

**AVAILABILITY, ADEQUACY AND UTILIZATION OF INSTRUCTIONAL
FACILITIES FOR TEACHING AND LEARNING OFFICE TECHNOLOGY AND
MANAGEMENT COURSES IN POLYTECHNICS IN KWARA STATE, NIGERIA**

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16/27/MBE008**

**DEPARTMENT OF BUSINESS AND ENTREPRENEURSHIP EDUCATION
COLLEGE OF EDUCATION
KWARA STATE UNIVERSITY, MALETE**

**IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF
MASTER OF SCIENCE (M.Sc) DEGREE BUSINESS EDUCATION**

APRIL, 2019

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CERTIFICATION

This Thesis titled “Availability, Adequacy and Utilization of Instructional facilities in Teaching and Learning Office Technology and Management Courses in Polytechnics in Kwara State, Nigeria” by Gabriel Obozuwa ASIMEGBE meets the regulations governing the award of the degree of Master of Science (Ed.) in Business Education, Kwara State University, Malete, Nigeria and is approved by the undersigned for its contribution to knowledge and literary presentation.

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DECLARATION

I hereby declare that the work in this Thesis titled “Availability, Adequacy and Utilization of Instructional Facilities in Teaching and Learning Office Technology and Management Courses in Polytechnics in Kwara state, Nigeria” was carried out by me in the Department of Business and Entrepreneurship Education, Kwara State University, Malete, Nigeria. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this Thesis has been presented for another degree or Diploma in this Institution or any other Institution.

.....
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.....
Date

DEDICATION

This Thesis is dedicated to God Almighty and to my lovely sister Agnes Musa.

ACKNOWLEDGEMENT

The researcher is most grateful to God Almighty for His sufficient grace that saw him through the various stages of this work and the entire educational programme.

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ABSTRACT

The study examined the availability, adequacy and utilization of instructional facilities in teaching and learning Office Technology and Management courses in polytechnics in Kwara State, Nigeria. To facilitate the conduct of the study, three specific purposes, three research questions and three null hypotheses were formulated. The study adopted the Cognitive Learning Theory. A descriptive survey design was used. The population of the study consisted of lecturers and students of all accredited office technology and management programme in Kwara state, Nigeria. The population of the study consisted of all academic staff and students of Office Technology and Management department in two accredited State and Federal owned polytechnics in Kwara State, Nigeria. The number of academic staff and students was 563. The researcher adopted the entire population for the study, hence there was no sample. A 32 item questionnaire tagged 'Availability, adequacy and utilization of instructional facilities in teaching and learning office technology and management courses in polytechnics in Kwara state, Nigeria' with 4-point rating scale was the instrument used for data collection. The instrument went through face and content validation by two experts. The reliability of the instrument was ensured using the Cronbach Coefficient Alpha and the result yielded a reliability coefficient of 0.88. The data collected were analyzed using mean and standard deviation. The Mean was used to answer the research questions while the standard deviation was used to determine the closeness or otherwise of the responses from the mean. The hypothesis was tested using t-test at 0.05 level of significance. The findings revealed that instructional facilities for teaching and learning office technology and management courses in polytechnics are available but of poor quality. The findings further reveals that instructional facilities for teaching and learning office technology and management course in polytechnic are partially inadequate and also, partially utilized. It was concluded that instructional facilities are available in office technology and management departments for teaching and learning but in poor quality. Furthermore, instructional facilities for teaching and learning are partially adequate and partially utilized. Based on the findings and conclusion of the study, it was recommended among others that National Board for Technical Education (NBTE) should initiate a policy that would emphasize that any polytechnic without appropriate and quality instructional facilities available for teaching and learning would not be accredited to run office technology and management programme.

Keywords: Availability, Adequacy, Utilization, Office Management Technology, Teaching and Learning

CHAPTER ONE

INTRODUCTION

Background to the Study

The purpose of any educational programme is to promote effective teaching and learning. Teaching in the context of this study is the process by which an experienced person gives knowledge, skills, values and habits to less experienced persons (learners) (Ndem, 2013). Teaching entails creating or providing opportunities from which learners can gain such experiences that will enable them acquire the knowledge, skills, attitude and appreciation that will serve as tools in life. Learning on the other hand is the process of assimilating information with a resultant change in behavior.

Instructional facilities are necessary prerequisites for effective teaching and learning. Uche, Okoli and Ahunanya (2011) opine that instructional facilities are materials and equipment which are used by teachers during teaching. These facilities could be animate or inanimate materials or objects. It consists of all forms of information carriers which can be used to promote and encourage effective teaching and learning. Oyinloye and Oluwalola (2014) described instructional facilities used in OTM as various office machines, equipment and devices for the purpose of imparting knowledge and training of students. It also involves provision of conducive and stimulating learning environment where effective teaching and learning could take place. Instructional facilities help the teachers to implement the educational objectives effectively and equally make teaching and learning more practical and interesting and it helps learners to assimilate what is being taught.

Office Technology and Management (OTM) is a form of education which is designed for vocational, office and business related occupations (Nwosu, 2000). It is concerned with the development of skills and knowledge needed in order to enable an individual to function well. One of the characteristics of OTM has been its devotion to offering education that is

relevant to the world in which the student lives. The need for instructional facilities in OTM programme is justified by the demand for OTM products in offices. Aliyu (2001) opines that business education (OTM inclusive) being a vocational education programme cannot do without adequate supply of resources both human and non-human which must equally be properly put to use. It was in recognition of the enormous roles of instructional facilities in teaching and learning OTM courses that the National Board for Technical Education (NBTE) sees instructional facilities as one of the requirements for accreditation and re-accreditation of OTM programmes. This implies that availability, adequacy and utilization of these facilities and resources is necessary if we want to know the state of affairs of the educational programme.

The use of instructional facilities for teaching and learning depend on functionally available facilities at a particular time. However, where instructional facilities are not made available, not adequate or in some cases adequate but not utilized properly, teaching and learning Office Technology and Management courses will suffer a setback. This may lead to possible graduation of highly unskilled graduates who are unemployable and unproductive in a nation economy. Availability and adequacy of instructional facilities will minimize or eradicate completely the issue of over-populated students working with limited facilities. Adequate instructional facilities will enable teachers and learners to teach and learn Office Technology and Management course with ease. It is not enough to have all the instructional facilities available and adequate but it will be appropriate if the available and adequate instructional facilities are fully utilized by the teachers in teaching and by the student in learning.

Sokyes, Bauda and Zakka (2012) reiterate that effective teaching and learning in OTM is sine qua non to availability of instructional materials needed for the smooth implementation of the programme. However, Zakka and Priscilla (2009) report that there is

gross inadequacy and poor utilization of instructional facilities in most Polytechnics in Nigeria. They added that the problem of infrastructural development and provision of instructional facilities have all being tied to inadequate funding of education in general and OTM programmes in particular in most Polytechnics. Hence the need for all stake holders to join hands in ensuring adequate funding for education and OTM programmes in particular. Acharu and Solomon (2014) support the above assertion and state that one of the major challenges facing the Polytechnics is inadequate infrastructural facilities and the continuous breakdown and deterioration of existing facilities for teaching of OTM courses which has affected students' achievement and academic performances.

Similarly, Ayelotan and Sholagbade (2014) maintain that instructional facilities are inadequate in most schools offering OTM, even where they are available, teachers are not adequately prepared to use them or do not put them to optimal use. They further maintained that availability of appropriate infrastructural facilities will enhance students learning by allowing them to be involved in demonstrations and practices which will build and concretize their skills.

Office technology and management teachers in Polytechnics have it as their obligation to be knowledgeable and confident of their ability to use instructional facilities for effective and efficient instructional delivery. However, James (2015) believes that many of the teachers lack knowledge and skills to use these facilities especially the new technologies and in addition are not enthusiastic about the changes due to inadequate training to meet up with technological flux. Okoro (2016) observes that most teachers do not use the available instructional facilities for teaching, especially the new technologies due to inadequate competencies. Nwosu (2003) maintains that most of the teachers of OTM were not effectively taught with new technologies. Therefore, they had to be retrained in the proper use of new technologies especially for instructional delivery. Ndem and Akubue (2015) stress that the

process of effective and efficient utilization of instructional facilities involves careful allocation of materials, proper planning, proper controlling, proper organization as well as supervision. Prudent management implies reduction of wastes and effective use of available materials. They lamented that the ineffective and inefficient use of instruction facilities by teacher especially in OTM, has led to wastages, use of wrong facilities and lack of the achievement of the laudable goals of the OTM programme. It is against this backdrop that the study will examines the availability, adequacy and utilization of instructional facilities for teaching and learning in office technology and management courses in Polytechnics in Kwara state.

Statement of the Problem

Education is meant to inculcate adequate skills, values and attitude in learner to enable them function effectively in a dynamic society. In educational institutions, the process of acquisition of these attributes is teaching and learning. It therefore means, educational institution obviously cannot impart skills to learners without the teaching-learning process. Office Technology and Management (OTM) programme is one of those educational programmes that emphasize the acquisition of appropriate skills and the development of mental, physical and social abilities and competencies for the individual to live in and contribute to the development of the society (Federal Government of Nigeria, 2013).

Contrary to this expectation, Mafikuyomi, Ojewale and Salami (2016) observe that most departments of Office Technology and Management do not have the necessary instructional facilities to carry out successful teaching. The effect of this is that, most of the graduates of office technology and management turn leave the school without the theoretical or practical knowledge of equipment they need to operate, hencemost employers of labourconsider them as half-backed, unemployable and unsuitable without further training or re-training (Akpan, 2005). These graduates can equally not be self employed because they are

not able to practice what they should have studied in school. Chika (2001) reports that employers complain about the incompetence of the products of office technology and management because of inadequate mastery of skills they need to acquire during training.

The researcher observes that OTM programme in most Nigerian polytechnics may be suffering due to inadequate provision and ineffective utilization of instructional facilities. The programme also appears to be attracting inadequacy of incompetent human resources to impart the necessary skills to learners (Sodipo, 2015). These problems may have limit the extents of skill acquisition in OTM programmes which can lead to the failure of the programme to produce the much needed skilled manpower for the nation's growth.

The problem of this study therefore is to empirically examine the availability, adequacy and utilization of instructional facilities for teaching and learning office technology and management courses in Polytechnics in Kwara State, Nigeria. If this research work is not conducted, the current state of instructional facilities for teaching and learning office technology and management courses will not be assessed. However if the current state of instructional facilities for teaching and learning office technology and management courses is not assessed, it may lead to the production of OTM graduates with considerable consequences in the nation's economy.

Purpose of the Study

The main purpose of the study is to examine availability, adequacy and utilization of instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State. Specifically, the study will examine the following:

1. Availability of instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State, Nigeria.
2. Adequacy of instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State, Nigeria.

3. The extent of utilization of available instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara state, Nigeria.

Significance of the Study

The researcher hopes that the results and findings of this study will be of particular significance to students, teachers, polytechnic authorities, policy makers, future scholars and researchers.

The study hopefully will expose OTM students to relevant and necessary facilities required for their learning exercises. With this development, students will be able to appreciate the potentials of the specific instructional facilities in the OTM curriculum and understand the different situations to use these facilities in solving business or office problems. The findings will equally re-direct students' orientation towards hard work, self-employment, encourage independence and self-actualization.

The study will be particular importance to OTM teachers because the required instructional facilities for teaching in OTM will be determined. This will serve as a necessary precursor for management to ensure adequate provision and utilization of instructional facilities and for designing a re-training or capacity building programme to equip teachers to successfully perform their duties. It will equally stimulate OTM teachers to make use of all instructional facilities for teaching as this will quicken students' understanding and make teaching an interesting profession.

Polytechnic authorities will equally find this study indispensable because it will be an eye opener for them to know the consequences and the problems associated with non availability, inadequacy and the non-utilization or ineffective use of instructional facilities. It will also redirect management' policy toward regular procurement of modern instruction facilities for teaching as well as ensuring regular training and retraining programmes for teachers to be up to date in using modern instructional facilities.

Policy makers in the Nigerian educational system will equally benefit from the findings of the study because they will appreciate the potentials in the use of instructional facilities for teaching. They will also appreciate the need to formulate and ensure proper implementation of policies that will encourage and enhance the adequate provision and use of instructional facilities for teaching and learning in OTM

Future scholars and researchers will benefit from the findings of the study because it will serve as a guide for the conduct of further studies on new technologies for teaching and learning. It will equally be an important addition to knowledge in the subject area.

Research Questions

The following research questions were used to guide the study:

1. How available are instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State, Nigeria?
2. How adequate are instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State, Nigeria?
3. To what extent are instructional facilities for teaching and learning Office Technology and Management courses being utilized in Polytechnics in Kwara State, Nigeria?

Research Hypotheses

Three hypotheses were formulated for the study. The following null hypotheses were formulated to be tested at 0.05 level of significance:

- H₀₁: There is no significant difference between the mean rating of respondents in federal and state owned polytechnics on the availability of instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State, Nigeria.

H₀₂: There is no significant difference between the mean responses of lecturers and students on the adequacy of instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State, Nigeria.

H₀₃: There is no significant difference between the mean responses of students and lecturers on the extent to which instructional facilities for teaching and learning Office Technology and Management courses are being utilized in Polytechnics in Kwara State, Nigeria.

Scope of the Study

The study was restricted to the availability, adequacy and utilization of instructional facilities in teaching and learning OTM courses in Polytechnics in Kwara State. The study is equally restricted to the departments of Office Technology and Management of the two public polytechnics in Kwara State: they are Federal Polytechnic Offa and Kwara State Polytechnic, Ilorin. The choice of these public Polytechnics were based on the fact that they have full accreditation for both their OTM programmes at the ND and HND level.

Operational Definition of Terms

The following words/terms are described according to their usage in the project.

Adequacy:- It refers to a situation whereby instructional facilities are enough in teaching and learning of OTM courses in qualities.

Availability:- It is referred to a situation whereby quality instructional facilities for teaching and learning are on ground and they can as well be seen and handled in teaching and learning OTM courses.

Instructional facilities:- They are tools, equipment and facilities that a learner/teacher can see, handle and manipulate as a practical guild in teaching and learning of courses in Office Technology and Management departments.

Office Technology and Management:- It is a department in the Polytechnic sector that trains and produces students/graduates with multiple-skilled knowledge, who can manage information effectively and equipped with comprehensive range of skills.

Utilization:- It refers to a situation whereby the available instructional facilities are fully used in teaching and learning of OTM courses in Polytechnics

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter will review the related literature on the availability, adequacy and utilization of instructional facilities in teaching and learning Office Technology and Management courses in Polytechnics in Kwara State. The chapter is organized according to the following sub-headings:

- Theoretical framework
- Concept of Instructional Facilities
- Teaching and Learning
- Office Technology and Management
- Availability of instruction facilities for teaching and learning in OTM
- Adequacy of instruction facilities for teaching and learning in OTM
- Utilization of instruction facilities for teaching and learning in OTM
- Review of Related Empirical Studies
- Appraisal of Literature Review

Theoretical Framework

Cognitive Learning Theory and ACTIONS Model Theory were considered for the theoretical framework in this study.

Cognitive Learning Theory (1920)

This research is based on the Cognitive Learning Theory by Wolfgang and Tolman (1920). The theory affirmed that when human beings learn, they acquire new knowledge. Cognitive learning involves more complicated processes of interpreting present perceptions in the light of past information to reason out ways through familiar routes. It state that what really matters when an animal learns is acquisition of knowledge. This assertion can also applicable to human-beings.

Cognitive learning theory by Wolfgang and Tolman was used to determine chimpanzees' ability to solve complex problems. In the experiment, a chimpanzee was placed in an enclosed area; somewhere out of its reach was a desirable banana. The chimpanzee squats at the bars to reach the banana but could not reach the fruit by means of its only available short stick within the bar. Using the short stick, the chimpanzee pulls a long stick deposited outside the bar which was long enough to reach the piece of fruit. The chimpanzee used the long stick as a pole to climb up to the banana and took it.

The above experiment illustrates cognitive learning. The chimpanzee later learned to solve his problem by understanding the relationship between the sticks and the piece of fruit; this is 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. The chimpanzee made frantic efforts to solve his problem by using the stick provided outside the bar by the means of the short stick inside the bar.

This theory is related to this study because in educational setting, learners are always faced with enormous difficulties, when instructional facilities that are peculiar for learning their courses are not available, adequate and utilized. It also implies that, teaching and learning should be predicated upon the availability, adequacy and utilization of functional and quality of instructional facilities. The chimpanzee in the above experiment could only get at the banana with the help of the sticks provided. In teaching and learning, learners can only acquire knowledge that they can use to compete in the world of work if instructional facilities are available, adequate and utilized.

It therefore means, without instructional facilities learners will not be able to perform to expectation of the duties required of them in their places of work after graduation. Without

the short stick, the chimpanzee will not have been able to get access to the long stick. This implies that, without instructional facilities for teaching and learning, if after graduation OTM graduates are confronted with these instructional facilities that were not made available for them to learn from, it may not be possible for them to function effectively with them. The chimpanzee was only able to use the long stick effectively to get the banana because he was already used to the short stick.

Bates ACTIONS Model Theory(1990)

This study will also be based on the theoretical framework of ACTIONS model making decisions. The ACTIONS model is about the use of pedagogic technology for teaching and learning. This model was developed by Bates for making decisions about the use of instructional facilities and the suggested factors to be considered when using the model so as to enhance effective teaching and learning. Bates was able to simplify the explanation of his theory by vertically explaining the meaning of “ACTIONS”.

According to Bates, “A” stands for accessibility. It means how accessible are the instructional facilities to the teachers- students or learner to learner? The C” stands for cost capital and recurrent fixed variable in budgeting. It means resources are expensive and the schools will not be able to afford them. Cost is a key thing in deciding on any form of instructional facilities. The T” stands for training/teaching function. It state that do teachers use instructional facilities in their teaching? The “I” stands for interaction, that is, what kind of teacher and student interaction will be possible? Is it teacher -student or student - student interacting with the use instructional facilities or any technologies? Are they able to interact with instructional technologies or there is no Learning Resource Center or laboratory? The “O” stands for organization. It asked the question what changes in organization that will be required to facilitate the use of instructional facilities or a particular technology. Do policies in the school assist or inhibit the use of resources? Is there bureaucracy in the use of

instructional facilities? The theory said “O” can be possible if there is openness in resources and use of proper communication flow. The “N” stands for novelty which means how modern or new are the instructional facilities? The “S” stands for speed. This look at how quickly and easily facilities can be updated and changed.

The ACTIONS decision model of instructional facilities used by teachers and the techniques they employ helps teachers to determine learners’ activities in the classroom. The more the learners are actively involved in the learning process and teaching/learning facilities are adequate, the better the knowledge acquisition (Jonassen, 1996). Teaching and learning resources are a variety of techniques used by the teachers to support their teaching and make it most effective. The theory states that teaching and learning resources should be appealing to the sight and senses of the learners. When teaching and learning resources are available, adequate and are used properly they may help the learners to perform concrete physical actions or use them to clarify concepts. A wide range of resources can used to increase learning, to generate more interest and to create a situation where the learners would fully engage classroom activities.

The theoretical framework presented above is relevant to the study because it portrays the critical role instructional facilities play in the education of all learners including teachers. It ties together the concepts of availability, adequacy and efficient utilization of resources/facilities in instructing learners. Furthermore, the theoretical framework presents the negative impact of inadequate and inefficient use of teaching and learning facilities on learning, especially for OTM students.

Concept of Instructional Facilities

Educational sector is getting a lot of attention from educational stakeholders on issues relating to the necessity for our institutions to use quality instructional facilities for teaching and learning (Onah&Okoro, 2010). These instructional facilities can be seen

asthoseequipment, device, teaching aids used by a teacher to simplify their teaching. They include both visual and audio-visual aids and could either be concrete or non-concrete. Conceptualizing instructional facilities is highly important in discussing this topic. It assumes various perspectives in terms of nomenclature. Akpan (2005) refers to them as “instructional facilities”, Mkpa (2005) views them as “Curriculum Facilities”, Opara (2002) refers to them as “Didactic Facilities” for the fact that they make teaching and learning possible, and Okoro (2008) sees them as “Learning Facilities” which help learners to learn faster and better.

According to Olaitan, Nwachukwu, Igbo, Enyemach and Ekong (2010), Instructional facilities are those devices developed or acquired to assist teachers in transmitting organized knowledge, skills and attitude to learners within an instructional situation. They added that instructional facilities are those practical and skills development resources which facilitate the process of teaching/learning and the evaluation of professional skills. Azikiwe (2012) explains that, instructional facilities are those facilities or devices used for the successful and maximal achievement of the objective of teaching and learning. To her, instructional facilities help to facilities instructions when properly utilized by teachers. Instructional facilities when available, adequate and fully utilized have the potentials to stimulate, motivate and arrest learner’s interest.

Nwandu (2014) is of the opinion that, instructional facilities are the resources which may be used by the teacher/learner in isolation or in combination formally to facilitate the acquisition of knowledge, skills and morals. Instructional facilities can also be referred to as objects of study that act as stimuli for the learners. They are books, picture, newspapers, pres-cuttings, diagrams, periodical, Films strips, film loops record, audiotape, community objects and equipment. Mkpa (2005) opines that curriculum facilities refer to the various instructional facilities for instructional delivery. He identified television, laminating machine, teaching machines, textbooks and computers as a form of instructional facilities for teaching and

learning. He also concluded by saying that other means of instruction can exist beside the teachers and that the student can learn without the teacher, if they have access to facilities capable of presenting viable information.

Instructional materials bring life to learning by stimulating students to learn (Onah&Okoro, 2010). The use of instructional materials in the classroom has the potential to help the teacher explain new concepts clearly, resulting in better student understanding of the concepts being taught. However, they are not ends in themselves but they are means to an end. Orheruata, Abubakar&Aminu (2014) maintain that good teaching resources can never replace the teacher but the teacher uses them to achieve their teaching and learning objectives. Some of the instructional materials necessary for effective teaching and learning of OTM include the chalkboard, white boards, computers, typewriters, projectors, textbooks, journals, slides, filmstrips, laminating machine, and television etc. The importance of the use of these materials cannot be underscored.

The place of instructional facilities in teaching and learning Office Technology and Management (OTM) cannot be overstressed. This is due to the fact that the present OTM curriculum can only be effectively implemented where instructional facilities stipulated in the National Board for Technical Education (NBTE) course manual are available. Modern day instructional materials include ICT facilities, lecture halls, laboratories, equipment and resource centers among others. Oyinloye and Oluwalola (2014) described instructional facilities used in OTM as various office machines, equipment and devices for the purpose of imparting knowledge and training of students. Onah and Okoro (2010), instructional materials for teaching office technology and management courses include hardware, software and telecommunications in the form of personal computers, scanners, digital cameras, phones, faxes, modems, teleconferencing, compact disks, projectors, digital video disk player

recorders, laminating machine and television and programme such as data base systems used in education, digitalized laboratories, workshops and model offices.

Availability, adequacy and usability of instructional materials is a necessary requirement for accreditation and reaccreditation of academic programmes in OTM and these have generated serious concern among scholars, researchers and business educators. Bongotons and Onyenwe (2010) mentioned that one of the pillars of a successful implementation of effective business teacher education (OTM inclusive) is the availability and adequacy of teaching and learning materials. These materials are in form of facilities and equipment needed to foster skill development and allow for standards and quality in products. In their view, availability or adequacy of teaching and learning materials implies that they are easily, readily, publicly and generally found and enough in quantity and quality for use. Unfortunately one of the major challenges facing the Polytechnic and indeed office education is inadequate infrastructural facilities; which are inadequate class rooms, laboratory equipment, inadequate teaching and learning resources.

When Instructional materials are appropriate, sufficient and environmental relevant in the socio-cultural spheres of a child, the psychomotor domains will development speedily. This implies that, instructional facilities play significant roles in the teaching and learning process. Doublegist (2013) in Tuimur& Bernard, (2015) outlines the importance of instructional materials as follows:

- i. To get and hold the learner's attention.
- ii. To provide for a direct interaction of students with realities of social and physical environment.
- iii. To re-enforce verbal message.
- iv. To promote greater acquisition and longer retentions of factual knowledge.
- v. To provide opportunities for independent and individual learning.

Similarly, Mkpka (2005) opines that instructional facilities could bring about the following benefits.

- i. To stimulate learner interest and attention.
- ii. To makes learning real and enjoyable for students when they manipulates the learning materials.
- iii. To play with the materials.
- iv. It helps in the development of body muscles as students manipulate teaching materials.
- v. It helps in class control – student can be kept busy in handling materials even in the absence of the teacher.
- vi. It helps engage students in their learning activities by observation.

The functions of instructional materials in the teaching-learning process include:

- i. Facilitate the learning of abstract concepts and ideas.
- ii. Keep the learners busy and active thus, increasing their participation in the lesson.
- iii. Save teachers' energy of talking too much.
- iv. Illustrate the concepts clearer and better than the teachers' words only.
- v. Help to overcome the limitations of the class - room by making the inaccessible issues accessible.
- vi. Help to broaden students' knowledge, increase their level of understanding as well as discourage rote-learning (if used judiciously).
- vii. Help to stimulate and motivate learners (Ogbu, 2015)

Teaching and Learning

Teaching is a social process in which the political system, social philosophy, values and culture of every nation leave their impression. Teaching is a two way process which involves the teacher and learner. It is therefore, assumed that the teacher knows more than

the learner and as a result, the teacher carefully brings to bare his knowledge of a subject before the learner in order to effect a change in the learner. The word 'teaching' is derived from 'to teach' which means to instruct. Instructing is a process in which one individual makes something known to another individual. Mudasir and Aqueel (2011) are of the opinion that teaching is a system of action which is intended to produce learning. One of the main characteristics of good teaching is that it should be an interactive process. It is with the help of this interaction, that the learners too become active in the leaning process. Teaching can be said to be effective when an instruction is explicitly engaging, clear, takes cognizance of individual differences and ultimately leads to the learner's success (Borich, 2002).

Ekpenyong (2002) said that, conceptualized teaching is a process of facilitating, guiding and generally moderating learner's behaviour through the provision of appropriate experiences so that the learner will achieve meaningful growth. According to Mohanan (2009) teaching is one with learning outcomes that effect changes in knowledge, abilities, skills, attitudes and mindset. Teaching is an active process in which one person shares information with other to provide them with the information to make behavioral changes. Mohanan further stated that research has made it clear that the quality of teaching can be the key factor in improving learner's achievement. Mudasir and Aqueel (2011) reiterate that teaching is an intimate contact between a more mature personality and a less mature one which is designed to further the education of the later.

Learning on the other hand involves the application of what is taught in solving a problem. Learning according to Advanced Learners Dictionary of Current English means the knowledge that you get from reading and studying. Learning is a change in behaviour that depends upon special condition of stimulation. Learning is also a continuing process/system. It is a progressive change in learner's behaviour and a potential weapon for development. Utoware and Kren-Ikidi (2013) state that learning is the apparent modification of a person's

behaviour through his activities and experiences, so that his knowledge, skills and attitudes, including modes of adjustment towards his environment are changed more or less permanently.

Office Technology and Management

Office Technology and Management (OTM) is a nomenclature that was used to replace the Secretarial Studies as it was formally called. It is a programme designed to equip its recipients with the necessary skills, knowledge and attitudes relevant and adequate for employment (i.e paid or self-employment) in specific occupations. Baba and Akarahu (2012) assert that the OTM is used as a comprehensive acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of the economic and social life. They added that the design of the OTM programme components also appears to be in response to a global initiative with an objective that portends new academic direction in favour of new technologies for teaching in OTM. Nwosu (2003) opine that the value of business education (OTM inclusive) could be determined on its ability to adequately prepare and equip appropriate individuals in such a manner that they could fit into specific jobs or establish their own businesses on graduation. It is therefore skill-oriented and employment motivated, in view of the fact that one of the objectives of development is the creation of employment opportunities to all citizens.

Anioke(2011) noted that business education (OTM inclusive) plays a significant role in the economic development by providing knowledge and skillsto the learners thereby enabling them to adequately impart knowledge into others and handle sophisticated office technologies and information systems. The goal of business education is primarily to produce competent, skillful and dynamic business teachers, office administrators and businessmen and women that will effectively compete in the world of work. For the goals and objectives of office technologyprogramme to be realized, there must be a mechanism put in place to ensure

proper funding of the programme. Zakka and Priscilla (2009) opine that office technology and management is a form of education concerned with the development of skills, knowledge and abilities needed to enable the recipients function effectively in a modern office environment.

The OTM curriculum focuses on expressing and training secretaries with internationally acceptable practice of the present day using the modern technologies for processing, storing and dissemination of information to management.

The curriculum at the national diploma (ND) level shows the introduction of the following new courses:

- Entrepreneurship Education
- ICT I & II
- Career Development
- Modern Office Technology
- Desktop Publishing
- People Communication Skills
- Record Management
- Web page Design

At the higher national diploma (HND) level, the new courses include:

- ICT Office Application I & II
- Professional Career Development
- Database Management
- Oral Communication Skills
- Advanced Desktop Publishing
- Management Information System
- Professional Ethics and Social Responsibility
- Advanced Webpage Design

One major aspect that is significant is that at the ND and HND levels, the OTM curriculum reduced the attainable shorthand and typewriting speeds and laid more emphasis on information technology. Esene, Olumese and Ovbiagele (2017) suggest that the improvement and expansion of the OTM curriculum and course specification requires that teachers should upgrade and update themselves to be able to face squarely the changes occasioned by the expansion and the challenges imposed on the teachers.

OTM programme is competence-based, with special emphasis on practical training, information and communication technology and entrepreneurship education (Augustine & Umukoro, 2013). Nnorom and Gaius-Oke (2013) observes that the objectives, theoretical and practical contents of the OTM curriculum are geared towards integrating graduates of OTM department into the evolution of technology. Students of this programme are exposed to courses in their special areas as well as courses in general education. In addition to the acquisition of vocational skills in office technology and management, the students are required to be equipped with effective work competences and socio-psychological work skills, which are very essential in everyday interactions with others. The broad objectives of the OTM programme as specified in the curriculum and course specification for both ND and HND in office technology and management include:

1. The acquisition of secretarial skills,
2. Ability to write shorthand for three minutes in varied materials at 1.3 syllabic intensity dictated at 80 words per minute (WPM) and 1.4 syllabic intensity dictated at 100 words per minute (WPM) and transcribe on the computer with a minimum of 95% accuracy for both ND and HND respective.
3. Typing effectively various office jobs and acquiring a copying rate of 40 wpm and 50 wpm for ND and HND respectively on passages not below 1.3 syllabic intensity with 98% accuracy.

4. Acquisition of general education.
5. Laying the foundation for advanced studies (NBTE, 2004).

Availability of Instructional Facilities for Teaching and Learning

The place of instructional facilities in teaching and learning Office Technology and Management courses cannot be overstressed. Oyinloye and Oluwalola (2014) describe instructional facilities used in OTM as various office equipment, machine and devices used to the purpose of imparting knowledge and training of students. For Onah and Okoro (2010), instructional facilities for teaching and learning of courses in Office Technology and Management includes hardware, software, and telecommunication in the form of personal computers, scanner, digital cameras, phones, faxes machines, modems, teleconferencing, compact disk, projectors, digital disk player recorders, laminating machine and television.

Availability of instructional facilities is one of the requirements for accreditation and re-accreditation of academic programmes. The unavailability of these requirements has generated serious concern among scholars, researchers and business educators (Ugwueze, 2016). This is because there have been reports of abysmal state of institutions in Nigeria, especially polytechnics in terms of inadequacy or continuous breakdown of facilities, outright non-availability of instructional facilities and deterioration of existing facilities which has affected students' achievement and academic performance (Oyedele, 1992).

There cannot be effective teaching and learning OTM courses without the availability of instructional facilities (Nwosu, 2003). This is because effective teaching and learning OTM courses is sine qua non to availability of instructional facilities needed for the smooth implementation and running of the programme. The new OTM curriculum which advocates more on ICT can only be achieved when instructional facilities are available and accessible to teachers and students. Availability of instructional facilities enhances students learning by

allowing them to be involved in demonstrations and practice which would continued to build their skills (Adelikan, 2009).

According to Uzuegbu, Mbadiwe and Anulobi (2013), the term “availability” relates how much instructional facilities that are on ground in which teachers and students can obtain or access in a particular point in time. In this study, availability means the condition with which teachers and students have access to functional instructional facilities for effective teaching and learning OTM course. Availability also refers to the quality and quantity of functional and disposable instructional facilities to teachers and students at every point in time for effective utilization. It is vital to note that the progress of education in any society irrespective of its level depends largely upon the availability of instructional facilities for teaching and learning.

Instructional facilities according to Bongotons and Onyenwe (2010) imply that, facilities are available, ready and enough in quality and in quantity for use. These instructional facilities can be in form of equipment that foster the skill development and quality of products. One of the major challenges facing the polytechnics and indeed Office Technology and Management is the unavailability of instructional facilities. This assertion is also supported by Ayelotan and Sholagabde (2014), when they mentioned that physical facilities and equipments are not available in the polytechnics offering Office Technology and Management in Ogun State. They encouraged that, when instructional facilities are available, it will enhance students ability to learn fast by allowing them to be involved in demonstrations and practice that will build and concretize their skills. Anayo (2018) is also of the opinion that most States institutions have nothing to write home about when compared to Federal owned institutions in terms of man-power, infrastructures, equipment and facilities

Aina (2000) identified the dearth of teachers and equipment as one of the major problem in teaching business education (OTM inclusive). That the provision of equipment and other teaching and learning facilities are paramount in teaching and learning Office Technology and Management courses. It is when these needed facilities are provided according to Aina that the products of OTM can become proficient in the world of work without necessarily being retrained when employed. The likely consequence of teaching and learning without adequate instructional facilities is that, teaching and learning will become theoretical and ineffective (Faith, Huida, & Samuel, 2016). This is to say, teacher will not be able to demonstrate to the students the practical aspect of the profession.

Aliyu (2001) argue that one of the primary responsibilities of teachers in business education (OTM inclusive) is to show students how various response patterns are made. This is made possible when a teacher demonstrates how to use a particular piece of facilities in front of the class for the learners to see, observe and learn. The students on the other hand, have the responsibility of imitating the response pattern. He went further to say that those response pattern can only be implemented when instructional facilities are available for teaching and learning. Olowookere & Asimegbe (2014) also complemented other authors by saying that, without the availability of instructional facilities students will not perform well to expectation after graduation. This is to say that, unavailability of these facilities for teaching and learning is capable of affecting the productivity of OTM students after graduation in their places of assignment.

The productivity of a learner after graduation will depend more on the training he receives during his training process and the conducive nature of his learning environment. Obasi (2005) maintained that a student will become more focused in their academic pursuit without much distraction, if the environment is conducive and the facilities are available for studies. Obasi further stress that, instructional facilities are always provided in polytechnics at

a very low level thus, affecting the standard of teaching and learning especially in OTM departments. It is however important to note that, with the latest changes in the curriculum of Office Technology and Management, emphasis is now being placed more than ever before on the practical aspect of teaching and learning OTM courses (Baba and Akarahu, 2012).

From the various authors cited so far, availability of appropriate infrastructure and instructional facilities will enhance students performances by allowing them to be involved in demonstrations and practice which that will build and concretized their skills. This suggests that the only way to improve and prepare students for the world of work after graduation is to make available and also improve teaching and learning instructional facilities (Tinio, 2012).

Adequacy of Instructional Facilities in Teaching and Learning

Adequate is when something is considered to be sufficient for a particular purpose. Adequacy is when someone is able to meet up with an agree term or requirements. Longman (2000) explain that adequacy is a situation in which there is enough facilities for a particular purpose. Mapaderum (2002) also assert that adequacy is a satisfactory condition of resources in an organization. Adequacy is when instructional facilities are easily, publicly and generally founded and enough in quality and quantity for use. Commenting on the importance of adequate facilities, Ogbu (2009) reiterate that when facilities are provided in adequate quality to meet relative needs of a school system, students will not only have access to the references facilities mentioned by the teacher but individual students will also learn on their own pace. The net effect of this is to increase the overall performance of students after graduating in their work places. On the contrary, inadequate facilities and equipment in teaching and learning is the origin of failure (Ugwueze, 2016).

Taking a look at most polytechnics offering Office Technology and Management as a course of study, what goes on their shows that nothing good can come-out from most schools

as they do not have the adequate facilities necessary to train their students for the world of work after graduation (Joyce, Abubakar&Aminu, 2014). It was as a result of unavailability and inadequate facilities in Nigeria Polytechnics that made Okafor (1992) to blame the falling of Curriculum Reform in Nigeria (CRN) on the inability of the initiators of a given programme to mobilize adequate resources to prosecute it and transform the plan of various programmes into reality.

The typical scenario of the problems associated with inadequacy is that Polytechnic right from inception maintain the number of intake base on its facilities on ground, but eventually, the number of students keeps increasing without any increase on the facilities for teaching and learning various courses. Even when instructional facilities are not adequate, it is still expected that lecturers should observe the students as they work in the laboratories using the right facilities to correct them during practical work. But in view of the prevailing situation where up to 50 students crowding a piece of facility cannot help in building students that will take up responsibilities in their places of work after graduation with current and relevant skills (Nnoli, 2001).

Similarly, Igbuzor (2006) is of the opinion that, dilapidated buildings and inadequate instructional facilities are some of the major challenges facing education in Nigeria (including Office Technology and Management). He further stress that most tertiary institutions are unable to procure instructional facilities, equipment and tools. Desai (2012) went on to say that, inadequate instructional facilities has been a serious issues since the past few decades, even through successive governments have tried to reform the education sector (since it is recognized as an instrument for rapid economic growth) without much success.

Generally, overcrowding and inadequate instructional facilities has always be pointed as one of the factor responsible for the decline in quality of education in Nigeria

(Olagbemiro, 2010). Schneider (2003), opine that institutions with inadequate instructional facilities, have a high student absenteeism and overcrowded students on few facilities and that the consequence of inadequate instructional facilities is that, these student after graduation will go into the labour market with no relevant skills to function. Inadequate instructional facilities tend to affect teachers of Office Technology and Management also in term of productivity. This is so because, the instructional facilities needed for them to discharge their duties properly and acceptably are not available and most times inadequate. This made Okoro (2008) to say that, ineffective teaching may be caused by lack of instructional facilities needed to impact practical skills on learners. According to a research conducted by Esene and Ovbiagele (2014) with the purpose of determining the quality and quantity of equipment available for OTM students in selected institutions in the south-south of Nigeria, it was reveals that training equipment were grossly inadequate to meet the needs of students.

Facilities should be adequate in line with the objectives of Office Technology and Management which is to prepare students for successful employment in the labour market as middle and senior level manpower for government, industries and business offices (Akarahu, 2010). OTM students can be sound and highly productive after graduation through a curriculum that is relevant, comprehensive as well as with adequate instructional facilities for training every recipient in the profession. It must be understood therefore that, adequate instructional facilities are paramount in training every OTM students of today and tomorrow. This is because after the completion of their programmes in schools, they will be well refined and skilled to handle organization challenges in their places of work without fear.

Utilization of Instructional Facilities in Teaching and Learning

Utilization of instructional facilities involves the use of instructional facilities and equipment to promote the understanding between the teacher and the learner. When utilized

effectively, can provide concrete and realistic experiences that help the learner develop faster understanding of concept to be learned. According to faith, Huida and Samuel (2016), utilization of instructional facilities helps pupils (students) to acquire manipulative skills needed to prepare them for immediate employment in the world of numerous challenges.

Dominic (2017) sees instructional facilities as a vital concept of learning and that when it is not being available, learners cannot do well. This means that the utilization of instructional facilities in teaching and learning process is vital in achieving educational goals and objectives. James (2015) noted that, teachers' utilization of relevant instructional facilities in teaching basic electricity which is also applicable to OTM, enhances students achievement and skills. He further stated that the usefulness of any available instructional facilities depend on what the teacher makes out of it.

Sometimes, instructional facilities can be available but not adequate; it can be adequate but not properly utilized. The amount of instructional facilities available in a school system do not guarantee student academic performance, rather it is when these facilities are being utilized in teaching and learning that will enable OTM students acquire the necessary skills that will enable them to function effectively in their various places of employment after graduation. It therefore means, Office Technology and Management Department should be ready to give students free hands to make use of facilities during school hours at their leisure time. This will enable them to really practice by themselves what they have been taught at their leisure time.

Teachers of OTM who may not be knowledgeable in some of these instructional facilities and as such not been able to utilize the available once, should be trained in order to meet up with the 21st century method of teaching. If OTM students must do well in their places of assignment after graduation, it is instructional facilities that they have seen, touched

and practices that will give them the necessary skills to function productively in their places of assignment after graduation.

Joyce, Abubakar and Aminu (2014) maintain that instructional facilities in office technology and management are not effectively utilized due to some factors. These factors according to them are: Student lack of interest in practical activities, students not allowed to operate machines equipment on their own, insufficient machines in workshops, lack of functioning stand-by generator, workshops technologists not available to assist students, lack of competent lecturers to operate machines and equipment, students are not allowed entry into workshop alone and theory not merged with practical's activities. Uzuegbu, Mbadiwe and Anulobi (2013) are of the opinion that instructional facilities are not been provided in such a way that students can have unrestricted access to laboratories for practical and that most lecturers do not know how to make use of information communication and technology instructional facilities for teaching their courses.

Review of Related Empirical Literature

Oyinloye and Oluwalola(2014) conducted a research on Modern Office Instruction Facilities in Office Technology and Management in Polytechnics: A means to Insecurity Management in Nigeria. The statement of the problem was bore down to employment issues and graduates who have not been giving the needed skills and competence in schools which will make them to be employable either in paid jobs or self employment after graduation. The purpose of the study is to assess adequacy of modern instructional facilities in OTM departments in line with the NBTE minimum requirement and the second purpose is to determine whether the available instructional facilities have the capacity to provide 21st century skills. The population of the study comprise of Eight Hundred and five (805) students and Eighteen (18) lecturers of the department of Office Technology and Management Federal Polytechnic, Offa and the Kwara state Polytechnic, Ilorin. Random

sampling was used to select 20% of respondents across the levels to give a total of one hundred and sixty one (161) students in the department distributed as follows: NDI thirty eight (38) students, NDII fifty (50) students, HND II forty three (43) students and HND I thirty (30) students. The instrument used for the collection of data for research question one was a stock taking. Also a structured questionnaire which has 18 items structured in 5 likert rating scale of Strongly Agreed (5), Agreed (4), Undecided (3), Disagree (2) and Strongly Disagree (1) was used to collect data to answer the research question two. The validity of the instrument was determined by expert from Kwara State Polytechnic, Ilorin. The instrument has Cronbach alpha reliability coefficient of 0.77 while the mean rating of 3.000.81. The first research question was analyzed using percentages to determine the adequacy of instructional facilities and the second research question was analyzed using mean rating. For research question one, any item with a percentage of 50% was considered adequate. The mean above 3.50 was accepted as agreed while any mean below 3.50 was accepted as disagree.

The result shows that, there were adequate laboratories in OTM departments in the two polytechnics in line with the NBTE minimum requirement. Based on the conclusion of the findings, it was concluded that Office Technology and Management Department which is expected and responsible for turning out modern secretaries and office managers, could not meet the minimum requirement of NBTE in terms of modern office instructional facilities, and that available instructional facilities are not in good shape or outdated and cannot provide the students with skills and competence required to function effectively in the 21st century office. It was recommended that OTM departments in Polytechnics should be fully provided with modern office instructional facilities such as various office equipment and machines in line with NBTE minimum requirement, adequate funding should be made available for office technology and management department for proper maintenance and repairs of office equipments to the department, lecturers and students should ensure that they take good care

and handle these equipment and machines with good care and NBTE should be strict and live up to their responsibilities during accreditation to ensure that minimum standard of instructional facilities are met by polytechnics.

Oyinloye and Oluwalola study is related to the present study because they both focused on the availability of instructional facilities in polytechnics in Kwara State. However, the differences is that Oyinloye and Oluwalola research considered the population of Eight hundred and five students and eighteen lecturers from the departments of office technology and management departments while this research will consider five hundred and fifty (550) office technology and management students and Thirteen (13) lecturers. Oyinloye and Oluwalola research put into consideration both the ND and the HND as respondents while this research will consider only the HND as respondents. Oyinloye and Oluwalola research was able to determine the availability and the adequacy while this research will examine the availability, adequacy and the extent of utilization of the available instructional facilities. Oyinloye and Oluwalola research used 5 rating scale while this research will use 4 rating scale, while this research made use of 4 rating scale. Oyinloye and Oluwalola arrived at the reliability coefficient of 0.77 while this research arrived at the reliability coefficient of 0.88.

Similarly, Ayelotan and Shola (2014) conducted a research on Infrastructural facilities and business education: office technology and management perspective. The significance of the study is to create awareness to educational stakeholders, management, parents and government on the unpleasant situation of most of our institutions in terms of inadequate infrastructural facilities especially those offering OTM program. The purpose is to examine the required infrastructural facilities necessary for the training of office technology and management programmes in tertiary institutions in conformity with the new curriculum, to examine the adequacy of the available infrastructural facilities in OTM programmes, finally to examine the effect of inadequate infrastructural facilities on the graduating students of OTM.

The research questions for the research were: What are the required infrastructural facilities necessary for the training of OTM students in tertiary institutions in conformity with the new curriculum? Are there infrastructural facilities for the training of OTM students? Are the available infrastructural facilities adequate for the training of OTM students? Finally, what are the effects of training OTM students with inadequate facilities? There were no hypotheses formulated. The scope of the research was limited to two polytechnics which are MoshoodAbiola polytechnic, Abeokuta and Federal Polytechnic, Ilaro. The research design for the study was a survey research design. The population of the study comprises of all students and lecturers from the two polytechnics. The sample size comprise of Ten lecturers from the two polytechnics and Two hundred students. The research instrument for the study was a structured questionnaire designed by the researcher. The data were analysed using descriptive statistics while the hypotheses were tested using product-moment correlation coefficient statistics at 0.05 level of significance.

The finding reveals that, majority of the items that were required for teaching and learning were nowhere to be found, instructional facilities were not adequate for training OTM students and finally, OTM departments lack infrastructural facilities. It was recommended that NBTE should initiate policy reform that would emphasize that any polytechnic without appropriate infrastructural facilities would not be accredited to run OTM programme. The researcher concluded by saying the role of business educator is to facilitate the process of providing adequate infrastructural facilities necessary for effective teaching and learning.

This study is related because it was able to determine availability and adequacy of instructional facilities but not able to determine the extent of utilization of the available once. However, Ayelotan and Shola study is difference due to the fact that, the population of their research comprise of lecturers and students of MoshoodAbiola Polytechnic, Abeokuta and

Federal polytechnic, Ilaro while this research focused on Federal Polytechnic, Offa and Kwara State Polytechnic, Ilorin. Ayelotan and Shola had a sample size of Two hundred and ten students and lecturers as respondents while for this research, the sample size comprised of Five hundred and fifty students and thirteen lecturers.

Summary of Literature Review

Availability, adequacy and utilization of instructional facilities in teaching and learning office technology and management courses has been explained and discussed by various authors. Availability refers to when the necessary tools, equipments and materials for teaching and learning are made ready for use. Adequacy is a condition in which something is enough in quality and quantity for a particular purpose or need. On the other hand, utilization is the act of making use of available service with the available and adequate recourses at individual disposal.

The literature reveals that instructional facilities are paramount in teaching and learning office technology and management courses and that a situation where these instructional facilities are not made available, students after graduation will not be able to perform to expectation. Instructional facilities should be available, adequate and enough to make students undergo the practical aspect of their training.

Finally, a department, profession and schools where instructional facilities are considered to be available and adequate, they should be well utilized in full during teaching and learning process.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter describes the various methods and procedures which the researcher will use to carry out the study. Therefore, this chapter is organized under the following sub-headings:

- Research Design
- Population for the Study

- Sampling Techniques
- Instrument for Data Collection
- Validation of the Instrument
- Pilot Study
- Reliability of the Instrument
- Procedure for Data Collection
- Method of Data Analysis
- Decision Rule

Research Design

The research design for this study is a descriptive survey. The descriptive survey approach was used because it involves a planned collection of data over a large area with the purpose of making generalization. This method is considered appropriate for the study because it allows the researcher to make careful records of his observations so that it can be used to analyze the information obtained from a representative sample of the population and to describe as they exist regarding availability, adequacy and utilization of instructional facilities in teaching and learning OTM courses in Polytechnics in Kwara State.

Population of the Study

The population for the study consists of all Office Technology and Management students and lectures from Federal polytechnic Offa and Kwara State polytechnic, Ilorin. The breakdown of the list of respondents based on polytechnics are: two hundred and fifty (250) students and nine lecturers of Office Technology and Management department in Federal Polytechnic, Offa and three hundred (300) students and four lecturers of Office Technology

and Management department in Kwara State Polytechnic, Ilorin. The total numbers of the respondents are five hundred and sixty three (563) students and lecturers from the two polytechnics.

The researcher decided to use office technology and management students as part of the population because; they have the experience to evaluate the training they had during their one year Industrial Training and Industrial Attachments.

Table 1: Distribution of Polytechnics in Kwara State, Nigeria and their population:

<i>Name of Polytechnics</i>	<i>Number of Students</i>	<i>Number of Lecturers</i>
Federal Polytechnic, Offa	250	09
Kwara State Polytechnic, Ilorin	300	04
TOTAL	550	13

Sources: Staff of the Polytechnics visited.

Sampling Technique

The researcher decided to use the entire population of five hundred and sixty three (563) respondents comprising of thirteen (13) lecturers and five hundred and fifty (550) students of Office Technology and Management departments from Federal Polytechnic, Offa and Kwara State Polytechnic, Ilorin.

The researcher decided to study the entire population because it is in line with Ademiluyi and Okwuanaso (2009) who state that it is ideal to study the entire population whenever it is possible to do so.

Instrument for Data Collection

The research instrument for this study is a self-designed questionnaire titled: “Availability, adequacy and utilization of instructional facilities in teaching and learning office technology and management courses in Polytechnics in Kwara state, Nigeria”.

The questionnaire was designed in a simple format to solicit responses from the respondents. The questionnaire was made up of section A and B. Section “A” is designed to elicit response on the demographic characteristic of the respondents while section “B” centers on structured questionnaire on availability, adequacy and utilization of instructional facilities for teaching and learning office technology and management courses in Polytechnics in Kwara state.

The questionnaire was answered by Office Technology and Management lecturers and students of the same department. The questions consist of responses based on 4 – point rating scale. For instrument one, responses are arranged as follows according to the points allocated to them.

Highly Available	HA	4 points
Available	A	3 points
Partially Available	PA	2 points
Not Available	NA	1 point

For instrument two, responses are arranged as follows according to the points allocated to them.

Highly Adequate	(HA)	-4 points
Adequate	(A)	- 3 points
Partially Adequate	(PA)	- 2 points

Not Adequate (NA) - 1 point

Finally for instrument three, responses are arranged as follows according to the points allocated to them.

Great Extent	(GE) -	4 points
Moderate Extent	(ME) -	3 points
Small Extent	(SE) -	2 points
Not Utilised	(NU) -	1 point

Validation of the Instrument

The questionnaire designed by the researcher was validated by experts consisting of two Business and Entrepreneurship Education lecturers from Kwara State University, Malete. The reason for this validation is to ensure that the contents of the questionnaire are able to measure accurately and consistently of what it is supposed to measure.

Pilot Study

The questionnaire was pilot-tested in Federal Polytechnic Auchi which is not part of the sampled area. Ten Office Technology and Management lecturers and fifty HND students were used for the pilot test. The results of the two were correlated to find the coefficient in order to determine the reliability of the instrument.

Reliability of the Instrument

Reliability is the degree to which an assessment tool produces stable and constant result (Collins, 2006). The Cronbach Alpha method was used to determine the reliability of the instrument and the reliability coefficient of 0.88 was calculated. This reliability

coefficient was positive and very high, therefore, the instrument was adjudged reliable and stable based on Nworgu (2015) who recommended that, reliability estimate of 0.80 and above is very high and the instrument for which it is calculated is reliable and stable.

Procedure for Data Collection

The questionnaire items were administered by the researcher and two research assistants that have been trained on the subject matter by the researcher. The respondents are students and lecturers from Federal Polytechnic, Offa and Kwara State Polytechnic, Ilorin. The questionnaire were administered and collected by the researcher and the two research assistants from the respondents immediately after supplying all the necessary information. The reason for using research assistants is to avoid the difficulties in collecting questionnaires from the respondents. It equally helps to enhance good understanding of the questionnaires items. One week was used for data collection exercise.

Method of Data Analysis

The data that were generated from questionnaire were statistically analyzed using mean rating and standard deviation to answer the research questions, while t-test statistics was used to test the hypothesis at 0.05 level of significance.

Decision Rule

The real limit of numbers used for interpreting the analysed data for the research questions are as follows: For research question one: Highly Available (HA): 3.50 – 4.0; Available (A): 2.50 – 3.49; Partially Available (PA): 1.50 – 2.49; and Not Available (NA): 1.00 – 1.49. Research questions two: Highly Adequate (HA): 3.50 – 4.0; Adequate (A): 2.50 – 3.49; Partially Adequate (PA): 1.50 – 2.49; and Not Adequate (NA): 1.00 – 1.49. While research question three: Great Extent (GE): 3.50 – 4.0; Moderate Extent (ME): 2.50-3.49; Small Extent (SE): 1.50 – 2.49; and Not Utilised (NU): 1.00-1.49 respectively.

Similarly, for the test of null hypotheses one to three, hypothesis of no significant difference was accepted when the observed probability value is greater than or equal to 0.05 level of significance. Where the calculated probability value is less than 0.05 level of significance, the null hypothesis was rejected.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

This research work was conducted on availability, adequacy and utilization of instructional facilities for teaching and learning Office Technology and Management courses

in Polytechnics in Kwara State, Nigeria. A total of five hundred and sixty three (563) questionnaires copies were distributed and four hundred and four (404) were retrieved representing 71.8% return rate. The breakdown of the retrieved questionnaires was 12 and 392 for lecturers and students respectively. This chapter deals with the presentation and analysis of the research data and discussion of findings. The analyses were carried out under the following headings:

- Analysis of demographic data
- Analyses of data to answer the Research Questions
- Hypotheses Testing
- Summary of Major Findings
- Discussion of Findings

Analysis of Demographic Data

The demographic variable for the study were analyzed in table two and three as follows:

Table 2: Percentage Distribution of Respondents by Ownership of Polytechnics

Polytechnic	Frequency	Percentage (%)
Federal Owned	188	46.5
State Owned	216	53.5
Total	404	100.0

Source: *Field survey, 2018*

Analysis in Table 2 reveals that 188 respondents representing 46.5% are from the federal polytechnic while 216 respondents representing 53.5% are from State polytechnic. This implies that respondents from state polytechnic are more in number than respondents from federal polytechnic in Kwara State.

Table 3: Percentage Distribution of Respondents by Position

Position	Frequency	Percentage (%)
Lecturers	12	3.0
Students	392	97.0
Total	404	100.0

Source: *Field survey, 2018*

Analysis in Table 3 reveals that there are 12 respondents representing 3.0% who are lecturers while 392 respondents representing 97.0% are students that responded to the questionnaire. This implies that students respondents are more in number than lecturers from polytechnic in Kwara State, Nigeria.

Analyses of Data to Answer the Research Questions

Analysis of data to answer the research questions conducted in table 4 to 6 as follows:

Research Question one: How available are instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State, Nigeria?

Table 4: Mean and standard deviation of responses on the availability of instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State, Nigeria

S/N	Item Statements	\bar{X}	SD	Remark
1.	UPS	1.56	0.88	Partially Available
2.	Printers	2.40	1.15	Partially Available

3.	Computers	2.72	1.15	Available
4.	Computers with internet ready	1.72	0.96	Partially Available
5.	Scanners	1.35	0.79	Not Available
6.	Air conditioner	2.49	1.09	Partially Available
7.	Manual typewriters	3.26	1.01	Available
8.	Electronics typewriters	1.76	1.04	Partially Available
9.	Photocopiers	2.92	1.24	Available
10.	Steel filing equipment	2.58	1.00	Available
11	Shredding machines	2.68	1.20	Available
12	Computers with relevant software	3.13	1.08	Available
13	Electric desk calculators	1.65	0.96	Partially Available
14	Telephone equipment (intercom)	1.25	0.70	Not Available
15	Fax machines	1.23	0.62	Not Available
16	Public address systems	3.11	1.04	Available
17	Laminating Machine	1.43	0.79	Not Available
18	Cassette players	1.47	0.88	Not Available
19	Colour Televisions	1.56	0.98	Partially Available
20	Video CD/DVDs	1.56	0.95	Partially Available
21	Projectors and screen	1.65	1.01	Partially Available
22	Digital cameras	1.43	0.84	Not Available
23	Interactive board	1.37	0.77	Not Available
24	Staplers	3.03	1.18	Available
25	Spiral Binding Machine	2.38	1.20	Partially Available
26	Generating set	3.06	1.03	Available
27	Relevant textbooks	3.34	1.00	Available
28	Journals	2.99	1.03	Available
29	Conference proceedings	2.73	1.07	Available
30	Project materials	3.53	0.90	Highly Available
31	E-Library	1.63	0.93	Partially Available
32	Daily Newspapers	1.51	0.97	Partially Available
	Weighted average	2.20	0.98	Partially Available

Source: Field Survey, 2018

Analysis of data in Table 4 reveals that the respondents indicated that project materials were highly available for teaching and learning Office Technology and Management courses. A mean score of 3.53 supported this. In addition, the respondents indicated that computers, manual typewriters, photocopiers, steel filing equipment, shredding machines, computers with relevant software, public address systems, staplers, generating set, relevant textbooks and journals were available for teaching and learning Office Technology and Management

courses with mean ranges from 2.58 to 3.34. UPS, printers, computers with internet ready, air conditioner, electronic typewriters, electric desk calculators, colour televisions, Video CD/DVDs, Projectors and screen, Spiral binding machines, E-Library, daily newspapers were partially available for teaching and learning Office Technology and Management courses with mean ranges from 1.51 to 2.49. Also, the respondents indicated that scanners, telephone equipments (intercom), fax machines, Laminating Machine, cassette players, digital cameras, interactive board were not available for teaching and learning Office Technology and Management courses. 32 items has standard deviation ranging from 0.62 to 1.24 which are below the fixed value of 1.96.

The items listed in the table are partially available. This means that instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics are partially available (mean = 2.20, SD = 0.98).

Research Question Two: How adequate are instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State, Nigeria?

Table 5: Mean and standard deviation of responses on adequacy of instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State, Nigeria

S/N	Item Statements	\bar{X}	SD	Remark
1.	UPS	1.69	0.95	Partially Adequate
2.	Printers	2.59	1.20	Adequate
3.	Computers	2.92	1.12	Adequate
4.	Computers with internet ready	2.44	1.25	Partially Adequate
5.	Scanners	1.67	0.98	Partially Adequate
6.	Air conditioner	2.52	1.14	Adequate
7.	Manual typewriters	3.24	0.99	Adequate

8.	Electronics typewriters	1.68	1.02	Partially Adequate
9.	Photocopiers	1.89	1.16	Partially Adequate
10.	Steel filing equipment	2.94	1.19	Adequate
11	Shredding machines	2.78	1.15	Adequate
12	Computers with relevant software	2.99	1.02	Adequate
13	Electric desk calculators	1.55	0.98	Partially Adequate
14	Telephone equipment (intercom)	1.24	0.68	Not Adequate
15	Fax machines	1.52	0.84	Partially Adequate
16	Public address systems	3.21	1.10	Adequate
17	Laminating Machines	1.40	0.79	Not Adequate
18	Cassette players	1.52	0.91	Partially Adequate
19	Colour Televisions	1.59	0.94	Partially Adequate
20	Video CD/DVDs	1.68	1.00	Partially Adequate
21	Projectors and screen	1.65	0.99	Partially Adequate
22	Digital cameras	1.48	0.84	Not Adequate
23	Interactive board	1.51	0.91	Partially Adequate
24	Staplers	2.95	1.19	Adequate
25	Spiral Binding Machines	2.37	1.20	Partially Adequate
26	Generating set	3.07	1.15	Adequate
27	Relevant textbooks	3.50	0.81	Highly Adequate
28	Journals	2.80	1.17	Adequate
29	Conference proceedings	2.62	1.17	Adequate
30	Project materials	3.67	0.81	Highly Adequate
31	E-Library	1.72	0.99	Partially Adequate
32	Daily newspapers	1.73	0.99	Partially Adequate
	Weighted average	2.25	1.02	Partially Adequate

Source: *Field Survey, 2018*

Analysis of data in Table 5 reveals that the respondents indicated that relevant textbooks and project materials were highly adequate for teaching and learning Office Technology and Management courses. A mean score of 3.50 and 3.67 supported these. In addition, the respondents indicated that printers, computers, air conditioner, manual typewriters, steel filing equipment, shredding machines, computers with relevant software's, public address systems, staplers, generating set, journals and conference proceedings were all adequately provided for teaching and learning Office Technology and Management courses with mean ranges from 2.52 to 3.24. UPS, computers with internet ready, scanners, Electronics typewriters, photocopiers, electronic desk calculators, fax machines, cassette

players, colour televisions, Video CD/DVDs, Projectors and screen, interactive board, spiral binding machine, E-Library, daily newspaper with mean ranges from 1.51 to 2.44 are only partially adequate for teaching and learning Office Technology and Management courses.

Also, the respondents indicated that telephone equipments (intercom), laminating machines and digital cameras with mean ranges from 1.24 to 1.48 were not adequate for teaching and learning Office Technology and Management courses. 32 items has standard deviation ranges from 0.68 to 1.25 which were below the fixed value of 1.96.

The entire table shows that, items listed were partially adequate for teaching and learning OTM courses. This means that instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics are partially adequate (mean = 2.25, SD = 1.02)

Research Question Three: To what extent are instructional facilities for teaching and learning Office Technology and Management courses being utilized in Polytechnics in Kwara State, Nigeria?

Table 6: Mean and standard deviation of responses on the extent to which instructional facilities are utilized for teaching and learning Office Technology and Management courses being in Polytechnics in Kwara State, Nigeria

S/N	Item Statements	\bar{X}	SD	Remark
1.	UPS	1.69	0.96	Small Extent
2.	Printers	2.60	1.27	Moderate Extent
3.	Computers	2.95	1.12	Moderate Extent
4.	Computers with internet ready	1.75	1.02	Small Extent
5.	Scanners	1.66	0.98	Small Extent
6.	Air conditioner	2.55	1.15	Moderate Extent

7.	Manual typewriters	3.27	0.99	Moderate Extent
8.	Electronics typewriters	1.71	1.03	Moderate Extent
9.	Photocopiers	1.92	1.18	Small Extent
10.	Steel filing equipment	2.42	1.17	Small Extent
11	Shredding machines	2.77	1.14	Moderate Extent
12	Computers with relevant software	3.00	1.22	Moderate Extent
13	Electronic desk calculators	1.57	0.92	Small Extent
14	Telephone equipment (intercom)	1.24	0.68	Not Utilized
15	Fax machines	1.52	0.85	Small Extent
16	Public address systems	3.22	1.09	Moderate Extent
17	Laminating Machines	1.40	0.79	Not Utilized
18	Cassette players	2.62	1.29	Moderate Extent
19	Colour Televisions	1.58	0.95	Small Extent
20	Video CD/DVDs	1.71	0.99	Small Extent
21	Projectors and screen	1.64	0.99	Small Extent
22	Digital cameras	1.48	0.84	Not Utilized
23	Interactive board	1.50	0.91	Small Extent
24	Staplers	2.98	1.18	Moderate Extent
25	Spiral Binding Machine	2.38	1.20	Small Extent
26	Generating set	3.10	1.14	Moderate Extent
27	Relevant textbooks	3.53	0.79	Great Extent
28	Journals	2.80	1.17	Moderate Extent
29	Conference proceedings	2.65	1.17	Moderate Extent
30	Project materials	3.67	0.81	Great Extent
31	E-Library	1.70	1.00	Small Extent
32	Daily newspapers	1.73	0.99	Small Extent
	Weighted average	2.26	1.03	Small Extent

Source: *Field Survey, 2018*

Analysis of data in Table 6 reveals that the respondents indicated that relevant textbooks and project materials are utilized to a great extent for teaching and learning Office Technology and Management courses. A mean score of 3.53 and 3.67 supported these. In addition, the respondents indicated that printers, computers, air conditioner, manual typewriters, shredding machines, computers with relevant software, public address systems, cassette players, staplers, generating set, journals and conference proceedings are utilized to a moderate extent with mean ranges from 2.55 to 3.27. UPS, E-Library, scanners, Electronics typewriters, photocopiers, steel filing equipments, electronic desk calculators, fax machines, colour televisions, Video CD/DVDs, Projectors and screens, interactive board, Spiral Binding

Machine, E-Library, daily newspapers with mean ranges from 1.50 to 2.42 were utilized to a small extent for teaching and learning Office Technology and Management courses. Also, the respondents indicated that telephone equipments (intercom), laminating machines and digital cameras with mean ranges from 1.24 to 1.48 are not utilized for teaching and learning Office Technology and Management courses. 32 items has standard deviation ranges from 0.68 to 1.29 which are below the fixed value of 1.96.

All the items listed in the table were utilized to a small extent for teaching and learning OTM courses. This means that instructional facilities for teaching and learning Office Technology and Management courses in polytechnics are utilized to a small extent (mean = 2.26, SD = 1.03)

Test of Hypotheses

The three null hypotheses of the study were tested at 0.05 level of significance using independent t-test. The summary of the test of hypotheses are presented in Tables 6 to 8 as follows:

H₀₁: There is no significant difference between the mean ratings of respondents in federal and state owned polytechnics on the availability of instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State, Nigeria.

Table 7: Summary of t-test of the difference in the mean rating of respondents in federal and state owned polytechnics on the availability of instructional facilities for teaching and learning OTM courses in Polytechnics in Kwara State, Nigeria

Group	N	Mean	SD	t-cal	Df	p-value	Decision
Federal	188	2.26	0.14				

Owned				8.896	402	0.000	S
State	216	2.16	0.10				
Owned							
Source:	<i>Field survey, 2018</i>					P<0.05	

The data in Table 7 reveals that there are 188 respondents from Federal owned polytechnic and 216 respondents from State owned polytechnic participated in the study. The respondents in federal and state owned polytechnic responses showed that instructional facilities for teaching and learning OTM are partially availability ($\bar{X} = 2.26$; $SD = 0.14$) and ($\bar{X} = 2.16$; $SD = 0.10$). Their responses are close to the mean as the standard deviations are very low. The table reveals that there was significant difference in the mean ratings of respondents in federal and state owned polytechnics on the availability of instructional facilities for teaching and learning Office Technology and Management courses ($t_{402} = 8.896$, $P < 0.05$). Therefore, the null hypothesis that states that there is no significant difference in the mean rating of respondents in federal and state owned polytechnics on the availability of instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State was rejected. Their responses showed that federal owned polytechnic rated the availability of instructional facilities higher than the state owned polytechnic (mean difference = 0.10).

H₀₂: There is no significant difference between the mean responses of lecturers and students on the adequacy of instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State, Nigeria.

Table 8: Summary of t-test of the difference between the mean responses of lecturers and students on the adequacy of instructional facilities for teaching and learning OTM courses in Polytechnics in Kwara State, Nigeria

Group	N	Mean	SD	t-cal	Df	p-value	Decision
Lecturers	12	2.24	0.22				
				0.302	402	0.762	NS
Students	392	2.25	0.13				
Source:	<i>Field survey, 2018</i>						P>0.05

The data in Table 8 reveals that there are 12 lecturers and 392 students. The lecturers and students responses showed that instructional facilities for teaching and learning Office Technology and Management courses are partially adequate ($\bar{X} = 2.24$; $SD = 0.22$) and ($\bar{X} = 2.25$; $SD = 0.13$). Their responses are close to the mean as the standard deviations are very low. The table reveals that there was no significant difference between the mean responses of lecturers and students on the adequacy of instructional facilities for teaching and learning Office Technology and Management courses ($t_{402} = 0.302$, $P > 0.05$). Therefore, the null hypothesis was not rejected. This implied that lecturers and students do not differ specifically in their responses regarding the adequacy of instructional facilities are adequate for teaching and learning Office Technology and Management courses.

H₀₃: There is no significant difference between the mean responses of students and lecturers on the extent to which instructional facilities for teaching and learning Office Technology and Management courses are being utilized in Polytechnics in Kwara State, Nigeria.

Table 9: Summary of t-test of the difference between the mean responses of lecturers and students extent to which instructional facilities for teaching and learning OTM courses are being utilized

Group	N	Mean	SD	t-cal	Df	p-value	Decision
Lecturers	12	2.61	0.18				

				9.664	402	0.000	S
Students	392	2.25	0.13				
Source:	<i>Field survey, 2018</i>						P<0.05

The data in Table 9 reveals that there are 12 lecturers and 392 students. The lecturers and students' responses showed that instructional facilities for teaching and learning Office Technology and Management courses are partially utilized ($\bar{X} = 2.61$; $SD = 0.18$) and ($\bar{X} = 2.25$; $SD = 0.13$). Their responses are close to the mean as the standard deviations are very low. The table revealed that there was significant difference between the mean responses of students and lecturers on the extent to which instructional facilities for teaching and learning Office Technology and Management courses are being utilized in Polytechnics ($t_{402} = 9.664$, $P < 0.05$). Therefore, the null hypothesis was rejected. This implied that lecturers and students differ in their responses regarding the extent to which instructional facilities for teaching and learning Office Technology and Management courses are being utilized in Polytechnics. Their responses showed that lecturers rated the extent of utilization of available instructional facilities for teaching and learning Office Technology and Management courses than the students (mean difference = 0.36).

Summary of Major Findings

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

1. Instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics are partially available (mean = 2.20, $SD = 0.98$)
2. Instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics are partially adequate (mean = 2.25, $SD = 1.02$).

3. Instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics are utilized to a small extent (mean = 2.26, SD = 1.03).
4. There was significant difference in the mean ratings of respondents in federal and state owned polytechnics on the availability of instructional facilities for teaching and learning Office Technology and Management courses in polytechnics in Kwara State, Nigeria ($t_{402} = 8.896, P < 0.05$).
5. There was no significant difference between the mean responses of lecturers and students on the adequacy of instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State, Nigeria ($t_{402} = 0.302, P > 0.05$).
6. There was significant difference between the mean responses of students and lecturers on the extent to which instructional facilities for teaching and learning Office Technology and Management courses are being utilized in Polytechnics in Kwara State, Nigeria ($t_{402} = 9.664, P < 0.05$).

Discussion of Findings

The study was conducted to assess the availability, adequacy and utilization of instructional facilities in teaching and learning office technology and management courses in polytechnics in Kwara State. The discussion is based on the three research questions and the three null hypotheses presented in chapter one were statistically analyzed in this chapter. The result of the analysis in table four shows that instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State are Partially Available (mean = 2.20, SD = 0.98). The finding collaborates that of Igboke and Chinedu (2014) who state that majority of instructional facilities for teaching and learning office technology and management are partially available and that in some cases not available, these instructional facilities will be found to be of poor quality. Anioke (2011) asserts that the

problems of Business Education (OTM Inclusive) in Nigeria are poor modern instructional facilities, laboratories and workshop equipment to enhance learning outcome. Desai (2012) emphasized that poor educational facilities are a serious issue in educational programmes (OTM Inclusive) since the past few decades, even though successive governments have tried to reform the educational sector without much success. According to Ayelotan and Sholagbade (2014) the challenges associated with poor instructional facilities in teaching and learning office technology and management programme in our tertiary institution cannot be over-emphasized or ignored. Its effect on the product is potentially destructive and detrimental to the nation's economy. Zakka and Priscilla (2009) report that while office technology and management demands the use of computers and other instructional facilities in teaching and learning, it is unfortunate that some of these facilities are partially available. Secretaries of today do not receive adequate training since the facilities for teaching and learning were available in poor quality during their training in school (Aliyu, 2014). Okoro (1990) is of the opinion that ineffective teaching may be caused by poor instructional facilities.

The finding from table five reveals that Instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics are partially adequate (mean = 2.25, SD = 1.02). The finding is in line with Joyce, Abubakar and Aminu, (2014) stated that most polytechnics offering Office Technology and Management as a programme do not have the adequate facilities necessary to train their students for the world of work after graduation. The prevailing situation of inadequate instructional facilities in office technology and management programme with up to 50 students crowding a piece of facility cannot help in building students who will take up great responsibilities in modern offices after graduation with current and relevant skills to function (Nnoli, 2001). Puyate (2002) maintains that the present state of Vocational Education facilities are inadequate and are also very poor, there is no planned means of maintenance of the broken down facilities or means of purchasing new

once, there has been little or no effort on the part of government, lecturers and students for the improvement of the present state of facilities. Where instructional facilities are inadequate for teaching and learning, Uzoagulu (1992) warns that such a programme will suffer setback and it has the tendency of leading to the production of unskilled personnel who are unemployable and unproductive. Olagbemi (2010) reiterates that overcrowding and inadequate facilities in teaching and learning in educational programmes have always been pointed as one of the major factor responsible for the decline in quality of education in Nigeria. He further said that overcrowding of students on few facilities leads to decline in their academic performance. Acharu and Solomon (2014) said inadequate instructional facilities tend to affect the lecturers of office technology and management departments. In terms of productivity, inadequate instructional facilities hinder teachers in discharging their duties (Okoro, 2008). He further said the failure to adequately provide instructional facilities for Office Education does not only postpone needed improvements in the programme but it will keep on reducing the ethics and qualities of graduates in the profession.

The finding from table six reveals that instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics are utilized to a small extent (mean = 2.26, SD = 1.03). This is in line with Joyce, Abubakar and Aminu (2014) who state that the available instructional facilities in office technology and management are not effectively utilized due to some factors. These factors according to them are; Student lack of interest in practical activities, students not allowed to operate machines equipment on their own, insufficient machines in workshops, lack of functioning stand-by generator, workshops technologists not available to assist students, lack of competent lecturers to operate machines and equipment, students are not allowed entry into workshop alone and theory not merged with practical's activities. Some of the office technology and management lecturers do not know how to make use of some of the important instructional facilities and equipment

relevant to OTM department in teaching and learning. Due to the recent change in nomenclature, more of information communication and technology courses has been infused into the programme giving way for more of ICT courses. According to Augustine and Umukoro (2013) teachers of OTM who have refused to train themselves in line with the new direction of OTM programme are always against the use of information communication and technology equipment for teaching and learning.

All the three hypotheses for this research work were tested using t-test to determine the mean rating as shown in table seven, eight and nine. Hypotheses one was tested to examine the difference in the mean ratings of respondents in federal and state owned polytechnics on the availability of instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State.

Table seven reveals that there was significant difference in the mean rating of respondents in federal and state owned polytechnics on the availability of instructional facilities for teaching and learning Office Technology and Management courses. Therefore, the hypotheses that stated that there is no significant difference in the mean rating of respondents in federal and state owned polytechnics on the availability of instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State was rejected. This implies that instructional facilities for teaching and learning in Federal owned polytechnics are partially available than that of the State owned polytechnics. The result is in line with Anayo (2018).

Table eight was conducted to examine whether the significance difference exists between the mean responses of lecturers and students on the adequacy of instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State, Nigeria. The table reveals that there was no significant difference between the mean responses of lecturers and students on the adequacy of

instructional facilities for teaching and learning Office Technology and Management courses. The hypotheses that stated that there is no significant difference between the mean responses of lecturers and students on the adequacy of instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State was adopted. This supported the claim of a study conducted by Esene and Ovbiagele (2014) to determining the quality and quantity of equipment available for OTM students in selected institutions in the south-south of Nigeria, it was reveals that training equipment were grossly inadequate to meet the needs of students.

Table nine was also conducted to examine whether the significant difference exists between the mean responses of students and lecturers on the extent to which instructional facilities for teaching and learning Office Technology and Management courses are being utilized in Polytechnics in Kwara State. The table reveals that, there was significant difference between the mean responses of students and lecturers on the extent to which instructional facilities for teaching and learning Office Technology and Management courses are being utilized in Polytechnics. The hypotheses that stated that there is no significant difference between the mean responses of lecturers and students on the extent of utilization of instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics in Kwara State was rejected. This is in line with Uzuegbu, Mbadiwe and Anulobi (2013).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of the entire work of this study and the conclusions drawn from the findings. In addition, it contained recommendations on the availability, adequacy and utilization of instructional facilities in teaching and learning office management and technology in polytechnics in Kwara State.

Summary

The study investigated the availability, adequacy and utilization of instructional facilities in teaching and learning office technology and management courses in polytechnics in Kwara State. The objective of this study was to examine the availability of instructional facilities for teaching and learning office technology and management courses in polytechnics in Kwara State; to examine the adequacy of instructional facilities for teaching and learning office technology and management courses in polytechnics in Kwara State and to examine the extent of utilization of available instructional facilities for teaching and learning of office technology and management courses in polytechnics in Kwara State.

Three research questions and three research hypotheses were formulated and tested respectively in line with the purpose of the study. Related literatures were reviewed on the study and descriptive survey was adopted to collect relevant data with the aid of self-designed questionnaire. The study used Office Technology and Management students and lecturers two selected polytechnics in Kwara State as its population.

A 4-point rating scale was employed in the questionnaire to show the extent of agreement and disagreement of the respondents to the items provided. Three research questions and three operational hypotheses were formulated to guide the study. The data was statistically analyzed using mean and standard deviation to answer the research questions and t-test statistics was also used to test the hypotheses at 0.05 level of significance.

Findings on the research questions reveals that instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics are partially available; instructional facilities for teaching and learning Office Technology and Management courses in Polytechnics are partially adequate and that instructional facilities for teaching and learning Office Technology and Management courses in polytechnics are utilized to a small extent. Hypotheses tested reveals that there was significant difference in the mean rating of respondents in federal and state owned polytechnics on the availability of instructional

facilities for teaching and learning Office Technology and Management courses in polytechnics in Kwara State, there was no significant difference between the mean responses of lecturers and students on the adequacy of instructional facilities for teaching and learning Office Technology and Management courses and that there was significant difference between the mean responses of students and lecturers on the extent to which instructional facilities for teaching and learning Office Technology and Management courses are being utilized in Polytechnics in Kwara State.

Conclusions

Based on the findings of the study, it was concluded that instructional facilities are critical in the process of teaching and learning. These instructional facilities for teaching and learning have increasingly improved the quality of students' outcome for global competitiveness in the 21st century world of work.

However, the challenges of availability, adequacy and utilization of instructional facilities in the office technology and management (OTM) programme have led to the learners not being adequately exposed to those experiences that will guarantee the total development of relevant competencies, intellectual and academic prowess that will enable them gain and maintain competitive advantage. This clearly indicates that the OTM programme would be producing graduates who would not be able to function effectively in the 21st century world of work and who cannot contribute anything meaningful to the development of an economy driven by technological innovativeness. This situation leaves much to be desired, as the implication of producing half baked graduates on the economy can better be imagined.

Recommendations

Based on the findings, the following recommendations were made:

1. The National Board for Technical Education (NBTE) should initiate a policy that would emphasize that any polytechnic without appropriate and quality instructional facilities available for teaching and learning would not be accredited to run office management and technology programme.
2. The Heads of Departments of office technology and management in collaboration with school management should source for funds from government, industries, organisations and individuals to facilitate the provision of adequate instructional facilities to run office management and technology programmes.
3. Lastly, lecturers who may not be knowledgeable in utilizing some of the available instructional facilities should be trained to do so. Also, theories should be matched with practical's and students should not be restricted from utilizing the available instructional facilities for practice at their leisure time during school hours.

Suggestion for further studies

This research work was carried out in Kwara State. Other researchers may focus on other States or geo-political zones of the country so as to give room for comparison.

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APPENDIX A

Department of Business and
Entrepreneurship Education,
College of Education,
Kwara State University,
Malete.

18th July, 2018.

/SCALE('TEST OF ALL QUESTIONS') ALL
 /MODEL = ALPHA

Case Processing Summary

		N	%
Cases	Valid	60	100.0
	Excluded	0	.0
	Total	60	100.0

- a. List wise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.881	32

APPENDIX C

SPECIMEN QUESTIONNAIRE

SECTION A

Please tick the appropriate answer(s) from the alternative answers provided.

SECTION A: DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Gender	Male Lecturer	
	Female Lecturer	
	Male Student	
	Female Student	
Qualification(s)	HND	
	B.sc/ B.Ed	
	M.sc/M.Ed	
	Ph.d	

Name of Polytechnic.....

SECTION B

Availability, Adequacy and Utilization of Instructional Facilities in Teaching and Learning Office Technology and Management Courses in Polytechnics in Kwara State, Nigeria

KEY

HA - Highly Available
A - Available

PA - Partially Available
 NA - Not Available

Research Question One: How available are instructional facilities for teaching and learning of OTM courses in Polytechnics in Kwara State, Nigeria?

Q/1	Level of Availability	HA	A	PA	NA
1	UPS				
2	Printers				
3	Computers				
4	Computers with internet ready				
5	Scanners				
6	Air conditioner				
7	Manual typewriters				
8	Electronics typewriters				
9	Photocopiers				
10	Steel filing equipment				
11	Shredding machines				
12	Computers with relevant software				
13	Electronic desk calculators				
14	Telephone equipment (intercom)				
15	Fax machines				
16	Public address systems				
17	Laminating Machine				
18	Cassette players				
19	Colour Televisions				
20	Video CD/DVDs				
21	Projectors and screen				
22	Digital cameras				
23	Interactive board				
24	Staplers				
25	Spiral Binding Machines				
26	Generating set				
27	Relevant textbooks				
28	Journals				
29	Conference proceedings				
30	Project materials				
31	E-Library				
32	Daily Newspapers				

KEY

- HA - Highly Adequate
 A - Adequate
 PA - Partially Adequate
 NA - Not Adequate

Research Question Two: How adequate are instructional facilities for teaching and learning of OTM courses in Polytechnics in Kwara State, Nigeria?

Q/2	Level of Adequacy	HA	A	PA	NA
1	UPS				
2	Printers				
3	Computers				
4	Computers with internet ready				
5	Scanners				
6	Air conditioner				
7	Manual typewriters				
8	Electronics typewriters				
9	Photocopiers				
10	Steel filing equipment				
11	Shredding machines				
12	Computers with relevant software				
13	Electric desk calculators				
14	Telephone equipment (intercom)				
15	Fax machines				
16	Public address systems				
17	Lamination Machine				
18	Cassette players				
19	Colour Televisions				
20	Video CD/DVDs				
21	Projectors and screen				
22	Digital cameras				
23	Interactive board				
24	Staplers				
25	Spiral Binding Machine				
26	Generating set				
27	Relevant textbooks				
28	Journals				
29	Conference proceedings				
30	Project materials				
31	E-Library				
32	Daily Newspapers				

KEY

- HA - Great Extent
 A - Moderate Extent
 PA - Small Extent
 NA - Not Utilised

Research Question Three: To what extent are instructional facilities for teaching and learning of OTM courses utilized in Polytechnics in Kwara State, Nigeria?

Q/3	Level of Utilization	GE	ME	SE	NU
1	UPS				
2	Printers				
3	Computers				
4	Computers with internet ready				
5	Scanners				
6	Air conditioner				
7	Manual typewriters				
8	Electronics typewriters				
9	Photocopiers				
10	Steel filing equipment				
11	Shredding machines				
12	Computers with relevant software				
13	Electronic desk calculators				
14	Telephone equipment (intercom)				
15	Fax machines				
16	Public address systems				
17	Lamination machines				
18	Cassette players				
19	Colour Televisions				
20	Video CD/DVDs				
21	Projectors and screen				
22	Digital camera				
23	Interactive board				
24	Staplers				
25	Spiral binding Machines				
26	Generating set				
27	Relevant textbooks				
28	Journals				
29	Conference proceedings				
30	Project materials				
31	E-Library				
32	Daily Newspapers				

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