oladunjoye, G. T. & Eebo, T. O. Teaching and learning business education: evaluation strategies for keyboarding mastery. *Association of Business Educators of Nigeria, Conference Proceedings* 2(1), 135-142, 2015.

Olatoye, R. A. Effect of teaching using charts, real specimens and videos on secondary school students' achievement in Mammalian skeletal system concepts. *ENSAYOS, Revista de la facultad de educacion de Albacete,* 32 (2), pp 63-75, 2017.

Olayanju, V. T. The challenges of new technologies on secretarial profession. *Nigeria Journal of Business Education.* Vol.3 No. 2, 73-88, 2016..

Olugbogi, V. T. & Akinsanya, S. O. (2016). The roles of secretarial professional in managing technological change and innovation in an organisation. *Journal of professional secretaries and office administrators*, vol. 25 (1), 51-75.

Omoni, B. G.. (2015). The use of technology in teaching software application course and its impact on secretarial education students' performance. *Conference proceedings of ABEN,* vol. 2 (1) 330-337.

Osawaru, A. J. & Okungbowa, D..(2014). Preparing quality business education for the implementation of business education in tertiary institutions. *Nigerian Journal of Business Education* vol.1(3), 1-8..

Osibor, S. (2014) Identification of the gaps in office technology and management in Nigeria. *Business Education Journal* 6(2) 143-155.

Onyesom, M. & Ashibogwu, N. (2016). Towards quality assurance in business education in Nigeria: constraint and control. *Asian Journal of Business Management* pp 306-312.

Oyedele J. F. & Oladeji D. (2015). Use of Internet-based social media as a tool for enhancing teaching and learning in business education. *Conference proceedings of ABEN,* vol. 2 (1) 287-294.

Oyewole, O. (2012). Developing quality assurance systems in African Universities. AAU initiatives. The quality assurance situation and capacity building needs of higher education in Africa 1-16.

Ryan, T.(2015). Quality assurance in higher education: A review of literature. *Higher learning research communications*, 5 (4) 1-12.

Selesho, J. (2014). Enhancing the culture of quality assurance in higher education: perspectives of managing institutional accountability. *Mediterranean Journal of Social Sciences MCSER Publishing, Rome-Italy* vol. 5 No. 1, 12-16.

Shaibu, G. O., Okpe, A. & Barinem, S.. 2015). Evaluation of business education in Nigeria: Challenges and chances. *Conference proceeding* 2 (1) 153-161.

Smith, D. (2018). Competence in transition. *Journal of European Industrial Training* 45 (1) 44-50.

Sokyes, H. L, Moris, P. W. & Bewaran,.Y. S. (2018). Quality assurance and skill acquisition in office technology and management for sustainable national development. *Nigerian Journal of Business Education* vol. 5 (1), 71-75.

Udoudom, M. & Usoro, E. (2017).. Improving quality assurance in office technology education through effective classroom management. *Association of Business Educators Books of Readings:* pp 90-96.

Ugwuoke, E. (2011). Effective utilization of ICT for repositioning business education programme in tertiary institutions in Nigeria for national development. *International journal of Education Research,* 11(1) 20-24.

Usiobor, S.. Information in the new challenges of record management. *Workshop proceedings of APSSON,* 100-107, 2017.

Utoware, J, Chamberlain Kren-Ikidi & Isreal Apreala. Issues and Trends in the application of new technologies in teaching business education in rian universities in South-South States, Nigeria. *Nigeria Journal of Business Education.* Vol.3 No. 2, 52-63, 2016.

Utoware, J. D. & Kren-Ikidi, C..New technologies in business education for instruction and practice: Imperatives for quality assurance. *American International Journal of Contemporary Research,* vol. 3 No. 9, 124-130, 2013

Umoru, T. & Nnaji, F. O. Utilizing new technologies in the preparation of business education students for self reliance. *Conference proceedings of ABEN,* vol. 2 (1) 191-200, 2015.

Uwameiye, B. E.. Availability and utilization of tools and equipment for teaching and learning of garment making trade in the senior secondary schools in Edo State. *International journal of Humanities, Social Sciences and Education* vol. 3 12-18, 2016.

Vin-Mbah, F. I.. Business Educators' utilisation of multimedia and hypermedia technologies in tertiary business education classrooms in Anambra State. *Conference proceedings,* 2 (1), 183-190. 2015

Wallace, I.. Effects of instructional materials on the teaching and learning of OTM in Polytechnics. *Business Education Journal* 6 (2) 221-240, 2016.

Yakubu, A. & Ugwu, F. A... Technological innovation and effective secretarial service delivery in tertiary institutions in Kogi State. *Conference proceedings of ABEN,* vol. 2 (1) 338-346, 2015.

Yusuff, S.. Challenges and technological changes in business education on teaching and learning. *Conference proceedings of ABEN,* vol. 2 (1) 282-286, 2015

Zakka, D. & Matthew, P. Critical issues in the teaching and learning of office technology and management. *Journal for the promotion/advancement of office management/secretarial profession,* (4) 22-29, 2018.

Books

Adebayo, T. A. *Principle and practice of classroom instruction. Abeokuta:* Mama (Nig.) Publishers, 2016.

Bandura,.A. *Self-efficacy: the exercise of control*. New York: Freeman, 1961.

Donal, A. *Introduction to research in education.* USA Holt, Rineheat and Winston, Inc., 1979.

Fadare, J. A. Introduction to fundamental of modern office equipment/machinery for students of tertiary institutions. *New Deal Publications Ltd.,* Ikirun Road, Osogbo, Osun State, 2018

Hornby, A. S. Oxford advanced learners' dictionary of current English (8th ed). London: Oxford University Press.

Long, V. J. Internet networking. *Connectivity and communication.* Ibadan Aseda Publishers, 2017`

Nworgu, G. *Educational research: basic issues and methodology*, Owerri: Wisdom Publishers, 2006.

Ogunsaju, S. Nature and purpose of educational management. *The craft of educational management,* Ibadan Reginason books publishers,2016

Oloyo, R. A. *Fundamentals of research methodology for social and applied sciences.* ROA Eductional Press, 2017.

Omotosho, S.O. *Understanding research methodology*. Kingdom Heir Publishers, 2016.

Oyedijo, A. Management theory. Ibadan Paramount Books Publishers, 1998.

Skinner, B. F. *Fundamentals of human learning, Ilorin:* Babjii Printing Works, 1992

Umoru, T. A. *Basic research methods: competencies and application* (2nd ed.) Lokoja Onaivi Printing & Publishing Co. Ltd., 2015.

Wolfgang, K. & Tolman C. E. *Fundamentals of human learning, Ilorin*: Babjii Printing Works, 1930.

Internet Sources

Azemikhah, H. The 21st century, the competency era and competency theory. Open learning Institute of TAFE. Retrieved on the 10th of August, 2015 from wwwww.avetra.org.au/ABSTRACTS2006/PA%20058.pdf.

Benjamin, .S. Understanding and expanding multicultural competence in teaching. A faculty guide. Office of Teaching Resources in Psychology. *Retrievedfromhttp:/teachpsy.org.resources/Documents/otrp/resources*, 2016.

Oladipo Adeosun. Quality assurance and sustainable university education in Nigeria. Retrieved from http//aadice Hiroshima u.ac/(accessed on 24/2/2020).

Bukoye, .R. O. Utilization of instructional materials as tools for effective academic performance of students: Implications for counseling. *www.mdpi.com/journal/proceedings pp 1-7, 2018.*

Benjamin S. Understanding and expanding multicultural competence in teaching. *A faculty guide. Office of Teaching Resources in Psychology. Retrieved from http://teachpsy.org/resources/Documents/otrp/resources/tittleford05.pdf*., 2016.

Ogbu, J..Availability and utilization of instructional facilities for teaching of basic electricity in Ebonyi State Technical Colleges. *ISSN 2224-607X (paper)mISN 2225-0565 (online)* 162-168, 2015.

Unpublished Papers

Abba, .M. Instructional materials in the implementation of normadic education programme in Taraba State, Nigeria (Unpublished Master Degree Thesis), ABU, Zaria, 2017.

Acharu, F. T. Influence of information and communication technology teaching Aids on teaching office technology and management in Polytechnics in North-Central Geo-Political Zone, Nigeria. *An unpublished M.Ed Thesis submitted to the Department of Vocational And Technical Education, ABU, Zaria*, 2015.

Adebayo, T. O. An assessment of education resources available for office technology and management programme in Polytechnics in the South West zone of Nigeria. A paper presented at the conference for academic staff of higher and further education institutions organized by ACME professional (UK) in Aston University, Aston Triangle, Birmingham, 2017.

Adakole, E. Availability and utilization of instructional materials in the teaching and learning of office technology and management courses. *Unpublished M.Sc (Ed) thesis* submitted to the Department of Business and Entrepreneurship Education, Kwara State University, Malete, 2016.

Adakole. E. Office Technology and Management: a panacea for national development. *Unpublished conference paper presented at the 7th annual national conference of the school of business and management, the Federal Polytechnic, Bida, Niger State.* 2017.

Adeyinka, J. Teachers' perception of the effects and use of learning materials. Unpublished teaching materials, Kwara State University, Malete, Nigeria, 2016.

Akasi, S. E. & Adebayo, T. O. Office technology and management: a catalyst for youth employment and self-reliance. Conference paper delivered at School of Business Studies Annual Conference held at the Federal Polytechnic, Ede, Osun State, 2016.

Akasi, S. E. Assessment of instructional materials in teaching office technology and management courses in Polytechnics in Osun State. Seminar paper presented to the Department of Information Management, Lead City University, Ibadan, 2020.

Arikewuyo, M.. Effective funding and quality assurance in the Nigerian education system. A paper preented at the 1st National conference of the Institute of Education, Olabisi Onabanjo University, Ago-Iwoye, 2011.

Ehindero, S. Accountability and quality assurance in Nigerian Education. Paper preented at the International conference of the Institute of Education, Olabisi Onabanjo University, Ago-Iwoye, 2014.

Eya, P. Instructional material procedures in a challenge education system. Paper presented at the annual conference organized by curriculum development and instructional material centre, University of Nigeria, Nsukka, 2017.

Iredia, P. A. The tripod of liberal, vocational and technical education: politics of dichotomy in Nigeria. *4th Inaugural Lecture of Auchi Polytechnic, Auchi, Edo State,* 2015.

Ojedele, P. K. Vocational and technical education in Nigeria: Issues and challenges. Paper presented at the International Conference of the Nigerian Association for Eduational Management Administration and Planning (NAEAP) held at University of Lagos, 2017.

Onouha, E. C. Quality assurance in teacher education. A discussion paper presented at the NTI 25th anniversary celebration, Osogbo, 2018.

Onyesom, M.. Strategies considered effective for quality assurance in business education at the tertiary institutions in Anambra State, Nigeria. A paper preented at the International Conference of the Institute of Education, Delta State University, Abraka, 2015.

Onyesom, M.. Assessment of instructional resources for teaching business education at the Colleges of Education in Edo and Delta States of Nigeria. (Unpublished Thesis) Nnamdi Azikiwe University, Awka, 2016.

Uluabia, J. Assessment of availability and utilization of modern instructional materials for teaching business subjects in secondary schools in Delta North. (Unpublished thesis) Nnamdi Azikiwe University, Awka, 2017.

LEAD CITY UNIVERSITY, IBADAN
FACULTY OF COMMUNICATION AND INFORMATION SCIENCES
DEPARTMENT OF INFORMATION MANAGEMENT

Dear Respondent,

I am, Akasi Sunday Ebhodaghe of the above-named University, carrying out a research titled **Instructional Faculities, Quality Assurance and Teaching of Office Technology and Management Courses** in public Polytechnics in South-West Nigeria.

Please complete the questionnaire and your responses will be used strictly for academic purposes.

Thank you.

Akasi, Sunday Ebhodaghe
LCU/PG/000885

To be completed by Academic Staff teaching OTM courses

Section A: **Demographic Data**

Instruction: Please tick as appropriate

1. Institution: Federal Polytechnic, Ado-Ekiti ( ) Federal Polytechnic, Ede ( ) Rufus Giwa Polytechnic, Owo ( ) The Polytechnic, Ibadan ( ) Federal Polytechnic, Ilaro ( ) Lagos State Polytechnic, Ikorodu ( ) The Polytechnic, Iree ( ) The Polytechnic, Eruwa ( ) Moshood Abiola Polytechnic, Abeokuta ( ) Yaba college of technology, Yaba ( )
2. Gender: (a) Male ( ) (b) Female ( )
3. Academic Qualifications: (a) HND ( ) (b) B.Sc ( ) (c) M.Sc ( ) (d) P.hD ( )
4. Lecturer cadre ( ) Instructorship cadre ( ) Technologist cadre ( )
5. Working Experience:
   (a) 1- 5 years ( ) (b) 6 – 10 years ( ) (c) 11- 15 years ( ) (d) 16–20 years ( )
   (e) 20 years and above ( )

Section B: Teaching abilities of Academic staff Teaching Office Technology and Management courses

Instruction: Please indicate the option that best suits your opinion on the teaching abilities of Academic Staff of OTM Department

Key: Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2, Strongly Disagree (SD) = 1

Academic staff Teaching OTM courses possess the following teaching abilities					
S/N	**A: Human Abilities** **i) Personal qualities**	SA	A	D	SD
1.	Neat appearance always				
2..	Perseverance to teach effectively				
3..	Initiative to achieve class objectives				
4..	Self-control while relating with students				
5.	Humour to carry students along in class				
	ii) **Responsibility**				
6.	Accountable for students' knowledge in their courses				
7.	Unbiased in relating with students				
8.	Committed to institutional values				
9.	Can be trusted with effective teaching				
10	Adherence to academic calendar of my institution				
	iii) **Decisiveness:**				
11.	Ability to make firm decision				
12.	Ability to make quick decision				
13.	Ability to prevent crisis during class interactions				
	B: Intellectual Abilities i) **Effective Communication:**				
14.	Good listening skills to teach students				
15.	Clear expression while teaching students				
16.	Courteous speech when interacting with students				
17.	Attention to non-verbal signs from students				
	ii) **Instructional Planning** **Ability to:**				
18.	State aims and objectives of their various subjects				
19.	Use various devices to enhance lecture delivery				
20.	Use various teaching strategies to hold students' attention during class				
21.	Consciously manage time within teaching periods				
22.	Maintain effective class monitoring to achieve course objectives				
	iii) **Leadership**				

	Ability to:				
23.	Maintain honesty while dealing with students				
24.	Motivate students while interacting with them				
25.	Uphold impeccable character to retain dignity				
	iv) **Academic qualities** **Ability to:**				
26.	Go through students' questions with intelligence				
27.	Display adequate subject matter knowledge				
28.	Display practical knowledge				
29.	Passionate about helping students gain literacy				

Section C: Availability of Instructional Facilities for Teaching OTM Courses

Instruction: Please indicate the option that best suits your opinion on the availability of Instructional Facilities for teaching OTM courses in your Polytechnic.

Key: Frequently Available (FA) – 4, Often Available (0A) – 3, Rarely Available (RA) – 2, Never Available (NA) – 1

S/N	**Kindly indicate the availability of the following:** **Computer Laboratory**	FA	OA	RA	NA
1.	computers with un-interrupted power supply				
2.	Internet facilities				
3.	Standby generator				
	Shorthand Laboratory				
4.	Microphone				
5.	Headphones				
	Keyboarding Laboratory				
6.	Electronic machines				
7.	Manual Typewriters				
	Lecture rooms				
8.	Multi-media projector				
9.	Marker Boards				

10.	Air conditioners				
11.	Good furniture				
	Model office				
12	Scanning machine				
13.	Television				
14	Radio/Recorder				
15	Photocopying machines				
16	Rizo machines				
	E-Library				
17	Recent text-books				
18.	Recent journals				

Section D: Utilization of Instructional Facilities for Teaching OTM Courses

Instruction: Please indicate the option that best suits your opinion on the extent of utilization of Instructional Facilities for teaching OTM courses in your institution

Key: Very High Extent (VHE) – 4, High Extent (HE) – 3, Low Extent (LE) – 2, Very Low Extent (VLE) – 1

S/N	What is the extent of utilizing the following instructional facilities	VHE	HE	LE	VLE
1.	computers with un-interrupted power supply				
2.	Internet facilities				
3.	Standby generators				
4.	Microphone				
5.	Headphones				
6.	Electronic machines				
7.	Manual Typewriters				
8.	Multi-media projector				
9.	Marker Boards				
10.	Air conditioners				
11	Good furniture				
12	Scanning machine				

13	Television				
14	Radio/Recorder				
15	Photocopying machines				
16	Rizo machines				
17	E-library with Recent text-books				
18	E-library with Recent journals				

Section E: Quality Assurance Measures to Ensure Quality Teaching of OTM Courses.

Instruction: Please indicate the option that best suits your opinion on the quality assurance measures that are in place for effective teaching of OTM courses in your institution

Key: Strongly Agree (SA) – 4, Agree (A) – 3, Disagree (D) – 2, Strongly Disagree (SD) – 1

S/N	The following Quality Assurance Measures are in place to ensure effective Teaching of OTM courses.	SA	A	D	SD
1.	Qualified lecturers/Instructors/Technologists				
2.	Training and re-training of Academic staff				
3.	Compliance to regulated class capacity				
4.	Class monitoring team				
5.	External moderation of examination questions				
6.	Moderation of Examination scripts				
7.	Examination monitoring Team				
8	Conducive teaching environment				
9.	Regular students' assessment by academic staff				
10	Prompt dissemination of information to staff/students				

Table showing Polytechnics, Location and Ownership used for the study.

S/N	Polytechnics	Locations	Ownership
1.	The federal Polytechnic, Ado-Ekiti	Ekiti State	Federal Government

2.	Rufus Giwa Polytechnic, Owo	Ondo State	State Government
3.	The Federal Polytechnic, Ede	Osun State	Federal Government
4.	The Polytechnic, Iree	Osun State	State Government
5.	The Polytechnic, Ibadan	Oyo State	State Government
6.	The Polytechnic, Eruwa	Oyo state	State Government
7.	The Federal Polytechnic, Ilaro	Ogun State	Federal Government
8.	Mushood Abiola Polytechnic, Abeokuta	Ogun State	State Government
9.	Yaba College of Technology, Lagos	Lagos State	Federal Government
10.	Lagos State Polytechnic, Ikorodu	Lagos State	State Government

Source: Field Work, 2021

gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	89	50.9	50.9	50.9
	Female	86	49.1	49.1	100.0

	Total	175	100.0	100.0	

Academic Qualifications

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	HND/B.Sc	40	22.9	22.9	22.9
	M.Sc/M.Ed	66	37.7	37.7	60.6
	Ph.D	64	36.6	36.6	97.1
	4	5	2.9	2.9	100.0
	Total	175	100.0	100.0	

Work Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1- 5 years	24	13.7	13.7	13.7
	6 – 10 years	65	37.1	37.1	50.9
	11- 15 years	24	13.7	13.7	64.6
	16 – 20 years	34	19.4	19.4	84.0
	20 years and above	28	16.0	16.0	100.0
	Total	175	100.0	100.0	

Neat Appearance always

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	35	20.0	20.0	20.0
	A	138	78.9	78.9	98.9
	SA	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Perseverance to teach effectively

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	1	.6	.6	.6
	A	172	98.3	98.3	98.9
	SA	2	1.1	1.1	100.0

	Total	175	100.0	100.0	

Initiative to achieve class objective

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	173	98.9	98.9	98.9
	SA	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Self-control while relating with students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	174	99.4	99.4	99.4
	SA	1	.6	.6	100.0
	Total	175	100.0	100.0	

Humor to carry students along in class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	5	2.9	2.9	2.9
	A	170	97.1	97.1	100.0
	Total	175	100.0	100.0	

Accountable for students' knowledge in class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	172	98.3	98.3	98.3
	SA	3	1.7	1.7	100.0
	Total	175	100.0	100.0	

Unbiased in relating with students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	173	98.9	98.9	98.9
	SA	2	1.1	1.1	100.0

	Total	175	100.0	100.0	

Committed to institutional values

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	173	98.9	98.9	98.9
	SA	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

can be trusted withneffective teaching

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	171	97.7	97.7	97.7
	SA	4	2.3	2.3	100.0
	Total	175	100.0	100.0	

Adherance to academic calender in my institution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	1	.6	.6	.6
	A	173	98.9	98.9	99.4
	SA	1	.6	.6	100.0
	Total	175	100.0	100.0	

Ability to make frm decision

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	102	58.3	58.3	58.3
	A	70	40.0	40.0	98.3
	SA	3	1.7	1.7	100.0
	Total	175	100.0	100.0	

Ability to make quick decision

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	76	43.4	43.4	43.4
	A	95	54.3	54.3	97.7
	SA	4	2.3	2.3	100.0

	Total	175	100.0	100.0	

Ability to prevent crisis during class interactions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	12	6.9	6.9	6.9
	A	157	89.7	89.7	96.6
	SA	6	3.4	3.4	100.0
	Total	175	100.0	100.0	

Good listening skills to teach students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	174	99.4	99.4	99.4
	SA	1	.6	.6	100.0
	Total	175	100.0	100.0	

Clear expression while teaching students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	171	97.7	97.7	97.7
	SA	4	2.3	2.3	100.0
	Total	175	100.0	100.0	

Courteous speech when interacting with students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	1	.6	.6	.6
	A	169	96.6	96.6	97.1
	SA	5	2.9	2.9	100.0
	Total	175	100.0	100.0	

Attention to non-verbal signs from students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	171	97.7	97.7	97.7
	SA	4	2.3	2.3	100.0
	Total	175	100.0	100.0	

State aim and objectives of their various subjects

		Frequency	Percent	Valid Percent	Cumulative Percent

Valid	A	173	98.9	98.9	98.9
	SA	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Used various devices to enhance lecture delivery

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	1	.6	.6	.6
	A	174	99.4	99.4	100.0
	Total	175	100.0	100.0	

Used various teaching strategies to hold students attention during class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	174	99.4	99.4	99.4
	SA	1	.6	.6	100.0
	Total	175	100.0	100.0	

Consciously manage time within teaching period

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	173	98.9	98.9	98.9
	SA	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Maintain effective class monitoring to achieve course objectives

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	173	98.9	98.9	98.9
	SA	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Maintain honesty while dealing with students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	1	.6	.6	.6
	A	172	98.3	98.3	98.9

	SA	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Motivates student while interacting with students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	172	98.3	98.3	98.3
	SA	3	1.7	1.7	100.0
	Total	175	100.0	100.0	

Uphold impeccable character to retain dignity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	173	98.9	98.9	98.9
	SA	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Go through students' questions with intelligence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	172	98.3	98.3	98.3
	SA	3	1.7	1.7	100.0
	Total	175	100.0	100.0	

Display adequate subject matter knowledge

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	173	98.9	98.9	98.9
	SA	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Display practical knowledge

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	174	99.4	99.4	99.4

	SA	1	.6	.6	100.0
	Total	175	100.0	100.0	

Be passionate about helping students gain literacy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	173	98.9	98.9	98.9
	SA	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Computer with uninterrupted power supply

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RA	2	1.1	1.1	1.1
	OA	168	96.0	96.0	97.1
	FA	5	2.9	2.9	100.0
	Total	175	100.0	100.0	

Internet facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA	24	13.7	13.7	13.7
	RA	147	84.0	84.0	97.7
	OA	4	2.3	2.3	100.0
	Total	175	100.0	100.0	

Standby generator

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA	137	78.3	78.3	78.3
	RA	38	21.7	21.7	100.0
	Total	175	100.0	100.0	

Microphone

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA	112	64.0	64.0	64.0
	RA	61	34.9	34.9	98.9

	FA	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Headphones

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA	113	64.6	64.6	64.6
	RA	59	33.7	33.7	98.3
	OA	1	.6	.6	98.9
	FA	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Electronic machines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA	74	42.3	42.3	42.3
	RA	98	56.0	56.0	98.3
	OA	1	.6	.6	98.9
	FA	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Manual typewriters

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA	71	40.6	40.6	40.6
	RA	100	57.1	57.1	97.7
	OA	2	1.1	1.1	98.9
	FA	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Multimedia projectors

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA	1	.6	.6	.6
	RA	5	2.9	2.9	3.4

	OA	168	96.0	96.0	99.4
	FA	1	.6	.6	100.0
	Total	175	100.0	100.0	

Marker boards

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RA	3	1.7	1.7	1.7
	OA	169	96.6	96.6	98.3
	FA	3	1.7	1.7	100.0
	Total	175	100.0	100.0	

Air conditioners

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA	9	5.1	5.2	5.2
	RA	132	75.4	75.9	81.0
	OA	33	18.9	19.0	100.0
	Total	174	99.4	100.0	
Missing	System	1	.6		
Total		175	100.0		

Good furniture

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA	51	29.1	29.1	29.1
	RA	119	68.0	68.0	97.1
	OA	5	2.9	2.9	100.0
	Total	175	100.0	100.0	

Scanning machines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA	99	56.6	56.6	56.6
	RA	72	41.1	41.1	97.7
	OA	3	1.7	1.7	99.4
	FA	1	.6	.6	100.0
	Total	175	100.0	100.0	

Television

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA	101	57.7	57.7	57.7

	RA	71	40.6	40.6	98.3
	OA	2	1.1	1.1	99.4
	FA	1	.6	.6	100.0
	Total	175	100.0	100.0	

Radio/Recorder

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA	102	58.3	58.3	58.3
	RA	70	40.0	40.0	98.3
	OA	3	1.7	1.7	100.0
	Total	175	100.0	100.0	

Photocopying machines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA	120	68.6	68.6	68.6
	RA	52	29.7	29.7	98.3
	OA	1	.6	.6	98.9
	FA	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Rizo machines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA	121	69.1	69.1	69.1
	RA	52	29.7	29.7	98.9
	OA	1	.6	.6	99.4
	FA	1	.6	.6	100.0
	Total	175	100.0	100.0	

Recent textbooks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA	158	90.3	90.3	90.3
	RA	15	8.6	8.6	98.9
	OA	1	.6	.6	99.4
	FA	1	.6	.6	100.0
	Total	175	100.0	100.0	

Recent journals

		Frequency	Percent	Valid Percent	Cumulative Percent

Valid	NA	158	90.3	90.3	90.3
	RA	15	8.6	8.6	98.9
	OA	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Computer with uninterrupted power supply

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	4	2.3	2.3	2.3
	LE	4	2.3	2.3	4.6
	HE	164	93.7	94.3	98.9
	VHE	2	1.1	1.1	100.0
	Total	174	99.4	100.0	
Missing	System	1	.6		
Total		175	100.0		

Internet facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	42	24.0	24.0	24.0
	LE	131	74.9	74.9	98.9
	HE	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Standby generator

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	168	96.0	96.0	96.0
	LE	6	3.4	3.4	99.4
	HE	1	.6	.6	100.0
	Total	175	100.0	100.0	

Microphones

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	163	93.1	93.1	93.1
	LE	9	5.1	5.1	98.3

	HE	3	1.7	1.7	100.0
	Total	175	100.0	100.0	

Headphones

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	71	40.6	40.6	40.6
	LE	96	54.9	54.9	95.4
	HE	6	3.4	3.4	98.9
	VHE	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Electronic machines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	66	37.7	37.7	37.7
	LE	102	58.3	58.3	96.0
	HE	5	2.9	2.9	98.9
	VHE	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Manual typewriters

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	65	37.1	37.1	37.1
	LE	100	57.1	57.1	94.3
	HE	8	4.6	4.6	98.9
	VHE	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Multimedia projectors

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	8	4.6	4.6	4.6
	LE	8	4.6	4.6	9.1
	HE	157	89.7	89.7	98.9
	VHE	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Marker boards

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	6	3.4	3.4	3.4
	LE	14	8.0	8.0	11.4

	HE	151	86.3	86.3	97.7
	VHE	4	2.3	2.3	100.0
	Total	175	100.0	100.0	

Air conditioners

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	31	17.7	17.7	17.7
	LE	110	62.9	62.9	80.6
	HE	34	19.4	19.4	100.0
	Total	175	100.0	100.0	

Good furniture

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	55	31.4	31.4	31.4
	LE	114	65.1	65.1	96.6
	HE	6	3.4	3.4	100.0
	Total	175	100.0	100.0	

Scanning machines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	79	45.1	45.1	45.1
	LE	93	53.1	53.1	98.3
	HE	3	1.7	1.7	100.0
	Total	175	100.0	100.0	

Television

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	88	50.3	50.3	50.3
	LE	84	48.0	48.0	98.3
	HE	3	1.7	1.7	100.0
	Total	175	100.0	100.0	

Radio/Recorder

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	93	53.1	53.1	53.1
	LE	80	45.7	45.7	98.9

	HE	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Photocopying machines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	98	56.0	56.0	56.0
	LE	73	41.7	41.7	97.7
	HE	2	1.1	1.1	98.9
	VHE	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

Rizo machines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	99	56.6	56.6	56.6
	LE	72	41.1	41.1	97.7
	HE	3	1.7	1.7	99.4
	VHE	1	.6	.6	100.0
	Total	175	100.0	100.0	

E-library with recent textbooks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	106	60.6	60.6	60.6
	LE	67	38.3	38.3	98.9
	HE	2	1.1	1.1	100.0
	Total	175	100.0	100.0	

E-library with recent journals

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VLE	110	62.9	62.9	62.9
	LE	62	35.4	35.4	98.3
	HE	2	1.1	1.1	99.4
	VHE	1	.6	.6	100.0
	Total	175	100.0	100.0	

Qualified lecturers/instructor/technologist

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SD	1	.6	.6	.6
	D	1	.6	.6	1.1

	A	154	88.0	88.0	89.1
	SA	19	10.9	10.9	100.0
	Total	175	100.0	100.0	

Training and retraining of academic staffs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SD	41	23.4	23.4	23.4
	D	126	72.0	72.0	95.4
	A	8	4.6	4.6	100.0
	Total	175	100.0	100.0	

Compliance to regulated class capacities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SD	7	4.0	4.0	4.0
	D	168	96.0	96.0	100.0
	Total	175	100.0	100.0	

Class monitoring teams

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SD	5	2.9	2.9	2.9
	D	158	90.3	90.3	93.1
	A	12	6.9	6.9	100.0
	Total	175	100.0	100.0	

External moderation of examination questions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	3	1.7	1.7	1.7
	A	171	97.7	97.7	99.4
	SA	1	.6	.6	100.0
	Total	175	100.0	100.0	

Moderation of examination scripts

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	6	3.4	3.4	3.4
	A	168	96.0	96.0	99.4

	SA	1	.6	.6	100.0
	Total	175	100.0	100.0	

Examination monitoring team

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SD	2	1.1	1.1	1.1
	D	14	8.0	8.0	9.1
	A	158	90.3	90.3	99.4
	SA	1	.6	.6	100.0
	Total	175	100.0	100.0	

Conducive teaching environment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SD	44	25.1	25.1	25.1
	D	128	73.1	73.1	98.3
	A	3	1.7	1.7	100.0
	Total	175	100.0	100.0	

Regular students' assessment by academic staff

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SD	54	30.9	30.9	30.9
	D	111	63.4	63.4	94.3
	A	10	5.7	5.7	100.0
	Total	175	100.0	100.0	

Prompt dissemination of information to staff and student

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SD	101	57.7	57.7	57.7
	D	73	41.7	41.7	99.4

	A	1	.6	.6	100.0
	Total	175	100.0	100.0	

Statistics

Academic Qualifications

N	Valid	175
	Missing	0
Mean		2.19

Academic Qualifications

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	HND	40	22.9	22.9	22.9
	BSc	66	37.7	37.7	60.6
	MSc	64	36.6	36.6	97.1
	Ph.D	5	2.9	2.9	100.0
	Total	175	100.0	100.0	

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	Quality_assurance, Instructional_facility [b]	.	Enter

a. Dependent Variable: Teaching abilities

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.841[a]	.708	.692	41.747

a. Predictors: (Constant), Quality_assurance, Instructional_facility

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	156417.924	2	78208.962	44.874	.000[b]
	Residual	64485.051	37	1742.839		
	Total	220902.975	39			

a. Dependent Variable: Teaching abilities

b. Predictors: (Constant), Quality assurance, Instructional facilities

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	6.492	8.811		.737
	Instructional_facility	1.211	.183	.971	6.601
	Quality_assurance	.895	.178	.737	5.028

a. Dependent Variable: Teaching_abilities