# ASSESSMENT OF AVAILABILITY AND UTILIZATION OF RESOURCES FOR TEACHING AND LEARNING BUSINESS EDUCATION IN FEDERAL COLLEGES OF EDUCATION IN NORTH-WEST ZONE, NIGERIA

**BY**

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# ZARIA, NIGERIA

**MARCH, 2018**

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**B.Ed. BUSINESS EDUCATION ABU, ZARIA 2011, M.ED/EDUC/24951/2012-2013 (P16EDVE8092)**

# A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES AHMADU BELLO UNIVERSITY, ZARIA, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF BUSINESS EDUCATION DEGREE

**DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION AHMADU BELLO UNIVERSITY,**

# ZARIA

**MARCH, 2018**

# DECLARATION

I hereby declare that this dissertation, titled Assessment of Availability and Utilization of Resources for Teaching and Learning Business Education in Federal Colleges of Education in North-west zone, Nigeria has been carried out by me in the Department of Vocational and Technical Education, Ahmadu Bello University Zaria. The information derived from literature has been duly acknowledged in the text and a list of references provided. No part of this dissertation has been previously presented for another degree at this or any other institution.

Saleh ABDULLAHI Date

# CERTIFICATION

This Dissertation titled: ASSESSMENT OF AVAILABILITY AND UTILIZATION OF RESOURCES FOR TEACHING AND LEARNING BUSINESS EDUCATION IN FEDERAL COLLEGES OF EDUCATION IN NORTH-WEST ZONE, NIGERIA, written by

Saleh ABDULLAHI meets the regulations governing the award of the degree of Master of Business Education of Ahmadu Bello University, Zaria and has been approved for its contribution to knowledge and literary presentation.

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# DEDICATION

This work is dedicated to my late sister Mariya Saleh, my parents Alh. Saleh Abdullahi and Haj. Rahinatu Abdullahi, my beloved wife, Zainab Tanimu, and my children Muhammad, Mariya and Abubakar Sadeeq.

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# OPERATIONAL DEFINITION OF TERMS

**Assessments:** in this study refers to method adapted in understanding the current knowledge of resource for the teaching and learning of Business Education through observation and to pass judgment.

**Availability:** in this study refers to description of facts that resources are available and ready for used in the teaching and learning Business Education.

**Utilization**: in this study refers to the extents to which resources optimally utilized by the teacher and student in order to achieve set goals and objectives in Business Education.

**Resources:** in this study comprised of personnel, equipment, and physical facilities for the teaching and learning of Business Education.

**Equipment:** in this study refers to materials resources such as Computer, Typewriter, and Photocopier Machines among others for teaching and learning Business Education.

**Physical facilities:** in this study refers to Building structure such as Classroom, Offices, Laboratories, and Studios among others for teaching and learning Business Education.

# ABSTRACT

This research work was carried out on the assessment of availability and utilization of resources for teaching and learning of Business Education in Federal Colleges of Education in North-west zone Nigeria. The study had four objectives, four research questions and four null hypotheses. The hypotheses were tested at 0.05 alpha levels of significance. Survey and ex- post facto research designs were employed. The populations of the study consisted of 140 lectures and 952 N C E III students, 20% of each were used as a sample for the study. Questionnaire and checklist were used as instruments for data collection and all the data collected were analyzed. Percentage, mean, standard deviation were used to answer the research questions while analysis of variance (ANOVA) was used in testing hypotheses 1 and 2 and for hypotheses 3 and 4 Pearson Product Movement Correlation (PPMC) was used. The study revealed that there is no significant difference in the level of availability of physical facilities and equipments in the teaching and learning of Business Education in the Colleges of Education in North-west zone, Nigeria, with p-value of 0.984. The findings further revealed that significant relationship exist between utilization of Physical facilities and equipment and the learning of Business Education in Federal Colleges of Education in North-west zone, Nigeria with p-value of 0.002. Based on the findings the study concludes that teaching and learning of Business Education in the five Federal Colleges of Education in North-west zone, Nigeria require not only available resources (physical facilities and equipment) but also need to meet up with the standards requirements as stipulated by the NCCE. Furthermore proper and effective utilization of physical facilities and equipment will enhance skills acquisition in the teaching and learning of Business Education. In line with this, recommendations were made among which are that computer Laboratories, Shorthand Studios and Model Offices for Business Education Departments should be adequately equipped with relevant equipment and staffs to meet the NCCE minimum standard requirement. Business Education Departments should regularly appraise and review the status of their physical facilities and the equipment vis-a-vis the students‟ sizes for the enhancement of academic achievements.

# CHAPTER ONE INTRODUCTION

# Background to the Study

In Nigeria, the primary role of Colleges of Education is to train teachers who will after completion, be awarded the minimum teaching qualification of Nigeria Certificate of Education (NCE). This certificate qualifies one to teach in Junior Secondary and Technical Colleges and the programme has duration of three years. These teachers‟ Institutions were formally known as Advanced Teachers Colleges and were affiliated to different Universities in Nigeria. They were later transformed into Colleges of Education under the supervision of one umbrella body known as National Commission for Colleges of Education (NCCE) established in 1989. There are eighty two (82) Colleges of Education in Nigeria classified according to their ownership; hence we have twenty (22) Federal, forty six (46) State and fourteen (14) Private Colleges of Education. The State‟s Colleges of Education are established and founded by their respective State governors, (NCCE, 2012).

Contextually, resources are tools for up-lifting the standards of education and the level of compliance in implementing the resource for teaching and learning process is decided at level and the type of education to be provided. For instance, resources can be natural, human and material. The natural resources are those resources that come from nature such as air, water, iron, oil, etc. The human resources are set of individuals who occupy certain positions in an organization, be it in the business or public sector domain. The material resources are assets that are in form of material possessions and they can be sourced or supplied for achieving organizational or societal objectives.

Resources availability is a description of facts that resources are available and ready for use. The availability of resources in teaching and learning processes provide

interesting and compelling platforms for learners, to acquire basic skills. For example, National Commission for Colleges of Education (NCCE) identified resources required for Business Education to include physical facilities, such as classroom that will take thirty (30) students conveniently, laboratories/studios at least one (1) each of the typing pool, shorthand laboratory, model office and information technology room, among others. Staff/student ratio for skill subject like shorthand, typewriting and accounting should be 1:20 and 1:30 for the other subjects, while equipments, such as typewriters- manual thirty (30) of various make and types, Computer at the ratio of one (1) computer to three (3) students. While utilization of resources is the extent to which resources are optimally utilized. Utilization of resource in teaching and learning promote teaching and motivates learners to learn better, easy and faster. It also lead to motivation, informing, instructive and presented the subject matter more attractive.

The desire to assess resources for teaching and learning Business Education stems from the fact that resources occupy significant position in the teaching and learning of Business Education. Thus, the smooth running of Business Education largely depends on the availability and utilization of resources such as: personnel, equipment and physical facilities among others in teaching and learning process. Business Education is one of the types that require available and relevant resources for effective teaching and learning; hence resources are requisite in the teaching and learning of Business Education.

The situation of Nigerian Educational system has subsequently brought serious concern about the quality and quantity of trained teachers, equipment and facilities in the schools set-up. As the public intensifies their criticisms of education system in Nigeria, experts in education are also intensifying their search to enhance the quality of education (Onyesom, 2013). Hence, the need for this study to assess the availability

and utilization of resource in teaching and learning of Business Education in Colleges of Education in North-west zone, Nigeria.

# Statement of the Problem

Resources constitute the major strategic factor that fosters excellent academic achievement but, what constitutes the resources in education is determined at the level and the type of education to be provided. Business Education is designed to provide instructions for and about business; that is to equip learners with right skills that will enable them to engage into economics activities in the society. To achieve this laudable objective, resources such as physical facilities and equipment among others are not only important but are expected to be available and effectively utilized in the teaching and learning processes.

However, it is being disturbance to note that Federal Colleges of Education in North-west zone, Nigerian seem to be backward, especially in terms of resources required for teaching and learning processes. Some of these Colleges administered Business Education with very few resources, which led to factors such as inefficiency or lack of seriousness or commitment on the part of both lecturers and students. A careful looked at some colleges the few resources available are hardly utilized due to obsolescent and or improper installation which grope most of the students stuffed with theoretical knowledge at the expense of practical skill training which affected their academic achievements. These statements agree with the report of National Educational Research and Development Centre (NERDC) (2004) which confirmed that human and material resources are inadequate in the teaching and learning of vocational business education. Similarly, Azih (2008) found that students offering Business Education in schools find it difficult to acquire the needed skills and competencies as a result of lack of adequate resources in the schools. In the same vein, Okoro (2008) also observed that,

Business Education at the various Colleges of Education in Nigeria lack adequate facilities and equipment such as laboratory, studio, word processors, Dictaphones, computer transmitting units and so on, Okoro added that, Colleges of Education in Nigeria are faced with the dearth of teachers in terms of quality and quantity to teach Business Education. This further state that, those few teachers available are overused and some engaged beyond their capability to the extent that their productivity and efficiency can hardly be guaranteed.

It is pertinent to ask this question; does availability and utilization of physical facilities and equipment influence the teaching and learning of Business Education? To answer this question, this study seeks to assess the availability and utilization of physical facilities and equipment in teaching and learning of Business Education in Federal College of Education in North-west zone, Nigeria.

# Objectives of the Study

The general objective of this study is to assess the availability and utilization of physical facilities and equipment for teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria, while the specific objectives are to:

1. assess the level of availability of physical facilities for teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria
2. determine the level of availability of equipment for teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria.
3. assess the level of utilization of physical facilities for teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria.
4. determine the level of utilization of equipment for teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria.

# Research Questions

This research work, answer the following research questions:

1. What is the level of availability of physical facilities for teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria?
2. What is the level of availability of equipment for teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria?
3. What is the level of utilization of physical facilities for teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria?
4. What is the level of utilization of equipment in teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria?

# Research Hypotheses

In line with the specific objectives and research questions the following null hypotheses were tested:

* + 1. There is no significant difference in the level of availability of physical facilities for teaching and learning Business Education among the Federal Colleges of Education in North-west zone, Nigeria.
    2. There is no significant difference in the level of availability of equipment for teaching and learning Business Education among the Federal Colleges of Education in North-west zone, Nigeria.
    3. There is no significant relationship between the level of utilization of physical facilities and the teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria.
    4. There is no significant relationship between the level of utilization of equipment and the teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria.

# Significance of the Study

This study will be of significance to the following: Authorities in Colleges of Education, the government and/or proprietors of Colleges of Education, and as well as the National Commission for Colleges of Education (NCCE) and other stakeholders. It will also benefit curriculum planners, lecturers‟ students‟ and researchers especially in Business Education and other related areas of study.

The study will be significant to the Authorities of Colleges of Education in planning the recruitment and employment policies in a way that more staff will be employed where they are inadequate. In addition, the finding will help the authorities to plan for the procurement and update the available resources.

Government and proprietors of Colleges of Education will be aware of resources needed in Colleges of Education, by virtue of the information that would be provided by the finding of the study. The awareness will enable the government/or proprietors to focus on resources needed in the Colleges.

The findings of this study will provide facts and information to the NCCE to plan for its supervision and other regulatory activities on the Colleges of Education that

are faced with problems of resources. Also the findings of this study will be of immense assistance to curriculum planners with a view to adjusting or creating a curriculum of business education which will be of favorable to the discipline and the entire system of education. In addition, the results of this study will help lecturers adjust to a better management and delivery of the courses with the limited resources available. This will bring about effective and efficient teaching and learning of the programme. The students will also be more serious to learn and to acquire the basic skills needed to partake in the world of work or to engage themselves in establishing small business enterprise in the absence of employment opportunities after graduation from the Colleges. Furthermore, this study will help researchers in Business Education and other related areas of study by widening the rage of ideas and provision of input material, data, and facts for researches.

Finally, copies of this work will be made available to the National Commission for Colleges of Education (NCCE) and also the work will be published in reputable academic Journal, for the benefits of academics.

# Basic Assumptions of the Study

The basic assumptions of this study are as follow:

1. Physical Facilities to enhance skills acquisition in Business Education in Colleges of Education in North-west zone, Nigeria are available and properly utilized.
2. Student‟s academic achievements in Business Education in Colleges of Education in North-west zone, Nigeria are improved due to the availability and utilization of equipment.

# Delimitation of the Study

The scope of this study, delimited to availability and utilization of physical facilities and equipment for teaching and learning Business Education in Colleges of Education in North-west zone, Nigeria. The study is further delimited to Federal Colleges of Education in the zone. This is to enable the researcher to understand the strength and weakness in terms of availability and utilization of physical facilities and equipment in the Colleges. The study is also delimited to NCE III students‟ 2015/2016 academic section. This is because the researcher believed that students at that level might have acquired enough experience overtime and would be in better position to adjudge whether these resources have been utilised or not.

# CHAPTER TWO

**REVIEW OF RELATED LITERATURE**

In this chapter, the researcher reviews the work of other researchers relevant to the research study. This is essential because the review of related and relevant literature provided a theoretical base for the researcher to build upon. It also provided the researcher with a sense of direction. The chapter focused on the following sub-headings:

* 1. Theoretical Framework
  2. Concept of Business Education
  3. Concept of Resources
  4. Resources require in Teaching and Learning Business Education
  5. Availability and Utilization of Resources in Business Education
  6. Benefits of Availability and Utilization of Resources in Business Education
  7. Challenges of Availability and Utilization of Resources in Business Education
  8. Related Empirical Studies
  9. Summary of Related Literature Reviewed

# Theoretical Framework

Theoretical frameworks and theories for any research work vary from different dimensions, but for the purpose of this study, the researcher used the Context, Input, Process and Product (CIPP) evaluation model, as its theoretical framework. The CIPP model is a model of curriculum evaluation and it was propounded by Daniel Stufflebeam in (1971) but popularized in 1975 and 1980 by Egan and Tim respectively. The CIPP model is an evaluation model that identify what should be evaluated in an

academic set-up or training programme. Evaluation can be seen as the process of alienating, obtaining and providing useful information for judging decision alternatives. Thus, there are different evaluation models in educational endowment; as such educational evaluators choose the one that is suitable for conducting their studies. CIPP model among others agreed with the present study hence is used as a theoretical framework of the study. In the CIPP model four elements are regarded as parameter thus: Context evaluation, Input evaluation, Process evaluation and Product evaluation.

**Context Evaluation**: this is applicable when a programme or course is newly planned. It is concerned with the determination and validation of goals and objectives of a programme. Context evaluation is conducted to define the prevailing environment in which a programme will take place, to discover the environment‟s unmet needs (students‟ needs, community needs and state needs), to identify some of the constraints and problems underlying those needs and to discover the opportunities for meeting those needs which already exist in the community. Context evaluation answers the question: where are you and what are your needs?

**Input Evaluation:** This evaluation parameter provides information on the resources available and how these resources may be used to achieve the desired goals and objectives of a Programme. Input evaluation entails the assessment of resources, staff, students, physical facilities, equipment, library and resources that are involved in the educational programme (Akpan, 2006). It provides information on the quality and quantity of existing resources of a programme. According to Tim (1980) the end product of input evaluation is an analysis of alternative procedural designs in terms of potential cost and benefits in attaining the desired goals. Input evaluation attempts to answer the question: how will you get there? However, this study hinges typically on the input evaluation parameter.

**Process Evaluation:** This type of evaluation is undertaken during the period of programme implementation and it provides periodic feedback on the quality of implementation. The primary purpose of process evaluation is to detect or predict defects during the programme or course implementation or operational stages. Process evaluation determines if the programme is being implemented as originally planned. The overall process evaluation strategy identifies and monitors on a continuous basis the potential sources of failure. These include the course offerings, teaching methods, teachers‟ performance, interpersonal relationships among others (Tim, 1980). The real question to be answered by process evaluation is: how are you doing to get there?

**Product Evaluation:** This form of evaluation is undertaken at the end or conclusion of a programme or course. The primary purpose of product evaluation is to determine the degree to which intended objectives and goals of a programme have been met and to relate same to context, input, and process evaluation in the measurement and interpretation of the outcome. Product evaluation is used to determine the effectiveness of a programme or course after it has been completed. It answers the question: have you made it?

# Relevance of CIPP Evaluation Model to the Study

The CIPP evaluation model is relevant to the study as it identifies and describes such evaluation parameters as input evaluation. Input evaluation assesses the educational resources (input resources) available for a programme. Such input resources include personnel, physical facilities and equipments resources. Therefore, the entirety of this study is centred on input evaluation because it seeks to assess the availability and utilisation of physicals facilities and equipments in the teaching and learning Business Education in Colleges of Education, North-west zone, Nigeria in relation to academic

achievements, standards of business and skills acquisition in Business Educations. This has made the CIPP evaluation model very relevant in guiding this study.

# Concept of Business Education

Business Education is a programme that starts at a point (junior Secondary School level), stop at a point (senior secondary school level), and continue at Degree / NCE levels of education in university and colleges respectively, it can be terminated at doctorial degree stage at the university. However, scholars in the field frequently use the concept, for example, Ahmadu and Idoko (2013) said that business education is education for business or training in business skills, which are required for use in business offices and clerical occupation and business policy analysis; it is a deliberate intent of teachers to students about economics and business concepts and skills that might be used in later life. In the view of Ibrahim, (2008) and Udoh (2012) business education encompasses knowledge, attitude and skills needed by all citizens in order to effectively manage their personal resources and participate effectively in the economic world. Onu (2012) opines that Business Education is the field of training in business practices and in specifics skills such as accounting, information processing, keyboarding/typewriting and shorthand.

Udoh (2010) asserts that Business Education covers a wide range of spectrum of economic activities in any society. It also refers to the desirable competencies necessary for self employment, which is particularly important in the present depressed global economic situation by equipping individuals with life –like skills for self employment. On his own part, Otamiri (2008) viewed business education as a fusion of pedagogical and entrepreneurial. He maintained that business education therefore involves the study of technologies and related sciences and the acquisition of practical skills (including teaching skills), attitudes, understanding and knowledge related to occupation in various sectors of the economy and social life. Based on the foregoing, one can deduce that business education is focused at training and preparing students for formal employment

as well as having skills which permit self employment, it also trains teachers who are to pass appropriate knowledge to the oncoming generation. In the same vein Esene (2006) asserted that Business education is that area of professional preparation for a career in business education, teaching business subjects and also with business information important for every citizens and consumer in order that he/she may better understand his/her business and economic surroundings. One of the primary functions of Business Education is to provide instruction for and about business courses such as accounting, data processing, economics, shorthand, typing, business law, business math, office procedures and business communication, all these are taught as a part of the business education curriculum.

Federal Republic of Nigeria (2004) National Policy on Education sees, Business Education curriculum as the subjects to be offered to include bookkeeping/accounting, commerce, economics, typewriting and shorthand and office practice. Offering these subjects at NCE level will take care of a wide raging variety of business activities that may be available in any community which formed the basis of choice of course for career planning, preparation and adjustment. Ukoje (2010) looks at Business Education as a “conglomerate of courses/subjects that is concerned with acquisition, development and inculcation of the proper values for the survival of the individual and society. The development of the intellectual capacities of the individuals to understand and appreciate the environment, the acquisition of both physical and mental skills which enable individuals developed to become useful members of the community” essence, business education knowledge will help an individual to have good skills and when put into use will be of benefit to the individual.

For Jones (2003) the content of Business Education must reflect the demands of the workplace and prepare prospective graduates to face the challenges of rapid

occupational changes. Since business Education is aimed at equipping learners with some skills. Oduh (2008) opined that Business Education graduates who acquire the needed financial, human and physical recourses can enter into any of the underlined job option for self-employment basing the choice on aptitude interest and knowledge but success depends on vocational skills acquisitions, business attitude, self-employment, sincerity in transactions and ability to manage business situations. The following provide possible opportunities for self-employment:

1. Serving as a consulting bilingual services
2. Dry cleaning services
3. Establishment of a business centre typing and duplicating of documents
4. Photocopying, lamination, data processing
5. Product advertising and promotion services
6. Trading in locally produced consumer food items
7. Petty trading in consumer goods
8. Table tennis and billiard business services
9. Setting up typesetting and printing centre
10. Bookbinders
11. Running business registration services
12. Establishing a recruitment centre
13. Establishing and running a private vocational/business school
14. Video coverage
15. Music studio
16. Transportation business.

Similarly, Njoku, (2001) states that graduates of Business Education can venture into the following areas of business for the development of self and society, thus;

1. Establishing secretarial bureau
2. Reprographics service-computer, photocopying and typesetting
3. Engaging in office machines sales and servicing
4. Establishing daily, weekly, monthly and yearly thrifts and loans services
5. Suppliers and distributors
6. Communication/public relation services
7. Contracts.

Furthermore, Aliyu (2001) maintained that Business Education at the lower levels of education (post-primary is mostly preparatory, that is education about business for meaningful personal living. At the higher levels students specialize in various areas of their choice for life-long occupations. One of the objectives of Vocational Business Education is to produce Nigeria certificate in education NCE graduates.

The National Commission for Colleges of Education, (2002, 2008 and 2012) in its document, Minimum Standard for colleges of education, states that Business Education at Colleges of Education is designed to achieve the following objectives, thus:

* 1. To provide well qualified competent NCE graduates in business subjects who will be able to teach business subjects in the secondary school and other related education institutions.
  2. To provide NCE business teacher who will be able to inculcate the vocational aspect of business education into the society.
  3. To provide NCE business teacher who will involved in the much desired revolutions of vocational development right from primary and secondary level of education.
  4. To equip students with necessary competencies so as to qualify them for a post of NCE degree program in business education.
  5. To equip graduates with the right skills that will enable them to engage in a life of work in the office as well as for self employment.

In order to achieving these laudable objectives, Colleges of Education must be well provided with availability and adequately utilization of resources (personnel, physical facilities and equipments among others). Usiobo (2007) states that the inclusion of the fifth objective seemed to give NCE business education new perception as it is believed today that business education graduates are articulates, competent and versatile as entrepreneurs as well as capable of occupying middle and high level executive position in government and commercial organizations. Similarly Adeshina (2007) added that “Business Education aims at providing occupational, career orientation, exploration on job opportunities and requirements in business activities. It helps in the development of occupation, knowledge, attitudes and skills in the clerical, stenographic, book keeping and accounting, data processing, marketing and sales, office administration, business ownership and management fields”. No doubt business education is a veritable toll for national development. Esene (2002) stated that there are two folded philosophy of Business Education thus:

1. Business Education offers to every individual as an opportunity to develop those skills, abilities and understandings that will enable him to handle competently his personal business affairs, to develop an understanding of the vocational opportunities available in the broad field of business, and to assume his citizenship responsibilities through enlightened, participation in and an understanding and appreciation of the Nigeria enterprise system.
2. Business education offers to the student who wishes to pursue a career in business, an opportunity to develop those skills, abilities and understanding that will enable him to enter, perform, and progress in a business occupation after graduation and finds job satisfaction in the labour force, this lead to the history of Business Education in Nigeria.

In their views, Ekpenyong and Nwabuisi (2003) express that the history of Business Education in Nigeria can be likened to that of a child which was abandoned because the father thought that he already had the type of children he wanted, it was later picked up by a childless man who knew its usefulness, nurtured and groomed it to adulthood. According to them, this statement implies that historically, Business Education did not come about in Nigeria through government effort, but through the effort of individual initiatives of a few Nigerian entrepreneurs. Such individuals were quick to realize the importance of Business Education not only to their personal benefits but also to the nation growth and development. In Nigeria the philosophy of education is derived from the national goals as simply as the developments of individual into sound and effective citizens.

# Concept of Resources

Resource constitutes the major strategies factor for any organizational set-up. Resources in education are those basic requirements that aid and facilitate effective teaching and learning. The term encompasses natural, physical, financial, humans, materials and social resources among others, but the vast majority of resources that made up the input to any type of educational are referred to as educational resources. Educational resources are assets which facilitate the attainment of educational objectives and make the process of teaching and learning smooth and effective at all levels of the education (Olagboye, 2004).

According to Aliyu (2013) Educational Resources consist of five main headings thus: financial, human, instructional/learning, physical, and time resources:

# Financial Resources

Financial Resources refer to required funding alongside the administrative plans required for the purchase of relevant materials, equipments and other valuable items. According to Inuwa (2013) financial resources made up all monetary input into the achievement of specified educational objectives. One among business education objectives is to equip students with the right skills that will enable them to engage in a life of work. In achieving this sound objective there must be provision for sufficient financial resources for operation in the system. This provision of financial resources into Business Education would be utilized for the purchasing of required equipments and materials for teaching and learning process. Equipments and materials would enhance student‟s academic achievement and promote business education into high academic standard. In pertinent to this there is one major question to ask, for example, whose should finance education?

To answer the above question there has been a lot of debate about cost of education especially on who should bear the cost? Elisha and Mohammed (2013) stated that argument has always being whether the cost of education should be borne by government or by individuals receiving education. The debate can be crudely reduced to three groups. World Bank Report, 2000, the first group is made up of those who argue that cost of education should be borne essentially by parents with government providing the enabling environment. They are of the view that education should be subjected to free market discipline. This group posits “that families and individuals ought to pay fee in order to access nominal available public services otherwise these services would not be available or their quality would not be available or their quality would become

unacceptable low. The problems with the position of this group are that those who are poor will not be able to pay and they will be denied access.

The second group argues that education is a right; there are enough resources in the world to fund at least vocational education for all Nigerian children. They posit that the problem is that of corruption, misplaced priority, inequality and poor policy choice. They argue that education should not only be free but also compulsory. They are of view that government should bear all the cost because even if the direct cost of education borne by government, the indirect cost (such as uniforms, books, transports and school meals, are be beyond the capacity of the family while the opportunity cost may be impossible to bear. they argue that no right could exist without corresponding government obligation and that government is obliged to make education available, accessible, acceptable and adoptable. Also according to World Bank report 2000, the third group while coming from the right based approach like second group posit that education is a right and government must not only endeavour to remove all the barriers to education but must also take steps to utilize to maximum of is available resources to achieved progressively the full of the right to education and other social and economic right.

Based on the arguments its can deduce that the first group are on the opinion that education, both government and parents should bear the burden, This position agreed with the summation of Zaidi (2011) who noted that provision of educational facilities and resources in India has been collaboratively sponsored and undertaken by both the government and private organizations such as multinational firms, NGOs and other individuals. In addition Oke (2003) had recommended that departments offering business education program must look beyond funds from proprietors of schools through sponsorship and partnership with multinational companies, industries,

international organizations, non-governmental organizations (NGOs) philanthropists and other private entities. The collaboration of these bodies, will of course, strengthens and improves the standard resources required for business education program in colleges of education in Nigeria. While the second and the third group opined that the right and burden of education should be beard by the government, this is in line with Universal Basic Education, UBE act 2004; part 1 section 2 which provided that “every government in Nigeria shall provide free, compulsory and Universal basic education to all school age children irrespective of their need and status. In Nigeria today funding of education is shared among different levels of government and supplement by funds from other sources such as Non-governmental organization (NGOs) Business and community organizations, and levies charged to parents. The revenue collected through fees constitutes an insignificant proportion of the revenue of the institutions.

Education is the right of citizens; therefore Nigerian government shall endeavour to direct reasonable percentage of its expenditures to education sector, this will give opportunity for every citizen to have access to education and enjoyed the benefits derive from being educated like others from different part of the world. In some parts of the world (developed countries), the Educational expenditure is major items in budgets. While in developing countries revise is the case. According to UNESCO statistics, education accounts 15 percent of public expenditures across all developing countries… there is consensus that resources devoted to education are not being used as efficiently as possible. In Nigeria today funding has always been the major constraint to the development of effective educational programme (business education inclusive). Despite the efforts made by the specialist in fields to throw more light on the importance of Business Education to the national development but yet commitments have not marched with actions. As a result scholars such as Nuru and Mumah (2009)

affirmed that investment in Vocational Business Education in the First, Second and Third Development plans are 0.10%, 0.36% and 0.84% respectively. At every level of vocational business education in the country enough funds are never allocated to vocational business education for acquiring the right environment for learning. Similarly, Ozoro (2007) observed that Vocational business Education in Nigeria has remained inadequate, unplanned, uncoordinated and to a considerable extent irrelevant to the societal needs. Hence, Okeke and Eze (2010) recommended that government should not lay emphasis on the study of science alone but also on vocational business education to enable it acquire the necessary human and material resources to meet its contemporary challenges. In addition Government should increase its fund to vocational business education to enable it covers the gap created by shortage of human resources and inadequate facilities.

# Human Resources

Human Resources are set of individuals who make up the workforce of an organization, business sector, or economic. Human capital “is sometimes used synonymously with human resources” although human capital typically refers to a more narrow view (the knowledge the individual embody can contribute to an organization). Likewise, other terms sometimes used include “manpower, talent, labour or simply people” (w.jstor.org/stsble/2261721). According to Undel (2014) human resources is largely associated with the department within an organization and or company that is responsible for employing and training people, and for looking after workers who possess problems. It also includes utilization of skills, abilities, energy, personal characteristics interest, capabilities, attitudes, knowledge, resources fullness, confidence etc (Nana, 2012).

Human Resources Utilization in education is the use of personnel‟s for the purposes of achieving educational goals and objectives. According to Ochu (2011) human resources utilization is concerned the used of human beings especially for practical purposes in the attainment of desire educational outcomes. Similarly, it perceived as something a company and or firm, educational organization and so on, could manipulate effectively in the achievements of pre-determined goals (Honby, 2005).

The objectives of Business Education cannot be fully achieved without available and adequately utilization of human resources in the teaching learning process. This agrees with the opinion of Esene (2002) who opines that personnel resources not capital, nor income, nor material resources, constitutes the ultimate basis of wealth of nations. Esene added that in business education, the personnel resources include the teachers, administrative and supporting staff as well as other workers. The teacher is one who assisted students in overcoming physical difficulties that could have hindered his effective presentation of a given topic. He also posses: personnel skills, values, attitudes and experiences which are crucial for producing high quality students. Thus, for personnel (teacher) to be relevant to academics and to the Business Education specifically, they have to be trained and re-trained on the job to qualify as resource persons. The teacher acting as a coach, guidance and companion in the learning process, because he contribute in facilitating student academic achievements.

Considering the NCCE minimum standards for Business Education, the documents stipulates the minimum human resources required to be available in Business Education in colleges of education to be a minimum of nine academic staff, at least one lecturer per subject area with a minimum of first degree qualification not lower than a second class lower division. It also states that one of the lecturers should be a

computer specialist, although it required all lecturers to be computer literate. It recommends that computer literacy must be one of the criteria for first appointment. The document added that lecturers/instructors must hold a minimum teaching qualification of NCE or its equivalent. These provisions are specifically for a class of thirty students at each level of study with expected staff and student ratio for skill subjects like Shorthand, Typewriting and Accounting to be 1:20 and 1:30 for other subjects like commerce and economics etc. the document furthermore provided that there should be other support staff for the department, namely; one school officer, one secretary, one clerical officer, one typist, one cleaner/messenger all at the head of department‟s office and other necessary staff for the model offices and laboratories/studios such as technicians and studio attendants. In the view of Aliyu (2001) the following are support staff in Business Education, administrative Officers, Clerks, Secretaries, Typists, Cleaners and Messengers, Studio attendants, Technicians and Instructor.

In addition to use more conventional instructional technologies, educators and teachers for Business Education still had to place emphasis on using resources for teaching and learning process. It is clear that the use of instructional resources of all forms continues to advance, teaching and learning of Business Education at all level. Generally, the above provision recognized the importance of both academic and non- academic staff for the attainment of business education objectives.

# Instructional Equipment

Instructional Equipments are all the material and equipment that are used to enhance Teaching and learning process, example chalkboards, flip charts, overhead projectors, videos, and computers among others. Instructional Equipment are required at all level of teaching and learning so as to expose students to some form of simulation which will arouses their interest and motivate them to learn fast and better. According to

Klans (2010), Instructional Equipment is tools that classroom teachers use to help their students learn quickly and thoroughly. A teaching aid can be as simple as a chalkboard or as complex as a computer system.

Chalkboard and Computer can be used as tools to convey information in the classroom. Jimoh (2009) opines that ordinary words or verbalization has been found to be inadequate for effective teaching, therefore the uses of Instructional materials serve as a channel through which message, information, ideas and knowledge are disseminated more easily. They can also be manipulated, seen, heard, felt or talked about. In addition, Adekunle (2008) noted that teaching resources in business education means anything that can assist the teacher in promoting teaching and learning. When the students are given the chance to learn through more senses than one, they can learn faster and easier. The use of instructional materials provides the teacher with interesting and compelling platforms for conveying information since they motivate learners to learn more and better. Hence teacher is assisted in overcoming physical difficulties that could have hindered his effective presentation of a given topic (Okobia, 2011). Kadzera (2006) noted that there was infrequent use of higher order instructional technologies such as overhead projectors, videos and computers in Teacher Training Colleges. The author identified lack of creative thinking and initiative on the part of the teachers as factors responsible for failure to use the locally available instructional equipment in their teaching. Teaching is not completed until knowledge has been successfully transferred to the learners which in most cases may not just be tied to teacher effectiveness or teaching skill but the instructional materials used in the teaching and learning process.

Instructional Equipments are those materials that aid and facilitate teaching and learning activities. They are also anything or anybody the teacher turns or selects to be

for help in learning process. Aliyu (2006) stated that when selecting instructional resources for business education, the following criteria must be borne in mind:

1. The equipment should enhance the achievement of the objectives of business education
2. Curriculum requirements of the school should be fulfilled by the equipment. The subjects in the curriculum in part determine the equipment that should be purchased.
3. The equipment should be the type used in the employing community.
4. Equipment must be up-to-date and current.
5. Skill should be required in the operation of equipment.

On the other hand, maintenance of equipment is necessary to keep the equipment in the right functioning mode and to elongate its life expectancy. The teacher is responsible not only for helping to select equipment when needed and for training students to use the equipment, but also for the care of the equipment (Aliyu, 2006). Aliyu added that too often, teachers slight the third of these responsibilities. The purpose of selecting instructional materials is to promote efficiency by improving the quality of teaching and learning. According to Aduwa-Ogiegbaen and Imogie (2005) these materials and resources including audio tape recorders, video tape recorders, slide projectors, opaque projectors, over head projectors, still pictures, programmed instruction, filmstrips, maps, chart, graphs and many more offer a variety of learning experiences individually or in combination to meet different teaching and learning experiences. Also Igboke (2005) submitted that instructional materials in office practice are made up of office equipment and supplies. He therefore advises that efforts should be made to convert the model offices into a real life and contemporary offices as

possible. However, Igboke added that the basic equipment required for business education program should include:

1. Sufficient number of typewriters including at least one electric typewriter
2. A rotator stencil duplicator
3. A rotator spirit duplicator
4. A telephone system
5. Three or two dictating machines
6. One or two adding and calculating machine
7. A four-drawer demonstration filing cabinet
   1. Vertical filing with an alphabet guide cards
   2. Vertical filing illustrating the alphanumerical system
   3. Flat-tops suspended filing
8. An alphabetic sorter
9. A guillotine for cutting and trimming of papers
10. Adequate supply of stationery including stencils, file folder, typing sheets, rulers, record cards, rubber bands, paper clip and string etc.
11. Reference books: One or two Standard English Dictionary, local telephone directory, a classical trade directory, a post office guide, yearbooks, world Almanac, business history and literature, air way time table, income tax table, Daily paper and other periodicals.
12. A photocopying and stamping machines
13. Useful addition includes cupboards or shelving equipment for lateral filings.

Business Education as a skills base programme, it required sufficient supplies and utilization of instructional resources in teaching and learning process, the availability and effective utilization of instructional resources will transform the

students from unskilled to skilled students. In the view of Azuka (2003) the success or failure of any classroom interaction depends to a large extent on the availability and functionality of instructional equipment and facilities, the teacher and the curriculum.

Effective teaching and learning only take place within the classrooms situation with the basic instructional resources available such as chalkboard, overhead projectors, videos and computers among others.

# Physical facilities

Research findings have shown that the success of any type of educational set-up relies on the availability and utilization of physical facilities for example school buildings such as classroom, laboratories studios, and offices, among others. Business Education is one of the types that required available and sufficient facilities such as school buildings for teaching and learning process. The above view agreed with Owoeye and Yara (2011) whose stated that school buildings are very vital input to educational system, emphasizing that even though they do not teach but their utilization may facilitate teaching and learning. However, when planning to construct a new school building, expanding or renovating old one in Business Education endeavour to put the following factors into consideration:

1. The educational use to which the building will be put Proper ventilation.
2. Adequate lighting, whether by artificial illumination or natural lighting or both.
3. The quality of room must be standards, so that sound effect can be effectively controlled.
4. They must be economical to operate.
5. The size and location of other buildings must be borne in mind.
6. The comfort and safety of the users must not be forgotten.
7. Safety gadgets must be installed.
8. The number of students and teachers who will use the building must be considered, bearing in mind the potential expansion of students and teachers number (Musibau and Oluwarotimi, 2011).

Furthermore Olutola (2002), noted that the availability of the school building and other plans contribute to good academic performance as they enhance effective teaching-learning activities. He further stated that well sited school buildings with aesthetic conditions, playground, and laboratories among others will contribute to the academic achievements. Creating conducive environment for learning will influence students academic achievements, while, unattractive buildings in business education department will make teaching and learning boring and also affects students academic achievements. Supporting the above view, Adeogun and Osifila (2008) emphasized that the availability, relevance and adequacy of educational resources contribute to academic achievement and that unattractive school buildings, crowded classrooms; non- availability of qualified and adequate staff can contribute to poor academic performance of students.

Throwing more light on the above views, the Encyclopaedia of Educational Research recorded that the total environment within a school building should be comfortable, accessible pleasant and psychological uplifting. It should provide a passive physical setting that is educationally stimulating, it should produce a feeling of well- being among its occupants, and it should support the educational process (p.1156).

Physical Facilities are aided factors help in promoting teaching and learning, hence availability and adequately utilization of teaching facilities will improve Students‟ academic achievement. In line with the above, Oghubu (2009) submitted that the quality of education and learning achievements of students depends on the physical

facilities available in school, example classrooms, laboratories, studios to among others, that would contained reasonable number of students.

Business Education is the type of skills base programmes that require available and adequate utilization of physical facilities for teaching and learning for the enhancement of student‟s academic achievement. This agrees with the view of Onyesom (2012) who maintained that availability of facilities and equipment aids learning and improves efficiency and thus certain equipment are designed to enhance the teaching of certain skills subjects. Onyesom added that availability of requisite facilities is important for the effective execution of any assigned task. Mean while, most of the business educators are stuffed with theoretical knowledge at the expense of practical skill training which affected their academic achievements. This has been observed by Amaewhule (2004) that, inadequacy of teaching facilities and equipment is a major impediment in Business Education at all level. In the same vein Arowolo (2004) added that inadequate facilities in the school for business education are one of the factors that inhibit full implementation of business education curriculum in Nigeria. Hence scholars, Akinwumiju and Orimoloye, in Owoeye (2012) opined that education institutions from Nursery to University require buildings for their effective operations. Classrooms, offices, assembly halls, laboratories and staff quarters are needed.

Business Education requires adequate utilisation of Physical facilities, such as classrooms, laboratories, studios, library, and offices among others of for the attainment of the designed objectives, while under-utilization of such could be attributed to factors such as shortage of lecturers or inefficiency or lack of seriousness or commitment on the part of students.

# Resources Required for Teaching and Learning Business Education

Business Education is skills and practical discipline which required resources like facilities, personnel and equipment among others, for the effective teaching and learning. Business Education being a skills base programme cannot be learned by students sitting and folding their arms and nodding their heads to their teachers. It is a field of study that requires available and effective utilization of resources for the achievement of student‟s academic achievement. On this note, provision of available resources (facilities, personnel and equipment) are inevitable in teaching and learning of Business Education. This was supported by Bongotons and Onyenwe (2010) that the need for availability and adequacy of educational resources in Business Education, believe that this will accelerate the achievement of all round preparation of a business teacher. They further opined that resources availability enhance students‟ acquisition of knowledge and technical skills required in one or more areas of business occupations, hence providing enough practical experience for self reliance.

In his view, Azih (2008) rightly pointed out that learning would be less meaningful without the use of teaching facilities and equipment and those students would grope in darkness for long before they can get a grasp of what the teacher says. Thus Olagunju and Abiona (2008) recommended that educational resources should be provided in quality and quantity in classrooms and laboratories for effective teaching and learning of Business Education.

The availability and utilization of resources would enhance teaching and learning process and also contribute to student‟s academic achievement firmly. This agrees with the view of Eze (2002) and Akano (2005) who pointed out that resources can only be utilized when they are available and that there should be investment in that wise in educational institutions for proper utilization of material resources and skills for

effective teaching and learning. In the same vein Azuka (2003) submitted that the success or failure of any classroom interaction depends to a large extent on the availability and functionality of instructional equipment and facilities, the teacher and the curriculum.

Curriculum implementers for example National Commission for Colleges of Education, (NCCE) whose functions serve as regulatory body for Colleges of Education in Nigeria, in its documents minimum standard for Colleges of Education, 2002, 2008 and 2012 stipulates the minimum resources (facilities, personnel and equipments) require for Business Education in Colleges of Education as thus;

# Equipment and Supplies

* 1. Typewriters
     1. Manual - - 30 of various makes and types
     2. Computers - - at the ratio of 1:3 students
  2. Swivel typing chair 30
  3. Drop desk, typist, convertible desk 30
  4. Instructor‟s Table 1
  5. Instructor‟s chair 1
  6. Stapling machine 4
  7. Stapling remover 4
  8. Perforator 2
  9. Stop watch 2
  10. Wall clock 1
  11. Shorthand dictionary 1
  12. Demonstration stand 1
  13. Filing cabinet 2

# Shorthand Laboratory

* 1. Tape recorders/consoles 2
  2. Head phones 30
  3. Air-conditioning systems
  4. Lecturers demonstration stand
  5. Punching machine
  6. File cabinet
  7. Appropriate furniture as technology may dictate from time to time.

# Model Office

* 1. Executive table with drawers and chairs
  2. Secretary‟s table with drawers and swivel chair
  3. Photocopier
  4. File trays and string
  5. Manual typewriters and computers
  6. File cabinets
  7. Adding and listing machines
  8. Waste paper baskets
  9. Any other latest office equipment in the market (NCCE, 2012).

# Personnel

Personnel should be at least one (1) academic staff per subject area with minimum qualification of first degree (minimum of second class lower division). A minimum nine (9) lecturers (one of whom should be a computer specialist) is required. All lecturers must be computer literate. Thus computer literacy must be one of the criteria for fresh appointment. The lecturers/instructors must hold a minimum teaching qualification of NCE or its equivalents Staff/students ratio for skilled subjects like

shorthand, typewriting and accounting should be 1:20 and 1:30 for other subjects like commerce and economics. Others personnel are; one (1) school officer, one (1) secretary, one (1) clerical officer, one (1) typist and one (1) cleaner/messenger all should be available in the Dean‟s office.

At the departmental level staff such as; one senior typist or secretary, one (1) messenger/cleaner, one (1) technician/typewriter machine and studio attendant. Mode of teaching; the mode of teaching business courses would be by lectures, tutorials, case studies, practical‟s, excursions and other appropriate methods. Practical in shorthand and typewriting/word processing are compulsory as stipulated and field trips.

In addition to the above NCCE requirements, Bongotons and Onyenwe (2010) recommend that the following equipment are necessary for the 21st century Business Education thus; phone answering machine, internet system, Uninterrupted Power Supply (UPS), digital calculator, Laptops, Smoke alarm Communicator, Fax machine, standby generator, multimedia board, printer and microwave radios should be available in the Business Education. In addition, the 21st century offices are becoming paperless offices, emphasis is shifting to information and communication technology (ICT) facilities, so computer and its peripheral are taking the centre stage now.

The provisions of ICT facilities would enable Business Education to remain relevant and survive the current challenges of information age (Onyesom, 2012). He added that, it is sad to note that most schools (Colleges of Education) continue to run Business Education with almost non-existence of equipment and facilities. This view agrees with the view of Okwuananso and Adenmiluyi (2010) that in respect of Colleges of Education a lot of fraud is being perpetrated by institutions in the effort to meet the accreditation agency‟s stipulations. In their view, equipment is often borrowed only to

be returned once the accreditation is over, leaving the programme not significantly richer after the accreditation visitation. they further recommends that, adequate number of computers and computer accessories in good working conditions, well maintained laboratory, well-furnished and well-kept classroom and competent teaching and non- teaching staff are the basic indicators of programme quality, but that they have only been moderately influenced by the accreditation exercises of the schools‟ regulatory bodies.

The success of Business Education largely depends on the availability and utilization of resources in the process of teaching and learning, on the other hand lack of available and under-utilization of resources would lead to factors such as inefficiency or lack of seriousness or commitment on the part of both lecturers and students.

# Availability and utilization of Resources in Business Education

The fact remain intact in creating conducive environment for teaching and learning properly done with available and adequate utilization of resources for example quality teachers, well-equipped workshops, studios, libraries and laboratories with up- to date materials. Availability and utilization of resources in Business Education has direct relationship with students academic achievements, therefore, there is need to provide available resources in colleges of education for effective teaching and learning. In support of the above view Adeogun and Osifila (2008) maintained that, availability, relevance and adequacy of educational resources contribute to academic achievements and that unattractive school buildings, crowded classroom, non-availability of qualified and adequate staff can contribute to poor academic achievement of students. In addition Okwunso (2004) further noted that availability of adequate facilities and equipments are required to make the teaching and learning of business education effectives. He added that a business teacher cannot effectively teach a student‟s home keys of a typewriter or

how to operate the adding machine without having the machines in the classroom. Similarly, Okoro and Iyeke (2004) maintained that, the qualification and background of teacher can only be completed when the right and adequate instructional facilities are provided for effective teaching and learning situation.

Business Education in Colleges of Education is designed to equip graduates with the right skills that will enable them to engage in a life of work in the office as well as for self employment, In achieving this Umunadi (2004) provides that Business Education in (Technical Colleges) and the ability to improve students‟ academic achievements depend on the number of factors, these include the availability of equipments, tools, materials and adequate supply of technical teacher and proper implementation and usage of technical‟s equipments, tools and materials. In the same vein, Okorie (2000) posited that the workshops, laboratories and the overall vocational business education environment must be adequately equipped so as to reflect the actual working environment beyond the classroom. He added that an equipped environment will expose students to the use of equipments in a way that will lead them to acquire relevance knowledge and skills.

Availability and utilization of Equipment, Physical Facilities among others in Business Education help in promoting efficiency of business educators as well as improving the quality and efficiency of teachers and students in teaching and learning process there by making them more seriousness in their activities.

# Benefits of Availability and Utilization of Resources in Business Education

Every educational programme has goal and objectives targeting to achieve, Business Education for example can achieve these objectives through appropriate utilization of resources and other tools available for teaching and learning. Resources constituted major strategies factor in education, their availability and effective

utilization can fill the gap anticipating in the teaching and learning process, for example between what the curriculum is set to be achieved and the curriculum achievers. Utilization of resource in Business Education can promote teaching and motivates learners to learn better, easy and faster. It is believed that the uses of instructional resources in teaching and learning of Business Education provides teacher with interesting and compelling platforms that allowed the learners to acquire skills that enable them to compete with their counterparts in related area of studies. The work of teacher is to assist the students in overcoming the difficulties in teaching learning process. In fact, utilization of instructional resources is the use of equipment and materials to motivate, inform, instruct and present the subject matter in order to assists in and supports student learning. It also helps the students to understand and enjoy the lesson which the teacher teaches them. In addition it helps students understand the object of the lesson the teacher is conveying. Furthermore Availability and utilization of instructional resources helps teacher to test whether the students have improved their understanding of the subject matter.

The purpose of assessing the availability and utilization of resources in Business Education is attributed to the enhance student‟s academic achievements. In addition to provide business educators and other researcher‟s assistance with enabling environment that would facilitates learning and researches. Accordingly, Nwanyanwu in Okabia (2011) summarized the purposes of using instructional materials in the teaching of Business Education to include (a) Making the subject matter more real, (b) Explicating difficult concepts, (c) Making the learners to experience what is being learnt, (d) Helping to fire the imagination of the learners, (e) Preventing misconceptions, (f) Preventing boredom and (g) Making learning interesting. Resources availability and utilization in teaching and learning process enable the learner to develop problems

solving skills and scientific attitudes and when provided to meet relative needs of a school system, students will not only have access to the references materials by the teacher, but individual students will also learn at their own paces (Owoeye and Yara, 2011). Accordingly Yusuf (2010) stated that, Nigeria is endowed with abundant human resources (abilities, capabilities, skills, and competencies) which if properly harnessed and used effetely can lead to the achievement of laudable national development goals.

Furthermore, Jimoh (2009) added that the use of instructional materials is a sine qua non in effecting behaviour change in learners in every field especially in business education, advances in technology have brought instructional materials especially the projected and electronic materials to the forefront as the most radical tools of globalization and social development which have affected the classroom teaching/learning situation positively. Jimoh added that, new technological breakthroughs such as networked and non-networked, projected and non-projected, visual, auditory, audio-visual electronic materials are important landmark in knowledge transfer. With them both teaching and learning become very pleasant experiences and less stressful.

On his own the part, Umunadi (2004) puts that in realizing the objectives of Business Education (Technical Colleges Programme) and the ability to improve students‟ academic achievements depend on the number of factors, these include the availability of equipments, tools, materials and adequate supply of technical teacher and proper implementation and usage of technical‟s equipments, tools and materials. Al- Mashari, Al-Mudimigh, and Zairi (2003) state that the delivery of the critical success factors is one major condition to lead to benefits from ERP implementation, and they suggests that IT projects can be considered successful as according to the following terms:(a) Correspondence success, which occurs when there is a match between IT

systems and the specific planned objectives.(b) Process success, which occurs when IT project is completed within time and budget.(c) Interaction success, which occurs when user‟s attitudes towards IT are positive.(d) Expectation success, which occurs when IT systems match users expectations. Generally, utilization of resources in business education is the use of equipment and materials that are relevant to present, inform, instruct and motivate the learners to learn better and understand effectively.

Resources appraisal should be one of the many roles assumed by educational Leaders, availability and utilization of resources in teaching and learning situation lead to the increase in student‟s academic achievements, otherwise demoralized students efforts toward achieving desirable educational goals, for example basic knowledge and skills acquisitions needed to partake in for national growth and developments.

Moreover, Business Education alone, serve as very important segment of the nation‟s economic development, through utilization of resources such as personnel (teaching and non teaching staff), facilities (classroom, laboratories, studios), and Equipment (Computers, Typewriters and Photocopiers machines among others) in teaching and learning process. Support of the above views, Ile (2001) postulated that utilization of Resources in teaching Business Education brings about fruitful learning and stimulate students‟ senses and interest as well as motivates them to learn better. Similarly, Awobodu (2000) noted that the utilization of relevant equipment, materials, and tools in teaching facilitated learning and enhances academic achievements.

# Challenges of availability and utilization of resources in Business Education

The twenty first century has brought with profound challenges to the nature, value and control of higher education in Nigeria. The societal expectation on the resources for higher education are undergoing fundamental shift. In a situation where Resources are available but unable to utilizes in teaching and learning the entire process

seemed to be impeded, for example colleges of education with available resources but unable to utilized the way it‟s supposed to be in teaching and learning process the gold‟s and objectives could be difficult to achieved the way it has been planned. The above view agrees with Kadzera (2006) who stated that, while some educators are fascinated by the potential of instructional materials in enhancing teaching and learning, other teachers lagged behind in using instructional materials to teach.

However, in achieving laudable goals for conscientious availability and utilization of instructional resources in Business Education there are challenges facing Colleges of Education in Nigeria for example; The Colleges are struggling with limited resources and dilapidated/outdated instructional facilities and the classroom seem to be overcrowded with little or no relevant and adequate learning facilities, even the personnel appear to be in short supply (Onyesom, 2013). Similarly, Adaralegbe, in Owoeye (2012) reiterated that from Inspector‟s reports over the years; there is abundant evidence and catalogue of inadequacies in the provision and judicious use of school buildings and materials for instruction in colleges. He went further to say that many classes have been held under unhygienic conditions while some schools have no ceiling, some have no doors and windows have no shutters and some classroom floors have not been concentrated.

The smooth running of Business Education only achieved where there is availability and effectively utilization of personnel, equipments, laboratories, studios, classrooms among others in the learning processes, while Under-utilization of resources in teaching and learning process would hinder student‟s academic achievements. Supporting the above view, Filani (2006) lamented that it is very disturbing that teaching of Vocational Business Education in Colleges of Education is very much retarded in terms of technological and modern equipment. Similarly Ntikudem (2005)

noted that there are inadequate lecture halls, classrooms and seats to cope with the ever growing students‟ enrolment in Business Education. Hence classroom is not conducive and teaching will is haphazardly done and desired result will not be achieved, accordingly Hallak, in Owoeye (2011) resources availability, relevance and adequacy contribute to academic achievement. However, he quickly added that unattractive school buildings and overcrowded classrooms among others contribute to poor academic attainment.

The success or failure of any classroom interaction depends to a large extent on the availability and functionality of instructional equipment and facilities, the teacher and the curriculum, The teacher lack tools with which to teach his students, workshops are poorly equipped or equipped with obsolete materials which lack maintenance and spare parts (Azuka, 2003). He further noted that most teachers resort to lecture method as the only way of teaching because there are no facilities to match and demonstrate instruction.

The teaching of Business Education in most cases is taking the faces of theorizing instead of practical as a result of insufficient resources. For example, for a teacher to take conceptual thinking and creates environment of interest for the student, there must be effective utilization of instructional equipments. Thus Students feel de- motivated and they easily forget what they have been taught if skills courses like typewriting, word processing, shorthand among others are taught without necessary equipments. Thus, Obi and Akume (2002) observed that, the objectives of business educations can hardly be achieved when teaching and research equipment and infrastructure are in short supply. Similarly, Esene (2002) maintained that physical facilities such as classrooms, lecture halls, chairs, table, departmental library, hostels and departmental bill boards are insufficient in the teaching of business education

courses. Also, Okorie (2000) recommended that workshops, laboratories, and the overall Vocational Business Education environment must be adequately equipped so as to reflect the actual working environment beyond the classroom.

There is no doubt if resources like teachers, classrooms, laboratories, library, equipments, among others far from reach, and or inaccessible or they are dilapidated, students academic achievements is likely not to or hardly achieved. The effective implementation of Business Education if presupposes the availability, of instructional resources, the programme would not be fully implemented in the Colleges of Education.

# Reviews of Related Empirical

Various studies have been carried out on assessment of availability and utilization of resources at different level of education by other researchers. The following studies are relevant and related to the present study:

Ugwuanyi and Eze (2008) conducted a study on the assessment of educational resources available for implementing the mandates of secretarial studies programme in Nigerian polytechnics. In the study, thirty three business educators of polytechnics located in Kogi and Benue states comprised the sample. The instrument for data collection was the questionnaire and data generated was analyzed using the mean and t- test statistics. The study found that facilities such as classrooms, laboratories, furnished staff offices and textbooks/journal were fairly adequate in the polytechnics, electronic typewriters, computers and Dictaphones were not adequate while micrographics and electronic communication equipment were not available for training secretaries in the states. Also, financial resources were not adequate and this has affected the facilities installed. The study also revealed that personnel were adequate but lecturers who are ICT compliant were lacking. It also found that there was no significant difference between the mean responses of lecturers and instructors. The study recommended among other things that adequate financial resources should be allocated to secretarial studies department in the polytechnics.

The previous study is more of the present study because the former assessed educational resources available for Secretarial Studies; the present is to assess the availability and utilization of Resources in teaching and learning of Business Education. On the other hand the former study was carried out in the polytechnics while the present is taking place in Federal Colleges of Education.

The researcher‟s lay more emphases on finance as a determinant for providing educational resources, neglecting the provider of finance as such who would provide the finance.

Owoeye and Yara (2011) conducted a study on school facilities and academic achievement of secondary school Agricultural science in Ekiti state of Nigeria. The study was the descriptive survey design of the ex-post facto type. One hypothesis guided the study and data was collected from WASCE between 1990 and 1997 and a structured questionnaire was administered. Data collected was analyzed using mean, standard deviation and the t-test. The study found that there were no significant differences in the performance of students between rural and urban secondary schools in terms of availability of library facilities, textbooks and laboratory facilities. The study recommended that provision of school facilities should be the concern of all stakeholders to complement the effort of the government to boost the performance of students in SSCE.

The two studies had similar characteristics, while the present study is to assess resources (physical facilities, and equipments) for teaching and learning in Business Education, the previous study had assess facilities in determining academic performance of students. The two studies differ in terms of coverage area; the present study covered Federal Colleges of Education in North-west zone, Nigeria, while the former study covered only one (1) State (Ekiti State) in a geographical zone.

Despite the efforts made by the researchers to collect data from WASCE, the study failed to use primary data in relation to student academic achievement.

Ijaduola, Oni and Muraina (2011) conducted a study on the empirical analysis of school plant planning as a determinant of secondary school students‟ academic performance. The study used a descriptive design of ex-post facto and it was guided by

three hypotheses. Eight hundred classroom teachers purposively selected from Ogun State as the sample of the study. Questionnaire was used for the data collection. The data were analyzed using mean, standard deviation and the Pearson product moment correlation co-efficient. The study found that a significant relationship exist between school plant planning and students‟ academic performance in the secondary schools in Ogun State. The study also revealed that schools with well planned and co-ordinate school plant, recorded impressive academic performance than those without. The study recommended among others that the schools plant maintenance and co-ordination should be part of orientation programme given to students, teachers and administrators in the educational system.

The study is related to the present study because while the present study assessed the availability and utilization of resources (physical facilities and equipment) in Business Education the previous had analyzing the influence of school plant (school facilities and equipment) planning on students‟ academic performance, and also the research designed adopted. In contrary the former study was analyzed the school plant in the determined the academic performance of secondary school students while the present study had assessed the availability and utilization of resources in Federal Colleges of Education.

Despite the efforts made by the researchers to explore the influence of school plant on student academic performance, the study failed to includes students as part of the population which make the work one-sided.

A study was conducted by Osaghae and Irabor (2012) on Availability and adequacy of human and materials resources for the teaching and learning of skill-based courses in Nigerian public Universities. The study had general purpose as to assess the

availability and adequacy of human and materials resources for teaching and learning of

skills-based courses in Nigerian public Universities. The study had three specific objectives and three research questions, also two hypotheses were formulated. The population for the study consists of academic staff and final year students of 2009/2010 academic session in Nigerian public universities. Ten universities were selected using stratified random sampling. Questionnaire and checklist was used as instrument for data collection, data collected was analyzed using the mean statistics, percentages and t-test.

The study reveals among others that humans and materials on ground for the teaching and learning of skilled-based courses in Nigerian public University did not match the minimum standards requirements. The study concluded that human and materials resources for the teaching and learning of skilled-based courses in Nigerian public Universities are in adequate and in most cases unavailable. The study recommend that government, non government‟s organizations and good citizens should ensure to provided the needed human and materials resources to help in the production of skilled graduates for national development among others.

The similarities between the present and previous study is that both the two studies were designed to assess the availability of resources such as human and materials resources. However the two studies differ significantly in terms of coverage and scope, while the previous study deals with the whole Nigerian public universities the present focused on Federal Colleges of Education in North-west zone, Nigeria.

Upon the similarities and differences for both study, the previous failed to identify or list out the skills base courses offered in Nigerian Universities for the readers to comprehend.

Akinfolarin, Ajayi and Oloruntegbe (2012) conducted a study on appraisal of resources utilization in vocational and technical education in selected colleges of

education in south-west Nigeria. The study had a major objective as to appraise the resources utilization in vocational technical education in south west Nigeria. Four research questions were raise and descriptive survey research was used. The population for the study was 1040 which made of 40 head of departments, 200 lecturers and 800 students. The subject was selected using stratified, purposive and simple random sampling techniques. It also uses stratified sampling to select 8 Colleges of Education in the area (3 Federal and 5 State Colleges).

Questionnaire and inventory were the instruments used for data collections. The data collected were analyzed using percentages, means and standard deviation. The study reveal that the means score on resources availability in each department in the school of vocational and technical education in south west Nigeria, the highest score on availability was Fine and Applied Arts with 100%, Technical Education had 90.7%, Home Economics had 90%, and Agricultural Science had 78.5% while Business Education department recoded the least resources available with 45.7 %. This shows that most of the required resources in Vocational and Technical Education were available with exception of Business Education department where some of the required resources were not available. The study concluded that most of the resources required in Vocational and Technical Education were available and adequate. The study recommend that resources such as shorthand laboratory, photocopies , overhead projectors and guillotine machines should be made available to the school of vocational and technical education in the college of education.

The present study found the previous study very relevant, while the former used questionnaire and inventory as an instrument for data collection the present study will also adopt similar for the collection of data. On the other hand the two studies differ in

terms of coverage while the former covered resources in the school of Vocational and

Technical Education (Agricultural, Business, Fine and Applied Arts and Home Economics Education) the present study will only covered resources for Business Education in Federal Colleges of Education North-west zone Nigeria.

The study was to appraise resources utilisation but the contents of study overlie on the availability of resources and neglecting utilization of the resources for the entire work.

Sarki and Abdullahi (2013) conducted a study on assessment of the adequacy of educational resources for office technology and management programme in school of business education in Federal College of Education (Tech) Gombe. The study had major purpose to assess the adequacy of educational resources for office technology in Federal Colleges of Education (Tech) Gombe. The study had three (3) specific objectives and 3 research questions. Three (3) null hypotheses were formulated. The study adopted survey research design and the population for the study was 97 respondents made of 20 lecturers/instructors and 77 NCE III students in the Department. Questionnaire was used to collect data using four points rating scale. Means score was used to analyze the data and to answer the research questions while t-test statistics was used to test the null hypothesis at 0.05 level of significant.

The study found that the level of provisions of equipment, facilities and personnel in school were adequate and the study concluded that the school of business education Federal College of Education (Tech) Gombe has adequate resources for teaching and learning office technology and management. The study recommends that the current level of provisions of teaching and learning resources be sustained and the colleges should improve on the provisions of in terms services among others.

The previous study found to be similar with the present study in terms of the objectives and methodology. However the two studies differs, while the former centre

on aspect of Business Education, the present covered physical facilities and equipment in Business Education in term of availability and utilization.

Although the methodology is alright but the researcher failed to measure resources with a standard instrument that specify the required resources for effective teaching and learning.

A study was conducted by Onyesom (2013) on the assessment of instructional resources for teaching of business education at the colleges of education in Edo and Delta states of Nigeria. The major purpose for the study is to assess the instructional resources available for business education program at the colleges of education in Edo and Delta states of Nigeria. Five (5) specific objectives ware states and the population was six (6) Business Education Departments, hence no sample being selected. The instrument used for data collection was NCCE Benchmark inventory for instructional resources. The data collected was analyzed using ratio and percentages score. The findings reveals that lecturers availability for Business Education in three (3) of the collages are not adequate while in the other (3) they are adequate in relation to NCCE minimum standards. It also found that the equipments and supplies in the typing laboratories of business education department in the colleges of education Edo and Delta are not adequate in relation to NCCE minimum standard.

Furthermore, it discovered that the physical facilities such as classrooms (chair/desks), typing laboratories shorthand studio and model office for Business Education of the colleges of education in Edo and Delta state are adequately while business education libraries (books), laboratory are not available. The study concluded that students of business education in these colleges of education are learning without the necessary required resources for the teaching and learning, thus may have affected the preparation and performances of students over the years. The study recommend that

adequate lecturers should be made available for business education by the authorities of the colleges of education as stipulated by the NCCE standards and also Business Education Departments should regularly appraise and review the standard of their instructional resources vis-à-vis the student size to enable them adjust where needed.

The previous study found to be relevant to the present study because both study reviewed similar literature and the instrument used in assessing the availability of resources is almost the same. However the present differ from the previous study, while the previous had assessed instructional resources available for Business Education in colleges of education at Edo and Delta States, Nigeria, the present study will assess the availability and utilization of resources in business education in Federal Colleges of Education in North-west zone, Nigeria.

It is alright the researcher used NCCE benchmark as instrument for data collection which is a standard but he failed to seek the opinion of lecturers and students, but concluded that resources are not available for teaching and learning in the colleges.

A study was conducted by Ibrahim, Yahaya, and Usman (2013) on exploring the availability, accessibility and utilization of Internet resource among the Postgraduate students in Business Education in Ahmadu Bello University, Zaria. The study has five objectives among which are (1) to determine the extent to which business education section in Ahmadu Bello University, Zaria is connected with internet resources. (2) to determine the Extent to which Postgraduate students in Business Education in Ahmadu Bello University utilized internet resources to access information from website. The study was guided with five null hypotheses among others are (1) Business Education section in Ahmadu Bello University, Zaria is not connected to internet service. (2) There is no significant relationship between Postgraduate students in Business Education and to internet resources in Ahmadu Bello University, Zaria.

The researchers adopted descriptive survey design method for the study; the population of the study was 45 M. Ed and 5 PhD students 2011/2012 academic year in Ahmadu Bello University, Zaria. Four rating scale structured questionnaire titled “Availability, Accessibility and Usage” (AAU) was employed to generate data from 50 Postgraduate students in Business Education. Pearson Product Moment Correlation Coefficient was employed to test null hypothesis one, two, three and four while t-test was used to test null hypothesis five. All the hypotheses were tested at significance level of 0.05. The results of the study reveals, among other that postgraduate students in Business Education in Ahmadu Bello University, Zaria have access to internet resources. As a result one of the recommendations postulated is that the section should encourage reforms in education that will ensure integration computers and Internet technologies by aligning them with curriculum. This will help to provide students with skill and proficiencies on how to use computer for browsing.

The previous study had similar characteristics with the present, because the present had assessed availability and utilization of resources in teaching and learning Business Education, the previous explored the Availability, Accessibility and Utilization of Internet resource among the Postgraduate students in Business Education. On the other hand the two studies differ in terms of coverage while the former explored internet resources in Ahmadu Bello University, Zaria. The present assessed resources in Federal Colleges of Education in North-west zone, Nigeria.

Despite the similarities and differences for both previous and present study, the previous failed to diagnose how students would get access to internet resources available for teaching and learning in Ahmadu Bello University. In nutshell the procedures to obtained internet ID.

# Summary of Related Literature Reviewed

The context, input, process and product (CIPP) evaluation model serve as the bases for the present study. The National commission for colleges of education (NCCE) is a body regulates the activities of Colleges of Education in Nigeria, its mandates includes the laying down of minimum standards for all programme of teacher education and accreditation their certificate and others awards. Concept of Business Education was reviewed as an education for business or training in business skills which are required for use in business offices. In education resources are those basic requirements that aided and facilities effective teaching and learning, Example personnel, facilities and equipment among others their availability and utilization in Business Education had being reviewed, also the benefits of and utilization resources in business education were discussed. The challenges of availability and utilization of resources for teaching and learning business education, like obsolesce and improper installation of resources was also discussed.

The previous available records reviewed showed that none of the researches assessed the availability and utilisation of physical facilities and equipment for teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria. It is this gap that the result of this present study hoped to fill.

# CHAPTER THREE RESEARCH METHODOLOGY

This chapter describes the method and procedure used for the study and it discussed under the following sub-headings:

* 1. Research Design
  2. Population of the Study
  3. Sample Size and Sample Procedure
  4. Instruments for Data Collection
     1. Validation of Instrument
     2. Pilot Study
     3. Reliability of the Instrument
  5. Procedure for Data Collection
  6. Procedure for Data Analysis

# Research Design

The present study used Survey and Ex-post facto research designs. The purpose of survey research design as noted by Tafida, (2008) is to find out or study a group of people or item by collecting and analyzing data from only few people or item considered to be representative of the entire group. Akuezuilo and Agu (2003) posit that Ex-post facto design seeks to find out the factors or conditions associated with certain occurrence, outcomes, situation or process by analysis of past events or of already existing conditions. The choice of these designs for this study is because the physical facilities and equipment assessed are already in existence in Business Education Departments in Colleges of Education in North-west zone, Nigeria.

# Population for the Study

The population for this study consisted of one hundred and forty (140) lecturers and nine hundred and fifty two (952) NCE III students of the Federal Colleges of Education that are running Business Education in North-west zone, Nigeria. The population of the study were represented in Table 1.

# Table 1: Population for the Study

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **Institutions** | **Location** | **Number of**  **Lecturers** | **Number of NCE III**  **Students** | **Total** |
| **1.** | Federal College of Education FCE (Tech) Bichi | Kano State | 32 | 335 | 367 |
| **2.** | Federal College of Education FCE (Tech) Gusau | Zamfara State | 28 | 187 | 215 |
| **3.** | Federal College of Education FCE Kano | Kano State | 22 | 213 | 235 |
| **4.** | Federal College of Education FCE Katsina | Katsina State | 14 | 67 | 81 |
| **5.** | Federal College of Education FCE Zaria | Kaduna State | 44 | 150 | 194 |
|  | **Total** |  | **140** | **952** | **1092** |

* 1. **Sample Size and sampling procedure**

Stratified random sampling was used to select the study population. The sample sizes for the study were twenty eight (28) lecturers and one hundred and ninety (190) NCE III students of 2015/2016 session in the five (5) Federal Colleges of Education in North-west zone, Nigeria. This is approximately 20% of NCE III student‟s populations as contained in Table 1. This is in line with Odukunle (2005) who recommended that if the population is less than 2500 for descriptive study 20% is enough to establish the existence or non existence of a relationship. The breakdown of the sample at a glance is presented in Table 2.

# Table 2: Sample Size of the Population

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **Institutions** | **Location** | **Number of**  **Lecturers** | **Number of NCE III**  **Students** | **Total** |
| 1. | Federal College of Education FCE (Tech) Bichi | Kano State | 6 | 67 | 69 |
| 2. | Federal College of Education FCE (Tech) Gusau | Zamfara State | 6 | 37 | 49 |
| 3. | Federal College of Education FCE Kano | Kano State | 4 | 43 | 37 |
| 4. | Federal College of Education FCE Katsina | Katsina State | 3 | 13 | 9 |
| 5. | Federal College of Education FCE Zaria | Kaduna State | 9 | 30 | 46 |
|  | **Total** |  | **28** | **190** | **218** |

**Source: Offices of Head of Departments, Business Education 2016**

# Instrument for Data Collection

The instruments used for this study were checklist and questionnaire. The checklist was used to generate data on availability of physical facilities and equipment in Federal Colleges of Education in North-west zone, Nigeria while a structured questionnaire was used for the collection of data on the utilization of physical facilities and equipment. The checklist was also divided into „A‟ and „B‟ Section „A‟ seek information on physical facilities available while section „B‟ seek information on equipment available all within the sample area of the study. The questionnaire was also divided in into two sections. „A‟ and „B‟ section „A‟ consist of names of colleges with their respective locations while section „B‟ contained questionnaire items from 21-30 on utilization of physical facilities in teaching and learning business education and 31-40 on utilization of equipment. On the other hand the checklist was used to seek

information on the availability of physical facilities and equipment in the selected sample area of the study. The checklist was extracted from the existing National Commission for Colleges of Education (NCCE) Benchmark with regards to resources for Business Education.

# Validation of the instruments

The content and face validity of the instruments was validated by four experts. Two of the experts were from Statistics Department, ABU, Zaria while the remaining two experts were from Psychology and Counselling Department (Measurement and Evaluation Unit) ABU, Zaria. All were not below the rank of Senior Lecturers. All the corrections and suggestions made were incorporated which improved the instrument to its present‟s level. This is in line with the view of Barge (2005) who state that for any research instrument to ascertain its validity it should be given to a panel of experts to determine if its contents can illicit the desired data it is intended to illicit.

# Pilot Study

In order to test the suitability of the instrument, a pilot study was conducted at Federal Capital Territory FCT College of Education, Zuba Abuja. Twenty questionnaires (20) were distributed to NCE III students. The researcher decided to use this institution as a result of similar characteristics with the population of the study and in addition, FCT College of Education is out of the study area. This is in line with the view of Olaofe (2010) who stated that pilot test are conducted with a small samples size of the respondents similar but not the same as the ones that would be used in the proper study.

# Reliability of the Instruments

In order to determine the reliability index of the instrument the data collected from respondents were sorted to statistical analysis using t-test analysis on (SPSS) and

the result obtained was 0.87. Thus this instrument is reliable for the study. This is in line with Olayiwola (2010) who suggested that a reliable test will have a high reliability coefficient close to positive one (1).

# Procedure for Data Collection

The researcher obtained an introductory letter as shown in (Appendix I) from Head of Department Vocational and Technical Education, Ahmadu Bello University Zaria, to enable him get permission and access to the Business Education resources in the Departments under study. The checklist was completed through direct observation and consultations by the researcher in the Departments of Business Education in Colleges of Education in North-west zone, Nigeria. However, the questionnaire forms were filled by the respondents in various Colleges and the collection was done personally and research assistance in each Colleges of Education. The researcher after distributing the questionnaire gave the respondent‟s period of time (four weeks) to fill the questionnaire.

Out of 190 copies of the questionnaire distributed, only 162 were duly filled and returned. This 162 constituted 85.3% of the sample population.

# Procedure for Data Analysis

The data collected were analyzed using ratio percentages mean, and standard deviation, Analysis of Variance (ANOVA) and Pearson Product Movement Correlation (PPMC) analysis. Percentage, mean and standard deviation were used in analysing the research questions. The null hypotheses 1 and 2 were tested using Analysis of Variance (ANOVA) while Pearson Product Movement Correlation (PPMC) was used in testing hypotheses 3 and 4. All the null hypotheses were tested at 0.05 alpha levels of significance. It is accepted when the P-value is less than or equal to the alpha value and rejected if otherwise. For easy statistical analysis all the Very High and High opinion in

regards to Utilization was taken as “High” similarly all responses as Low and Very low are taken as “Low”

**Decision Rule:** Physical facilities and equipment are regarded as available if the percentage available is 100 and above and will be considered not available if the percentage available is less than 100. A weighted mean score of 2.50 and above will be considered as High, while a weighted mean of 2.49 and below will be considered as Low with respect to research questions. This is because of the average rating scores thus:

Very High (VH) 4

High (H) 3

Low (L) 2

Very Low (VL) 1

10

The mean of the rating scale are 1+2+3+4 = 10 = 2.50

4 4

# CHAPTER FOUR

**DATA PRESENTATION AND ANALYSES**

This chapter presented the result of the data analysis used to answer four research questions and four null hypotheses. Percentage, mean and standard deviation were used in answering the research questions while Hypotheses 1 and 2 were tested using the Analyses of Variance (ANOVA) and Hypotheses 3 and 4 were tested with the Pearson Product Moment Correlation (PPMC). All null hypotheses were tested at 0.05, alpha levels of significance. The chapter was organized under the following sub-headings:

* 1. Distribution of respondents by their Colleges
  2. Answers to research questions
  3. Test of hypotheses
  4. Summary of major findings
  5. Discussion of major findings

# Distribution of Respondents by their Colleges

Out of 190 copies of the questionnaire distributed to the respondents only 162 were duly filled and returned. This 162 constituted 85.3% of the sample population and it used for the data analyses.

# Table: 3 Distribution of respondents by their Colleges

|  |  |  |
| --- | --- | --- |
| **Colleges (FCE)** | **Frequency** | **Percentages** |
| Zaria Katsina Kano Gusau  Bichi | 30 | 18.5 |
| 13 | 8.0 |
| 38 | 23.5 |
| 33 | 20.4 |
| 48 | 29.6 |
| **Total** | **162** | **100.0** |

**Source: Field Survey, 2016**

The Table above gave the breakdown of the respondents from the five Federal Colleges of Education that were used in this study. It showed that FCE Bichi had 48 or 29.6% while 38 or 23.5% from FCE Kano as against 33 or 20.4% that are from FCE Gusau, 30 or 18.5% are drawn from FCE Zaria while the rest 13 or 8.0% are from FCE Katsina.

# Answers to Research Questions

Observations and Consultations used to answer research questions 1 and 2 and are presented in Tables 4 and 6 for the purpose of giving more clarification to the reader

# Question one: What is the level of availability of physical facilities for teaching and learning Business Education among the Federal Colleges of Education in North-west zone, Nigeria?

The data collected from research question one was summarized in Table 4.

**Table 4** Answers to research question one on the level of availability of equipment for teaching and learning Business Education among the Federal Colleges of Education in North-west zone, Nigeria.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| SN | Physical Facilities | College | No.  Required | No.  Available | % | Remark |
| **1** | Typing Laboratory | 5 FCEs | 5 | 10 | 200 | A |
| **2** | Shorthand Laboratory | 5 FCEs | 5 | 4 | 80 | NA |
| **3** | Model Office | 5 FCEs | 5 | 6 | 120 | A |
| **4** | Library | 5 FCEs | 5 | 4 | 80 | NA |
| **5** | ICT Laboratory | 5 FCEs | 5 | 5 | 100 | A |
| **6** | Accounting Laboratory | 5 FCEs | 5 | 2 | 40 | NA |
| **7** | Lecturers Office | 5 FCEs | 140 | 78 | 55.7 | NA |
| **8** | Classroom | 5 FCEs | 31 | 27 | 82.1 | NA |

# Source: Field Survey, 2016

The result presented in Table 4 item one showed that the typing laboratories for teaching and learning of Business Education in all the five FCEs in North-west zone are available and in line with the NCCE minimum standard with cumulative of 200%. Specifically, FCE Bichi and Kano had 300% each, FCE; Gusau had a 200% while FCE Katsina and Zaria had 100% compliance in providing typing laboratories for the students (See Appendix II).

Item two showed that shorthand laboratories for teaching and learning of Business Education in four of the FCEs in North-west zone are available and in line with the NCCE minimum standard while only one College (Gusau) had no shorthand laboratory. Specifically, FCE Bichi, Kano, Katsina and Zaria had 100% compliance in providing shorthand laboratories for their students while FCE, Gusau had 0% compliance.

Item three showed that Model Office for teaching and learning of Business Education in all five FCEs they are available in North-west zone and in line with the NCCE minimum standard. Specifically, FCE, Bichi had 200% compliance in providing model office for their students while FCE, Gusau, Kano, Katsina and Zaria had 100% compliance.

Item four showed that library for teaching and learning Business Education in four of the FCEs in North-west zone are available and in line with the NCCE minimum standard while library was not available in only one FCE (Katsina). Specifically, FCE, Bichi, Gusau, Kano and Zaria had 100% compliance in providing library for their students while FCE, Katsina has 0% compliance.

Item five showed that ICT laboratory for teaching and learning Business Education in all the Colleges of Education in North-west zones are available and in line with the NCCE minimum standard. It is worth noting that each of the FCEs had 100% compliance in providing an ICT laboratory for their students.

Item six showed that accounting laboratory for teaching and learning Business Education in the Colleges of Education in North-west zones are available only in two colleges in line with the NCCE minimum standard. Specifically, FCEs Bichi and Gusau had 100% compliance each in providing accounting laboratory for their students while FCEs Kano, Katsina and Zaria had 0% compliance.

Item seven showed that Lecturers‟ Offices for teaching and learning Business Education in FCEs in North-west zones are only available in one FCE (Gusau) in line with the NCCE minimum standard. Specifically, of the 28 offices required for lecturers

in FCE, Gusau, the College had 31 offices for her lecturers. This was 111% compliance with the minimum standard. Consequently, FCE Kano and Bichi that needed 22 and 32 offices for their lecturers had 14 and 16 offices for their lecturers respectively. This was a 63% for FCE, Kano and 50% for FCE, Bichi. FCE Zaria and Katsina needed 46 and 14 offices for their lecturers only had 13 and 4 offices respectively. This was 28% compliance each for the Colleges.

Item eight showed that classrooms for teaching and learning Business Education in the Federal Colleges of Education in North-west zone are available only in two Colleges (Katsina and Zaria) which is in line with the NCCE minimum standard. Specifically, FCE Katsina and Zaria had above 100% compliance each in providing classrooms for their students while FCE Gusau, Bichi and Kano had 83%, 71%, and 45% compliance.

**Table 5:** Descriptive mean statistics on difference in the level of availability of physical facilities in the teaching and learning of Business Education among the Federal Colleges of Education in North-west zone, Nigeria

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Colleges (FCE)** | **N** | **Mean** | **Std. Deviation** | **Std. Error** |
| Bichi | 48 | 17.1458 | 3.93019 | .56727 |
| Gusau | 33 | 16.6061 | 4.11506 | .71634 |
| Kano | 38 | 16.8421 | 3.75267 | .60876 |
| Katsina | 13 | 16.6154 | 4.35007 | 1.20649 |
| Zaria | 30 | 16.6000 | 3.94444 | .72015 |
| **Total** | **162** | **16.8210** | **3.92144** | **.30810** |

# Source: Field Survey, 2016

According to the descriptive statistics in the Table above, there is no much difference in the level of availability of physical facilities for teaching and learning of Business Education among the Federal Colleges of Education in North-west zone, Nigeria.

The descriptive, mean statistics showed that their computed mean levels of availability of physical facilities are 17.1458, 16.8421, 16.6154, 16.6061 and 16.6000

by FCE Bichi, FCE Kano, FCE Katsina, FCE Gusau and FCE Zaria respectively. This shows almost the same level of availability of physical facilities among the five FCEs in North-west zone, Nigeria.

# Question Two: What is the level of availability of equipment for teaching and learning Business Education among the Federal Colleges of Education in North-west zone, Nigeria?

The data collected from research question two was summarized in Table 6.

**Table 6:** Answers to research question two on the level of availability of equipment for teaching and learning Business Education among the Federal Colleges of Education in North-west zone, Nigeria.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| SN | Equipments | Colleges | No.  Required | No.  Available | % | Remark |
| **9** | Typewriters | 5 FCEs | 952 | 408 | 42.9 | NA |
| **10** | Computer/laptop | 5 FCEs | 316 | 302 | 95.6 | A |
| **11** | Stop watch | 5 FCEs | 478 | 59 | 12.3 | NA |
| **12** | Wall clock | 5 FCEs | 31 | 24 | 77.4 | NA |
| **13** | Shorthand dictionary | 5 FCEs | 31 | 17 | 54.8 | NA |
| **14** | Tape recorder | 5 FCEs | 478 | 59 | 12.3 | NA |
| **15** | Headphones‟ | 5 FCEs | 952 | 112 | 11.8 | NA |
| **16** | AC system | 5 FCEs | 31 | 41 | 132.3 | A |
| **17** | Photocopier machine | 5 FCEs | 31 | 15 | 48.4 | NA |
| **18** | Typewriter/computer in model office | 5 FCEs | 31 | 5 | 16.1 | NA |
| **19** | Adding and listening machines | 5 FCEs | 31 | 56 | 180.6 | A |
| **20** | Printers | 5 FCEs | 31 | 27 | 87.1 | NA |

# Source: Field Survey, 2016

The result presented in Table 6 above, Item nine shows that Typewriters for teaching and learning Business Education in the Colleges of Education in North-west zone are not available in all the Colleges of Education in line with the NCCE minimum

standard. Specifically, of the 213 typewriters required in FCE, Kano the College had 128 typewriters, for this was 60% compliance with the minimum standard. FCE Katsina Bichi, Gusau and Zaria that needed 67, 335, 187 and 150 typewriters had 40, 155, 50 and 35 respectively. This was 59% for FCE, Katsina, 46% for FCE, Bichi, 26% and 23% for FCE, Zaria.

Item ten showed that Computers/Laptops for teaching and learning of Business Education in three FCEs (Katsina, Bichi and Zaria) in North-west zone are available and in line with the NCCE minimum standard while only two of the Colleges (Gusau and Kano) had no available. Specifically, FCE Bichi, Katsina and Zaria had 182, 107 100% and above compliance in providing Computers/Laptops for their students. FCE, Gusau and Kano had 81%, 59% compliance.

Item eleven showed that Stopwatch for teaching and learning of Business Education in all the FCEs in North-west zone are not available and in line with the NCCE minimum standard. Specifically, of the 168, 94, 107, 34 and 75 in FCE, Bichi,

Gusau, Kano, Katsina and Zaria respectively had 3%, 7%, 5%, 6% and 3% compliance in providing Computers/Laptops

Item twelve showed that Wall-clock for teaching and learning Business Education are only available in one College (Katsina) and in line with the NCCE minimum standard while Wall-clocks were not available in the remaining four Colleges. Specifically, FCE, katsina had 5 which is 250% compliance in providing wall clock for their students. FCE Bichi, Gusau, Kano and Zaria had 5, 5, 5and 4 respectively with 83%, 80%, 71% and 45% compliance.

Item thirteen showed that Shorthand Dictionary for teaching and learning Business Education in the FCEs in North-west zone are available only in one College and in line with the NCCE minimum standard. Specifically, FCE Bichi had 109% compliance in providing Shorthand Dictionary for their students while FCE Kano had 71%. FCE Gusau, Katsina and Zaria had 0% compliance.

Item fourteen showed that Tape recorder for teaching and learning Business Education in all the FCEs in North-west zone are not available and in line with the NCCE minimum standard. Specifically of the 168, 107, 95, 45 and 35 require in FCEs

Bichi, Kano, Gusau Katsina and Zaria had 30, 12, 10, 5 and 2 respectively. This are

18%, 13% 11%, 6%, and 5% compliance.

Item fifteen showed that Headphones‟ for teaching and learning Business Education in all the five FCEs in North-west zone are not available and in line with the

NCCE minimum standard. Specifically, of the 100% required in each FCE Katsina had 44%, Zaria 20%, Bichi 9% kano 6% and Gusau 5% compliance in providing Headphones‟ for their students.

Item sixteen showed that Air Condition (AC) system for teaching and learning of Business Education in four of the FCEs in North-west zone are available and in line with the NCCE minimum standard while only one College (Bichi) had no available AC system. Specifically, FCE, Katsina, Kano, Gusau and Zaria had 100% and above compliance in providing AC system for teaching and learning processes while FCE, Bichi had 81% compliance.

Item seventeen showed that Photocopier Machines for teaching and learning Business Education in Federal Colleges of Education in North-west zone are only available in one College (Katsina) and in line with the NCCE minimum standard. Specifically, of the 2 Photocopier machines required in FCE, katsina, the College had 3 Photocopier machines for their students. This was 150% compliance with the minimum standard. FCE Bichi, Gusau, Kano, and Zaria that needed 11, 7, 6 and 5 respectively had 7, 2, 2 and 1 Photocopier machine. This was a 64%, 33% 28% and 20% compliance for FCE, Bichi, Gusau Kano and Zaria.

Item eighteen showed that Typewriter/computer in Model Office for teaching and learning Business Education in the FCEs in North-west zone are not available and in line with the NCCE minimum standard. Specifically, of the 100% required in each FCE Katsina had 50%, Zaria 20%, Gusau 17% and Bichi 0.11 compliance in providing Typewriter/Computer in the Model Office for teaching and learning.

Item nineteen showed that Adding and listening machines for teaching and learning Business Education in the FCEs in North-west zone are only available in three Colleges in line with the NCCE minimum standard. Specifically, of the 11, 7, and 2 required in FCE Bichi, the College had 26, 16 and 6 respectively. This was 300%, 236%, and 228% compliance for their students. FCE Gusau and Zaria had 83% and 60% compliance.

Item twenty showed that Printers for teaching and learning of Business Education in two of the Colleges are available and in line with the NCCE minimum standard while three Colleges had no available printers. Specifically, FCE Kano and Katsina had 100% and above compliance in providing Printers for teaching and learning. FCE Zaria, Gusau, and Bichi had 75%, 67% and 63% respectively.

**Table 7:** Descriptive mean statistics on the level of availability of equipment for teaching and learning Business Education among the Federal Colleges of Education in North-west zone, Nigeria

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **College (FCEs)** | **N** | **Mean** | **Std. Deviation** | **Std. Error** |
| Katsina | 13 | 17.6923 | 4.38529 | 1.21626 |
| Zaria | 30 | 17.0000 | 4.66092 | .85096 |
| Gusau | 33 | 17.2727 | 4.39654 | .76534 |
| Kano | 38 | 17.1053 | 4.59606 | .74558 |
| Bichi | 48 | 17.4583 | 4.08921 | .59023 |
| **Total** | **162** | **17.2716** | **4.35537** | **.34219** |

# Source: Field Survey, 2016

The descriptive statistics above showed the level of availability of equipment for teaching and learning Business Education among the Federal Colleges of Education in North-west zone, Nigeria. According to the Table, their computed mean levels of availability of equipment are 17.6923, 17.4583, 17.2727, 17.1053, and 17.000, by FCE Katsina, FCE Bichi, FCE Gusau, FCE Kano and FCE Zaria respectively.

Based on this outcome, the level of availability of equipment for teaching and learning Business Education among the Federal Colleges of Education in North-west zone, Nigeria, is at the same level.

Responses used to answer research questions 3 and 4 are summarized in Tables 8 and 9 for the purpose of giving more clarification to the readers.

# Question Three: What is the level of utilization of physical facilities for teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria?

The data collected from research question three are summarised in Table 8.

**Table 8** Answers to research question three on the level of utilization of physical facilities for teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **S/no** | **Items** | **Response categories** | | | | **MEAN** | **STD.DEV** |
|  |  | **VH** | **H** | **Low** | **VL** |  |  |
| **21** | level of utilizing standard Classes for teaching and learning process in your  Department | 49 | 61 | 49 | 3 | 2.9630 | 0.8257 |
| **22** | Ability to utilize well furnished Classes with Chairs and Desks for teaching and learning process in your  Department | 59 | 51 | 39 | 13 | 2.9625 | 0.9645 |
| **23** | Level of utilizing Library for teaching and learning process  in your Department | 37 | 45 | 62 | 18 | 2.6235 | 0.9588 |
| **24** | Utilization of ICT Laboratory for teaching and learning  process in your Department | 37 | 45 | 55 | 25 | 2.5802 | 1.0076 |
| **25** | Ability to utilize Shorthand laboratory for teaching and learning exercise in your  Department | 17 | 62 | 62 | 21 | 2.4630 | 0.8498 |
| **26** | Ability to utilize Model  Office in your Department for teaching and learning process | 28 | 70 | 55 | 9 | 2.7222 | 0.8133 |
| **27** | Typewriting Laboratory in your Department is not adequately utilize due to  obsolesce equipment | 33 | 47 | 56 | 26 | 2.5370 | 0.9915 |
| **28** | Ability to utilize Lecturers office for seeking academic  advice | 38 | 60 | 37 | 27 | 2.6728 | 1.0143 |
| **29** | In ability to utilize most classes due to poor maintenance culture of your  Department | 19 | 57 | 61 | 25 | 2.4321 | 0.8907 |
| **30** | Ability to utilize well-equip typing Laboratory that will accommodate more than 30  students in your Departments | 52 | 58 | 29 | 23 | 2.8580 | 1.0267 |
|  | **Cumulative mean** |  |  |  |  | **2.6814** |  |

Decision mean = 2.5000

According to the Table 8 above, the level of utilization of physical facilities for teaching and learning Business Education in Federal Colleges of Education in North- west zone, Nigeria, is high. Reason is that the cumulative mean of 2.6814 on all the ten items under utilization of equipment was found to be higher than the decision/standard mean of 2.5000.

Specifically, they were of the strong opinion that Departments utilized standard classes for teaching and learning process, as this opinion attracted the highest mean agreement level of 2.9630 as details showed in Table 8. While 49 were in strong agreement, 61 were in agreement with this statement as against 49 that disagreed and only 3that were in strong disagreement.

In the same vein they believe that Classes are well-furnished with Chairs and Desks for teaching and learning process in the Departments as this item attracted the second highest mean agreement level of 2.9625 as details showed that 59 were in strong agreement while 51 agreed as against 39 disagreed and the rest 13 in strong disagreement.

This students rating is closely similar to those of their lecturers, in that cumulative mean was 2.943 on all the ten items under utilization of physical facilities. They equally believed that when standard classes are been utilized for teaching and learning process, students records high academic achievements (see appendix V).

In summary, the level of utilization of physical facilities is high especially as standard Classes are utilized for teaching and learning process and Classes are well- furnished with Chairs and Desks for teaching and learning process in the Departments.

# Question Four: What is the level of utilization of physical facilities for teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria?

The data collected from research question four was summarized in Table 9.

**Table 9** Answers to research question four on the level of utilization of equipment for teaching and learning Business Education in Federal Colleges of Education in North- west zone, Nigeria.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **s/no** | **Items** | **Response categories** | | | | **MEAN** | **STD.DEV** |
|  |  | **VH** | **H** | **Low** | **VL** |  |  |
| **31** | Students taught with apparatus acquire more skills  than those taught in theory | 72 | 67 | 14 | 9 | 3.2469 | 0.8345 |
| **32** | Ability to utilize headphones in teaching and learning  shorthand | 46 | 33 | 63 | 20 | 2.6481 | 1.0243 |
| **33** | Ability to utilize typewriter in teaching and learning  keyboarding | 38 | 72 | 22 | 30 | 2.7284 | 1.0210 |
| **34** | Level of utilizing computer/laptops in teaching  and learning word processing | 53 | 58 | 32 | 19 | 2.8951 | 0.9944 |
| **35** | Level of Students  performance, undergone computer training outside school in learning word  processing | 44 | 79 | 32 | 7 | 2.9877 | 0.8036 |
| **36** | Inability of students to access to internet in teaching and  learning | 29 | 62 | 47 | 24 | 2.5926 | 0.9493 |
| **37** | level utilizing projector in  teaching and learning process | 41 | 62 | 38 | 21 | 2.7593 | 0.97467 |
| **38** | Ability to access to internet  facilities in your Department | 8 | 16 | 128 | 10 | 2.1358 | 0.5845 |
| **39** | Level of utilizing tape recorder in teaching and learning shorthand in your  Department | 15 | 18 | 94 | 35 | 2.0802 | 0.8339 |
| **40** | Ability to utilize Adding and listening machine in teaching  and learning process | 30 | 67 | 53 | 12 | 2.7099 | 0.8538 |
|  | **Cumulative mean** |  |  |  |  | **2.6784** |  |

Decision mean = 2.5000

According to the Table 9 above, the levels of utilization of equipment for teaching and learning Business Education in Federal Colleges of Education in North- west zone, Nigeria, is high. Reason is that the cumulative mean of 2.6784 on all the ten items under utilization of equipment, was found to be higher than the decision/standard

mean of 2.5000.

Specifically, they were of the strong opinion that student taught with apparatus acquired more skills than those taught in theory in Business Education Department, as this opinion attracted the highest mean agreement level of 3.2469 as details showed in Table 9 that while 72 were in strong agreement, 67 were in agreement with this statement as against 13 that disagreed and only 9 were in strong disagreement.

In the same vein they believe that students undergone computer training outside school perform better in word processing class in Business Education Departments as this item attracted the second highest mean agreement level of 2.9877 as details showed that 44 were in strong agreement while 79 agreed as against 32 disagreed and the rest 7 were in strong disagreement.

This opinion is closely related to those of their lecturers in that the cumulated mean was 2.732 on all the ten items under utilization of equipment. The lecturers held strong opinion that students learned with apparatus acquire more skills than those learned in theory. This opinion attracted 2.857 (see appendix V).

In summary, the level of utilization of equipment is high especially as Students taught with apparatus acquire more skills than those taught in theory and Students undergone computer training outside school perform better in word processing class.

# Test of Hypotheses

The following null hypotheses were tested at 0.005 alpha level of significant

thus:

# Hypothesis One: there is no significant difference in the level of availability of physical facilities for teaching and learning Business Education among the Federal Colleges of Education in North-west zone, Nigeria.

The data obtained from hypothesis one ware summarized in table 10.

**Table 10** Analysis of Variance ANOVA statistics on difference in the level of availability of physical facilities for teaching and learning Business Education among the Federal Colleges of Education in North-west zone, Nigeria.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Sum of  Squares |  |  |  | F critical | |
| Variations | Df | Mean Square | F ratio |  | Sig. |
| Between Groups | 7.239 | 4 | 1.810 | .093 | 2.60 | .984 |
| Within Groups | 3046.810 | 157 | 19.406 |  |  |  |
| **Total** | **3054.049** | **161** |  |  |  |  |

# Source: field Survey 2016

Results of the Analysis of Variance in Tables 10 above showed that there is no significant difference in the level of availability of physical facilities for teaching and learning of Business Education among the Federal Colleges of Education in North-west zone, Nigeria. Reason being in the Analysis of Variance statistics Table, the computed p-value of 0.984 is higher than the 0.05 alpha levels of significance while the computed F ratio value of .093 is found to be lower than the F critical value of 2.60.

Therefore the null hypotheses which state that there is no significant difference in the level of availability of physical facilities for teaching and learning Business Education among the Federal Colleges of Education in North-west zone, Nigeria, is hereby accepted and retained.

# Hypothesis Two: there is no significant difference in the level of availability of equipment for teaching and learning Business Education among the Federal Colleges of Education in North-west zone, Nigeria.

The data obtained from hypothesis two were summarized in table 11.

**Table 11** Analysis of Variance ANOVA statistics on difference in the level of availability of equipment for teaching and learning Business Education among the Federal Colleges of Education in North-west zone, Nigeria

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Sum of  Squares |  |  |  | F critical | |
| Df | Mean Square | F |  | Sig. |
| Between Groups | 8.621 | 4 | 2.155 | .137 | 2.60 | .968 |
| Within Groups | 2467.188 | 157 | 15.715 |  |  |  |

|  |  |  |
| --- | --- | --- |
| **Total** | **2475.809** | **161** |

# Source: Field Survey, 2016

The Results of the Analysis of Variance showed that, there is no significant difference in the levels of availability of equipment for teaching and learning Business Education among the Federal Colleges of Education in North-west zone, Nigeria. Reason being in the Analysis of Variance statistics Table, the computed p-value of 0.968 is higher than the 0.05 alpha, levels of significance while the computed F ratio value of 0.137 is found to be lower than the F critical value of 2.60.

Therefore the null hypothesis which states that there is no significant difference in the levels of availability of equipment in the teaching and learning of Business Education among the Federal Colleges of Education in North-west zone, Nigeria, is hereby accepted and retained.

# Hypothesis Three: there is no significant relationship between utilization of physical facilities and the teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria.

The data collected from hypothesis three were summarized in table 12.

**Table 12:** Pearson Product Moment Correlation (PPMC) on the relationship between utilization of physical facilities and the teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variables | N | Mean | Std.dev | Correlation index r | Df | P |
| utilization of Physical  facilities | 162 |  |  |  |  |  |
|  | 26.7840 | 8.22186 |  |  |  |
|  |  |  |  | 0.900\*\* | 160 | 0.002 |
| Teaching Learning of Business  Education | 162 |  |  |  |  |  |
|  | 88.1420 | 18.60036 |  |  |  |
| **Source: Field Survey, 2016*. Correlation is significant at the 0.05 level (2-tailed).*** | | | | | | |

The outcome of the Pearson Product Moment Correlation (PPMC) statistics above showed that significant relationship exist between utilization of physical facilities and the teaching and learning of Business Education in Federal Colleges of Education in North-west zone, Nigeria. This is because the calculated p-value of 0.002 is found to be lower than the 0.05 alpha levels of significance at a correlation index r level of 0.900. The correlation between the two variables is directly proportional i.e the higher the level of utilization of Physical facilities, the higher the level of teaching and learning of Business Education and vice versa. Therefore, the null hypothesis which states that there is no significant relationship between utilization of Physical facilities and the teaching and learning of Business Education in Colleges of Education in North-west zone, Nigeria, is hereby rejected.

# Hypothesis Four: there is no significant relationship between utilization of equipment and the teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria.

The data collected from hypothesis four were summarized in table 13.

**Table 13:** Pearson Product Moment Correlation (PPMC) on the relationship between utilization of equipment and the teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variables | N | Mean | Std.dev | Correlation  index r | Df | P |
| Utilization of  Equipment | 162 | 26.8148 | 8.92078 |  |  |  |
|  |  |  |  | 0.904\*\* | 160 | 0.001 |
| Teaching Learning of  Business Education | 162 |  |  |  |  |  |
|  | 88.1420 | 18.60036 |  |  |  |
| **Source: Field Survey, 2016. *Correlation is significant at the 0.05 level (2-tailed).*** | | | | | | |

The outcome of the Pearson Product Moment Correlation (PPMC) statistics above showed that significant relationship exist between utilization of equipment and the teaching and learning of Business Education in Federal Colleges of Education in North-west zone, Nigeria. This is because the calculated p-value of 0.001 is found to be lower than the 0.05, alpha levels of significance at a correlation index r level of 0.904. The correlation between the two variables is directly proportional i.e the higher the level of utilization of equipment, the higher the level of teaching and learning of Business Education and vice versa. Therefore the null hypothesis which states that there is no significant relationship between utilization of equipment and the teaching and learning of Business Education in Federal Colleges of Education in North-west zone, Nigeria, is hereby rejected.

# Summary of Major Findings

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

* + 1. There is no significant difference in the level of availability of physical facilities in the teaching and learning of Business Education among the Federal Colleges of Education in North-west zone, Nigeria.
    2. There is no significant difference in the level of availability of equipment and the teaching and learning of Business Education among the Federal Colleges of Education in North-west zone, Nigeria.
    3. Significant relationship exists between the level of utilization of physical facilities and the teaching and learning of Business Education in Federal Colleges of Education in North-west zone, Nigeria.
    4. Significant relationship exists between the level of utilization of equipment and the teaching and learning of Business Education in Federal Colleges of Education in North-west zone, Nigeria.

# Discussion of Major Findings

The result of Tables 4 and 10 revealed that there is no much difference in the level of availability of physical facilities in the teaching and learning of Business Education in the Federal Colleges of Education in North-west zone, Nigeria. Based on the results obtained, 0.984 which is higher than 0.05 alpha levels of significant. This is in line with the specification of National Commission for Colleges of Education (NCCE) whose functions serve as regulatory body for Colleges of Education in Nigeria, in its documents minimum standard for Colleges of Education, 2002, 2008 and 2012 stipulates the minimum resources (facilities, personnel and equipments) require for Business Education in Colleges of Education. In addition to the above NCCEs requirements, Bongotons and Onyenwe (2010) recommend certain equipment necessary for the 21st century Business Education including: Phone answering machine, Internet system, Un-interrupted Power Supply (UPS), Digital Calculator, Laptops, Smoke alarm Communicator, Fax Machine, Standby Generator, Multimedia Board, Printer and Microwave radios should be made available in the Business Education. In addition, the 21st century offices are becoming paperless offices; emphasis is shifting to Information and Communication Technology (ICT) facilities, so Computer and its peripheral are taking the centre stage now.

Furthermore, Tables 5 and 11 reveled that the level of availability of equipment in the teaching and learning of Business Education among the selected Colleges of Education in North-west zone, Nigeria is almost at the same level by the result obtained 0.968, which is higher than 0.05 alpha levels of significant. This agreed with National Commission for Colleges of Education, (NCCE) whose functions serve as regulatory body for Colleges of Education in Nigeria, in its documents minimum standard for Colleges of Education, 2002, 2008 and 2012 stipulates the minimum resources

(equipments) require for Business Education in Colleges of Education in Nigeria.

In addition Tables 8 and 12 revealed that the level of utilization of physical facilities in the teaching and learning of Business Education in Colleges of Education in North-west zone, Nigeria is high. This is because the calculated p-value of 0.002 is found to be lower than the 0.05 alpha levels of significance at a correlation index r level of 0.900. Therefore the correlation between the two variables is directly proportional, that is the higher the level of utilization of physical facilities, the higher the level of teaching and learning of Business Education and vice versa. This is in agreement with Hallak, in Owoeye (2011) whose state that utilization of relevance and adequacy resources contributes to academic achievement. However, he added that unattractive school buildings and overcrowded classrooms among others contribute to poor academic attainment. In addition Okorie (2000) recommended that workshops, laboratories, and the overall Vocational Business Education environment must be adequately utilized so as to reflect the actual working environment beyond the classroom.

Subsequently the results of Tables 9 and 13 revealed that utilization of equipment in the teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria, is high. This is because the calculated p-value of

0.001 is found to be lower than the 0.05, alpha levels of significance at a correlation index r level of 0.904. Therefore the correlation between the two variables is directly proportional that is the higher the level of utilization of equipment the higher the level of teaching and learning of Business Education and vice versa. This is in line with Kadzera (2006) who noted that there was infrequent use of higher order instructional technologies such as overhead projectors, videos and computers in Teacher Training Colleges. Also in the his opinion Jimoh (2009) expresses that ordinary words or verbalization has been found to be inadequate for effective teaching, therefore the uses

of Instructional equipments serve as a channel through which message, information, ideas and knowledge are disseminated more easily. They can also be manipulated, seen, heard, felt or talked about.

The provisions of Information and Communication Technology (ICT) facilities enable Business Education to remain relevant and survive the current challenges of information age (Onyesom, 2012). Furthermore Jimoh (2009) added that the use of instructional materials is a sine qua non in effecting behaviour change of learners in every field especially in business education. Advances in technology have brought instructional materials especially the projected and electronic materials to the forefront as the most radical tools of globalization and social development which have affected the classroom teaching/learning situation positively. Jimoh added that, new technological breakthroughs such as networked and non-networked, projected and non- projected, visual, auditory, audio-visual electronic materials are important landmark in knowledge transfer. With them both teaching and learning become very pleasant experiences and less stressful.

# CHAPTER FIVE

**SUMMARY, CONCLUSION AND RECOMMENDATIONS**

This chapter summarized the findings of the study. Based on these findings conclusions were drawn and recommendations were made. The chapter was presented under the following sub- headings:

* 1. Summary
  2. Contribution to knowledge
  3. Conclusion
  4. Recommendations
  5. Suggestions for further studies

# Summary

This study aimed at assessing the availability and utilization of physical facilities and equipment in the teaching and learning of Business Education in Federal Colleges of Education in North-west zone, Nigeria. Four objectives and four research questions were raised. To guide the study, four null hypotheses were formulated and tested at

0.05 alpha levels of significance. Descriptive survey and ex-post facto as designs were used. The population of the study consisted 140 lectures and 952 NCE III Students. Out of this population a sample of 28 lecturers and 190 NCE III students‟ were used, this is 20% of the total population. Questionnaire and checklist were used as the instrument for data collection. The data collected were analyzed using percentages, mean, standard deviation and Analysis of Variance (ANOVA) and Pearson Product Movement Correlation (PPMC). The percentages, mean and standard deviation were used to answer the research questions while Analysis of Variance (ANOVA) was used in testing Hypotheses 1 and 2 and Pearson Product Movement Correlation was used to test the null hypotheses 4 and 3. Null hypotheses 1 and 2 were accepted and retained

because the p-values are higher than 0.05 alpha levels of significance, while 3 and 4 were rejected because the p-values are less than 0.05 alpha levels of significance. Therefore, the study revealed that:

The availability of physicals facilities and equipment in teaching and learning Business Education in Federal Colleges of Education in North-west zone is almost the same. Also the utilization of physical facilities and equipment had significance relationship with the teaching and learning Business Education in Federal Colleges of Education in North-west zone.

Based on these results, the researcher concluded that the level of availability of physical facilities and equipment in the teaching and learning of Business Education among the Federal Colleges of Education in North-west zone, Nigeria, is very similar. In addition the level of utilization of physical facilities and equipment is high. As a result of this some recommendation were made that physical facilities such as well- equipped typing pool that accommodates more than 30 students in the Department and big examination halls are grossly inadequate and should therefore be provided to all the Colleges of Education. Also Most of the Colleges do not possess adequate Typewriters/Computers in the Departments and should therefore be made available. Furthermore philanthropists, rich individuals and community-based organizations should complement government efforts in providing the much needed equipment and physical facilities for effective utilization in teaching and learning also there should be regular monitoring and supervision of the available equipment and physical facilities for proper utilization in Business Education Departments in Federal Colleges of Education in North-west zone, Nigeria.

# Contribution to Knowledge

This section provided contribution to knowledge for the study.

This study has provided empirical facts on availability and utilization of resources for teaching and learning Business Education in Federal Colleges of Education in North-west zone Nigeria, based on the result obtained, p-value 0.984, 0.968, 0.002 and 0.001 respectively on the availability and utilization of physical facilities and equipment in teaching and learning Business Education.

# Conclusion

Based on the findings discussed in chapter four, this study concludes that teaching and learning of Business Education in the five Federal Colleges of Education in North-west zone, Nigeria require not only available resources (physical facilities and equipment) for the teaching and learning processes, but also needed to meet up with the standards requirements as stipulated by the NCCE. Also, proper and effective utilization of physical facilities and equipment will enhance skills acquisition Business Education.

# Recommendations

Based on the findings of this study the following recommendations are hereby put forward:

1. Typing Laboratories, Shorthand Studios and Model Offices of Business Education Departments should be adequately equipped with relevant equipment to meet the requirement of NCCE minimum standard.
2. Business Education Departments should regularly appraise and review the status of their physical facilities and the equipment vis-a-vis the students‟ sizes for the enhancement of academic achievements. Also the Colleges that did not possess available Computers/Laptops should therefore ensure their availability for effective teaching and learning.
3. TETFund special intervention, philanthropist, rich individuals and community- based organizations should complement government efforts in providing the much needed equipment and physical facilities for effective utilization in teaching and learning of Business Education in Colleges of Education.
4. There should be regular monitoring and supervision by the NCCE for the available physical facilities and equipment for proper utilization in the teaching and learning of Business Education in Colleges of Education in North-west zone Nigeria.

# Suggestions for further studies

The researcher suggested that further studies be carried out on the

* + 1. Impacts of availability and utilization of equipment and physical facilities on the academic performances of students in Business Education in Colleges of Education in North-west zone Nigeria.
    2. Impacts of availability and utilization of computer software resources on the academic achievements of Business Education Students in Colleges of Education in North-west zone Nigeria.

# REFERENCES

Adeogun, A. A and Osifila, G. I. (2008). Relationship between educational resources and student‟s academic performance in Lagos State Nigeria online at: Http//Www.Unilorin .edu Ejournal//Jen,accessedon, 25/9/2014.

Adeshina T. J. (2007). *Understanding Business Education*: Zaria: Micsons Press,

Aduwa-Ogiegbaen S. O. and Imogie, A. I. (2005). *Instructional communication and technology in Higher Leadership Journal, 8*(2), retrieved the 3rd July, 2011 from [Http://Aljrss.Org](http://Aljrss.Org/)

Ahmadu, S. A. and Idoko, M. (2013). The role of entrepreneurship skill development in providing Business Education Students in Nigeria: *Journal of Business Educators Association in Vocational Education (BEAVE),* 2(1), 20-27.

Akano, B. U. (2005). The use of local materials in the teaching and learning of science in primary school a paper present at the 1st science workshop; *Science Teachers Association of Nigeria* on May 5-9 at the FCE Kantogora.

Akintola, B. and Olayiwola, A. (2006). Repositioning Nigeria higher education through Information and Communication Technology (ICT) and visual Library services, *a multi disciplinary Journal of Research Development*, (8), 112-115.

Akpan, V. C. J. (2006). *Vocational Education Evaluation*: Theories and Applications, Uyo: Dorand publishers.

Akuezuilo, E. O. and Agu, N. (2003). Research and statistics in education and social sciences: method and application. Awka: Nuel centi publishers and academic press.

Aliyu, M. S. (2013) Assessment of the impact of fund management on quality teaching and learning in Nigerian Federal Universities: *Proceedings of Multicultural African Conference*; Faculty of Education ABU, Zaria.

Aliyu, M. M. (2001). Resources evaluation of Business Education in Government Secondary Schools in Kaduna State: *Business Education Journal*, 3(4), 214-223.

Aliyu, M. M. (2006). Business Education in Nigeria: *Trends and Issues*. Ilorin: Ghosen print media.

Al-Mashari, M, Al-Mudimigh, A. and Zairi, M. (2003). Enterprise resources planning: A Taxonomy of critical factors; *European Journal of Operational Research, 146*(2), 352-364.

Amaewhule, W. A. (2004). Improving Business Education and challenges of standardization. *Business Education Journal,* 4(2), 1-7.

Arowolo, R. S. (2004). Improving management standard of Business Education in Ondo State secondary schools. *Business Education Book of Readings*, 1(4), 52-61.

Awobudu, V. Y. (2000) Materials resources utilization for teaching in primary sciences in the era of Universal Basic Education (UBE) in A.W. Ajetunmob, F. O. Ezeudu;

O. M. Adesope; G. D. Momoh, (Eds) *Technology Education and the UBE in Nigeria, Association of Teacher of Technology*: Lagos, Alographiks Komonunikation.

Ayeni, M. F. (2005). The roles of Vocational and Technical Education in National Development. *Journal of Research in Vocational Education,* 2 (1), 111-117.

Azih, N. (2008). An appraisal of teachers and teaching facilities available for teaching Business Studies in Secondary Schools in Abakaliki Urban; *Business Education Journal*, 6(2), 135-142

Azuka, E. B. (2000). Challenges of a professional secretary: Need for curriculum revision in Nigeria polytechnics, *Business Education Journal*, 3(3), 38-48.

Berge, B. L (1995). Qualitative research method for the social science 2nd Ed: London Needham Heights Mass.

Bongotons, O. Y. and Onyenwe, B. O. (2010). Availability and adequacy of ICT resources in business teacher education programmes of Nigeria: *Business Education Journal*, 7(2), 200-215.

Ehie, I. C., & Madsen, M. (2005). Identifying critical issues in enterprise resource planning (ERP) implementation: *Computers in Industry, 56*(6), 545-557

Ekpenyong, L. E., & Nwabuisi, J. (2003). Business teacher education in Nigeria: Projecting a new direction: *Journal of Vocational Education and Training*, 55(1), 33-46.

Esene, R. A. (2002). *Improvement of instruction in Business Education*: Agbor: Royal Place Publishers.

Eze, S. U. (2002). *Effects of target task approach on student’s achievement and interest in senior secondary school physical chemistry* (unpublished Doctoral Dissertation). University of Nigeria, Nsukka.

Eze, T. I. (2002), Policy constraints to the growth of technology education programme.

*Journal of Technical Education Review*, 2 (3), 14-20.

Ezeyi, N. V. (2008). Refocusing Vocational Business Education towards acquisition of skills for self-reliance. *Journal of Business and General Education (BUDGEN)* A Publication of School of Business Education (Technical), Umunze 2(1), 62-66.

Federal Republic of Nigeria (2004), *National Policy on Education*, Lagos: Research and Developments Council.

Filani, E. O. (2006). Business Education: A Golden Gateway to National Survival:

*Business Education Journal, 5*(2), 1-7.

Haralambos, M. & Holborn, M. (2000). Sociology: Themes and perspectives.

Hammersmith, London: Harpercollins Publishers.

Honrby, A. S. (2005) Oxford Advanced Learners Dictionary, Oxford University Press [Http://Aljrss](http://Aljrss/)

Ibrahim, A. Yahaya, A. and Usman, B. A. (2013). Exploring the availability and utilization of internet resources amongs Postgraduate Students in Business Education in Ahmadu Bello University Zaria. *Journal Educational Research International*, 2(2), 2-12.

Ibrahim, S. (2008). Business Education and Nigeria‟s National Development in the 21st century: *Journal of Education Research and Development*, 3(1), 299-305.

Ijaduola, K. O. Oni, J. & Muraina, K. O. (2011). Empirical analysis of school plant planning as a determinant of secondary school Students‟ academic performance: *Academic Leadership Journal*, 9(2). Retrieved on the 25thseptember 2011, from [Http://Www.Aljrss.](http://Www.Aljrss/)

Ile, C. M. (2001). Adequacy of instructional facilities and equipment for Business Education Programme in Colleges of Education: Evidence from the Eastern States of Nigeria: *Business Education Journal,* 3(4), 65-71.

Jimoh, M. E. (2009). *The use of instructional materials in teaching social studies at the secondary schools of Kabba Bunu Local Government area of Kogi State* [online] available: [Http://Www.Docstoc.Com.](http://Www.Docstoc.Com/)

Jones, C. (2003). Differentiates teaching and providing for special educational needs, in

S. Kennewell, J. Parkinson and H. Tanner (Eds). Learning to teach ICT in secondary schools. London: Routledge.

Julia, K. (2010). *Definition of teaching aids by Ehow* (Electronic Version) retrieved December, 2010, from [Http://Www.Ehow.Co.Uk/About\_](http://Www.Ehow.Co.Uk/About_) 6317487\_ Definition- Teaching-Aids.Html.

Kadzera, C. M. (2006). *Use of instructional technologies in teacher training colleges in Malawi*: Unpublished Ph.d Dissertation*,* Virginia Polytechnic Institute and State University, USA *IOSR Journal of Mechanical and Civil Engineering (IOSRJMCE)1(4), 01-06.*

Kelly, A. Y. (1999). *The current theory and practice*: 4th Ed. London; Pau Charpman Publisher Ltd.

Kerlinger, F. N. and Howards, B. L. (2000). *Foundations of behavioral research* 4th (Ed.) Harcourt College Publisher: Forth worth TX.

Mohammed and Elisha (2013). Resources mobilization and management for access quality in Vocational and Technical Education: Proceedings of *Multicultural African Conference 2013* Faculty of Education A B U Zaria. A B U Press.

Musibau, A. V. Oluwarotimi, L.A. (2011). Towards optimal utilization of school facilities in secondary schools: *Journal of Research in National Development*, 9(1), 23-31.

National Commission for Colleges of Education, (2012). *Minimum standard for NCE Vocational and Technical Education* (1sted) Abuja: NCCE.

Nuru, A. Y. and Mumah, S.N. (2009), *Growth and development of polytechnic in Nigeria*: A paper presented at all Nigerian polytechnic conference Abuja. March, 20th – 23rd

Obi, C. A. and Akume, B.C. (2002). Resources evaluation in Business Education:

*Business Education Book of Readings*, 1(2), 75-77.

Ochu, A. O. (2011). Human resources development and utilization: The role of Vocational and Technical Education. Lead paper presented at the 4th annual conference of Vocational and Technical Education: Federal College of Education, Zaria.

Odukunle, M. R. (2005). Academic research and developing skills in project writing: Jimaita Yola Rech Publishers House.

Oghuvbu, E. P. (2009). Analysis of resources management in primary schools in Delta State Nigeria: *Academic Leadership Journal*, 7(1). Retrieved on the 25th September 2011 from [http://Www.Aljrss](http://Www.Aljrss/)

Okabia, E. O. (2011). Availability and teachers use of instructional materials and resources in the implementation of social studies in junior secondary school in Edo State, Nigeria: *Reviews of European Studies*, 3(2):90-97.

Okeke, B. C. & Eze, C. P. (2010). Repositioning Vocational and TechnicalEducation for the 21st century: Implications and challenges; *Journal of Vocational and Adult Education*, 7(1), 58-67.

Okorie, J. U. (2000). *Developing Nigeria’s workforce*. Calabar: Page Environ Publishers.

Okoro, J. & Iyeke, P. O. (2004). An appraisal of instructional facilities for Business Studies in secondary schools in Delta State: *African Journal of Education and Development Studies*, 4(2), 34-40.

Okoro, J. (2008). Strategies to improve the teaching and learning of Business Studies in secondary schools in Delta State: *African Journal of Education and Development Studies*, 6(2), 48-56.

Okwuanaso, S. I. (2004). Improving the standard of Business Education in Nigeria.

*Business Education Journal, 4*(2), 12-23.

Olagboye, A. A. (2004). *Introduction to educational management in Nigeria*: Ibadan: Daily Graphics Nigeria Ltd.

Olagunju, A. M. & Abiona, O.F. (2008). Production and utilization of resources in Biology Education: A case study of South-west Nigerian secondary schools. *International Journal of African and African American Studies,* 7(2), 49-56.

Olayiwola A. O. (2010). *Procedures in educational research*: Kaduna: Hanijam Publications.

Olutola, K. S. (2000). Relationship between educational facilities and academic performance of students in Anambra State: *Journal of Nigeria Educational Research Association,* 8(1), 33-38.

Onu, A. J. C. (2012). Business Education: An emerging information and communication technology, *Journal of Business Educators Association in Vocational Education*, 1(2), 11-12.

Onyesom, M. (2013). Assessment of instructional resources for teaching Business Education at the Colleges of Education in Edo and Delta State Nigeria: Unpublished Thesis.

Osagae, R. I. and Irabor, Q. O. (2012). Availability and adequacy of human and material resources for the teaching and learning of skills based courses in Nigeria public universities, *Journal of Sociology Soc Anth*, 3(1), 15-27.

Osuala, E. S. (2004). *Hand book of Vocational and Technical Education for Nigeria*.

Ibadan, Practice Publisher.

Otamiri, S. (2008). Business Education and self employment: A case for entrepreneurship education, *Business Education Journal.* 6(2), 95-104.

Owoeye, J. S. & Yara, P. O. (2011). School facilities and students‟ academic achievement of secondary school agricultural science in Ekiti State, Nigeria: *Asian Social Science*, 7(7), 64-74.

Oyeniyi, O. L. (2010). Analysis of the educational facilities in southern universities in Nigeria: *Academic Leadership Journal*, 8(2). Retrieved on the 3rdjuly, 2011 from [http://aljrss](http://aljrss/)

Ozoro, P. A. (2007). *Vocational Education in Nigeria*: Issues and analysis, Obosi, Nigeria: Pacific Publishers.

Sarki, R. A. and Abdullahi, D. N. (2014). Assessment of the adequacy of educational resources for office technology and management programme in school of Business Education, Federal College of Education (Tech) Gombe; *Business Education Association in Vocational Education Journal (BEAVE)* 2(2), 63-71.

Tafida A. D. (2008) *Research design:* In Moti V.G (Ed) research methodology in the social management sciences: Kaduna: Joyee Publisher.

Tim, L. W. (1980). *Evaluating occupational education and training programme*: Boston: Allyn and Becon Inc.

UBE Act, (2004). *The compulsory, free, universal basic education act, and other related matters,* Federal Ministry of Education: Abuja, Nigeria.

Udoh, A. A. (2010). Business Education as a tool for economic empowerment and investment opportunities. *Journal of Business Education, Research and Development, (JOBERD)*, 1(1), 22-27.

Ugwuani, M. O & Eze, M. E. (2008). An assessment of the educational resources available for implementing the mandates of secretary studies programme in Nigerian polytechnic: *Business Education Journal* 6(2), 189-208.

Ukeje, B. O. (2002). Financing Education in Nigeria. *The Nigerian Social Scientist Journal*, 5(1), 31-39.

Ukoh, U. A & Ahia, C. N. (2004). Educator‟s perception of the influence of National Commission for Colleges of Education, accreditation exercise on some quality indicators in NCE Vocational Teachers Training Institutions; *Journal of Vocational and Adult Education,* 3(1), 19-24.

Ukoje, E. S (2010). The role of Business Education in the achievement of the Yar‟adua administration seven point agenda, *Journal of Business Education Research and Development* (JOBERD) 1(1), 109-111.

Umumadi, K. E. (2009). Teacher utilization of instructional equipment and materials in teaching basic electricity in urban and rural technical Colleges: *International Journal of Scientific Research in Education,* 2(2), 88-9.

Umunadi, E. K. (2004). Utilization of equipments and facilities for teaching and learning in technical colleges, Nigeria: *Journal of Education Research and Development*. 3(1), 100-108.

Unguru, C. & Abdullahil, H. (2007). The educational implication of the core courses and elective courses, to Agric Education lecturers and students: *Journal of Educational Research and Development;* Ahmadu Bello University, Zaria. 2(3), 66-73

Usioboh, S. A. (2007). The education reform: A gender-challenges and prospects for tertiary education in Nigeria; *Journal of National Association of Professional Secretarial Staff of Nigeria*. 12(5), 70-73

Usman, H. N. (2012).Techniques of Vocational and Technical Education in human recourses development and utilization: *Journal of Vocational and Technical*

*Education* 7(1), 92-95.

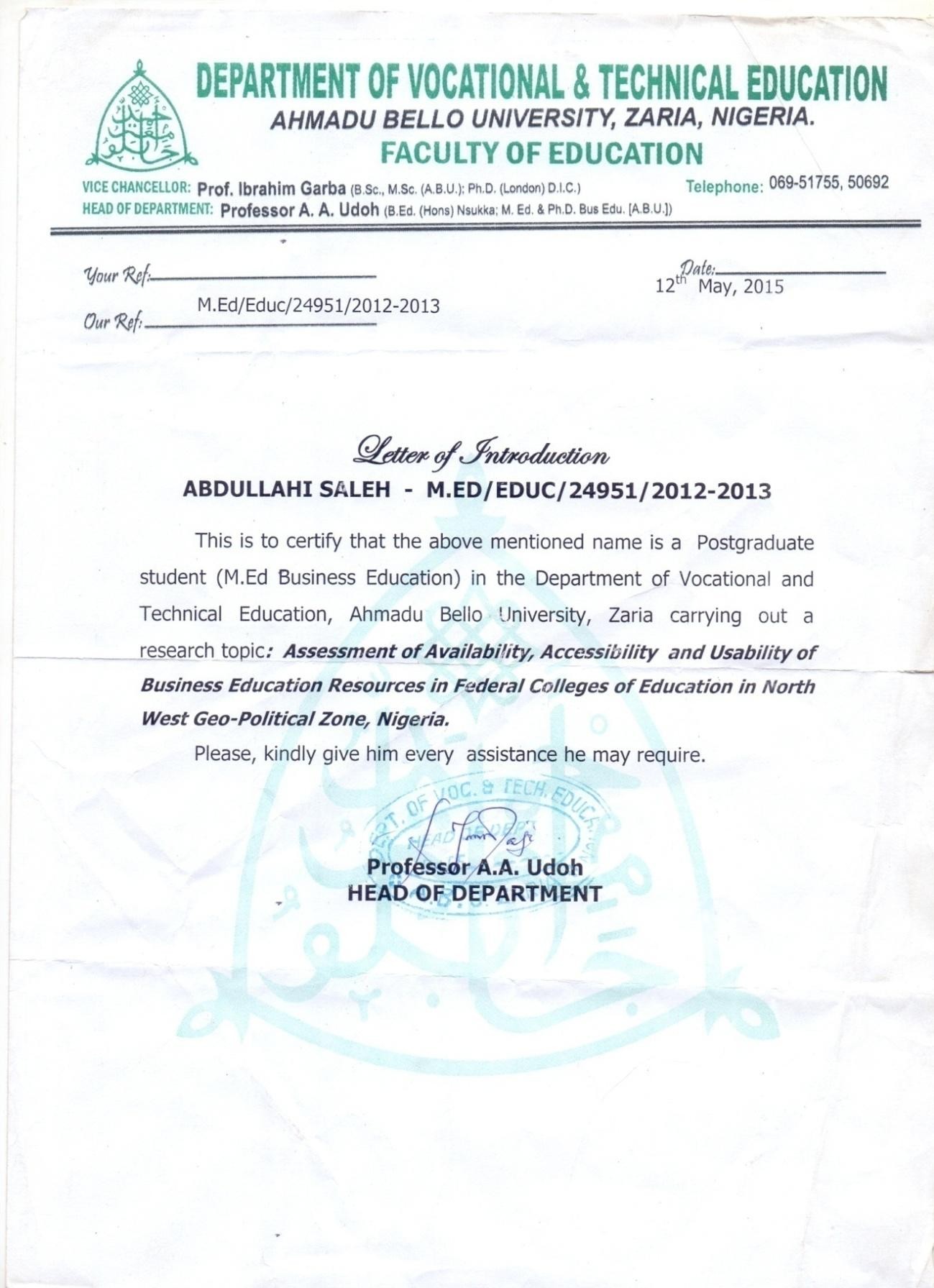
Uwheraka, T. (2005). Analysis of space dimensions and physical facilities in senior public secondary schools: Unpublished master‟s thesis; Delta State University, Abraka.

Uzoegwu, P. N. (2001). Availability of instructional materials for effective teaching and learning english, in the universal basic education scheme; *Nigerian Universal Basic Education Journal,* 1(2), 205-206.

Yusuf, E. (2013). Fundamentals of research methodology: Kaduna: Sunjo Global Links Ltd.

Zaidi, S.M.I.A. (2011). Provision and utilization of elementary education facilities in North-east India: What DISE data reveals? Retrieved on the 25th September 2011 from [Http://Www.Dise.In/Download/../Zaidi](http://Www.Dise.In/Download/../Zaidi)

# APPENDIX I LETTER OF INTRODUCTION



**APPENDIX II**

# CHECKLIST FOR PHYSICAL FACILITIES AND EQUIPMENT FOR TEACHING AND LEARNING BUSINESS EDUCATION IN FEDERAL COLLEGES OF EDUCATION IN NORTH-WEST ZONE, NIGERIA

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **SN** | **Physical**  **Facilities** | **Colleges** | **No.**  **Required** | **No.**  **Available** | **Surplus**  **/Deficiency** | **%** | **Remark** |
| 1 | Typing Laboratory | FCE, Bichi FCE, Gusau FCE, Kano FCE, Katsina  FCE, Zaria | 1  1  1  1  1 | 3  2  3  1  1 | +2  +1  +2  0  0 | 300  200  300  100  100 | A A A A  A |
| 2 | Shorthand Laboratory | FCE, Bichi FCE, Gusau FCE, Kano  FCE, Katsina FCE, Zaria | 1  1  1  1  1 | 1  0  1  1  1 | 0  -1  0  0  0 | 100  0  100  100  100 | A NA A  A A |
| 3 | Model Office | FCE, Bichi FCE, Gusau FCE, Kano FCE, Katsina  FCE, Zaria | 1  1  1  1  1 | 2  1  1  1  1 | +1  0  0  0  0 | 200  100  100  100  100 | A A A A  A |
| 4 | Library | FCE, Bichi FCE, Gusau FCE, Kano  FCE, Katsina FCE, Zaria | 1  1  1  1  1 | 1  1  1  0  1 | 0  0  0  -1  0 | 100  100  100  0  100 | A A A  NA A |
| 5 | ICT  Laboratory | FCE, Bichi FCE, Gusau FCE, Kano FCE, Katsina  FCE, Zaria | 1  1  1  1  1 | 1  1  1  1  1 | 0  0  0  0  0 | 100  100  100  100  100 | A A A A  A |
| 6 | Accounting Laboratory | FCE, Bichi FCE, Gusau FCE, Kano  FCE, Katsina FCE, Zaria | 1  1  1  1  1 | 1  1  0  0  0 | 0  0  -1  -1  -1 | 100  100  0  0  0 | A A NA  NA NA |
| 7 | Lecturers Office | FCE, Bichi FCE, Gusau FCE, Kano FCE, Katsina  FCE, Zaria | 1:1 (32)  1:1 (28)  1:1 (22)  1:1 (14)  1:1 (46) | 16  31  14  4  13 | -16  +3  -8  -10  -33 | 50  111  63  28  28 | NA A NA NA  NA |
| 8 | Classroom | FCE, Bichi FCE, Gusau FCE, Kano  FCE, Katsina FCE, Zaria | 1:30 (11)  1:30 (6)  1:30 (7)  1:30 (2)  1:30 (5) | 5  5  5  5  7 | -6  -1  -2  +3  +2 | 45  83  71  250  140 | NA NA NA  A A |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **SN** | **Equipments** | **College** | **No.** | **No.** | **Surplus** | **%** | **Rema** |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Required** | **Availab**  **le** | **/Deficiency** |  | **rk** |
| 9 | Typewriters | FCE, Bichi FCE, Gusau FCE, Kano FCE, Katsina  FCE, Zaria | 30:30(335)  30:30(187)  30:30(213)  30:30(67)  30:30(150) | 155  50  128  40  35 | -180  -137  -85  -27  -115 | 46  26  60  59  23 | NA NA NA NA  NA |
| 10 | Computer/laptop | FCE, Bichi FCE, Gusau FCE, Kano  FCE, Katsina FCE, Zaria | 1:3(112)  1:3(61)  1:3(71)  1:3(22)  1:3(50) | 120  50  42  40  50 | +8  -11  -29  +18  0 | 107  81  59  182  100 | A NA NA  A A |
| 11 | Stop watch | FCE, Bichi FCE, Gusau FCE, Kano FCE, Katsina  FCE, Zaria | 2:30(168)  2:30(94)  2:30(107)  2:30(34)  2:30(75) | 5  7  5  2  2 | -163  -87  -102  -32  -73 | 3  7  5  6  3 | NA NA NA NA  NA |
| 12 | Wall clock | FCE, Bichi FCE, Gusau FCE, Kano  FCE, Katsina FCE, Zaria | 1:30(11)  1:30(6)  1:30(7)  1;30(2)  1:30(5) | 5  5  5  5  4 | -6  -1  -2  +3  -1 | 45  83  71  250  80 | NA NA NA  A NA |
| 13 | Shorthand dictionary | FCE, Bichi FCE, Gusau FCE, Kano FCE, Katsina  FCE, Zaria | 1:30(11)  1:30(6)  1:30(7)  1;30(2)  1:30(5) | 12  0  5  0  0 | +1  -6  -2  0  0 | 109  0  71  0  0 | A NA NA NA  NA |
| 14 | Tape recorder | FCE, Bichi FCE, Gusau FCE, Kano  FCE, Katsina FCE, Zaria | 2:30(168)  2:30(94)  2:30(107)  2:30(34)  2:30(75) | 30  5  12  2  10 | -138  -89  -95  -32  -65 | 18  5  11  6  13 | NA NA NA  NA NA |
| 15 | Headphones‟ | FCE, Bichi FCE, Gusau FCE, Kano FCE, Katsina  FCE, Zaria | 30:30(335)  30:30(187)  30:30(213)  30:30(67)  30:30(150) | 30  10  12  30  30 | -270  -177  -201  -37  -120 | 9  5  6  44  20 | NA NA NA NA  NA |
| 16 | AC system | FCE, Bichi FCE, Gusau FCE, Kano  FCE, Katsina FCE, Zaria | 1:30(11)  1:30(6)  1:30(7)  1:30(2)  1:30(5) | 9  6  13  8  5 | -3  0  +6  +6  0 | 81  100  217  400  100 | NA A A  A A |
| 17 | Photocopier machine | FCE, Bichi FCE, Gusau FCE, Kano  FCE, Katsina FCE, Zaria | 1:30(11)  1:30(6)  1:30(7)  1:30(2)  1:30(5) | 7  2  2  3  1 | -4  -4  -5  +1  -4 | 64  33  28  150  20 | NA NA NA  A NA |
| 18 | Typewriter/comp uter in model  office | FCE, Bichi FCE, Gusau  FCE, Kano | 1:30(11)  1:30(6)  1:30(7) | 1  1  1 | -10  -5  -6 | 0.1  1  17 | NA NA  NA |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | FCE, Katsina FCE, Zaria | 1:30(2)  1:30(5) | 1  1 | 1  -4 | 14  50  20 | NA NA |
| 19 | Adding and listening machines | FCE, Bichi FCE, Gusau FCE, Kano  FCE, Katsina FCE, Zaria | 1:30(11)  1:30(6)  1:30(7)  1:30(2)  1:30(5) | 26  5  16  6  3 | +15  -1  +9  +4  +2 | 236  83  228  300  60 | A NA A  A NA |
| 20 | Printer | FCE, Bichi FCE, Gusau FCE, Kano FCE, Katsina  FCE, Zaria | 1:30(11)  1:30(6)  1:30(7)  1:30(2)  1:30(5) | 7  4  7  6  3 | -4  -2  0  +4  -2 | 63  67  233  120  75 | NA NA A A  NA |

**APPENDIX III LETTER TO RESPONDENTS**

Business Education Section, Vocational and Technical Educ. Dept. Ahmadu Bello University,

Zaria.

29th April, 2016.

Dear respondents

I am a student of the above addressed institution, undergoing a research study for M.Ed. Business Education on the topic **“Assessment of availability and utilization of resources for teaching and learning Business Education in Federal Colleges of Education in North-west zone, Nigeria”** You are requested to provide information on student‟s utilization of physical facilities and equipment in teaching and learning process. Any information provided will be treated with all confidentiality and strictly for the purpose of this research work.

Thanking you!

Yours Faithfully,

Abdullahi Saleh M.ed/Educ/24951/12-13 **08037916665**

# APPENDIX IV QUESTIONNAIRE

**SECTION A**

Please tick () as appropriate in the space provided below

|  |  |  |
| --- | --- | --- |
| (1) Name of your College |  | |
| Federal College of Education Zaria | [ | ] |
| Federal College of Education Katsina | [ | ] |
| Federal College of Education Kano | [ | ] |
| Federal College of Education (T) Gusau | [ | ] |
| Federal College of Education (T) Bichi | [ | ] |
| (2) Lecturer **[ ]** Student **[ ]** |  |  |

# SECTION B

Please read the following statement carefully and indicate your opinion about the statement by ticking in one of the boxes provided on the right hand side.

Keys:

VH = Very high H = High

L = Low

VL = Very low

# QUESTIONNAIRE ITEMS

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S/N | **Level of utilization of physical facilities for teaching and**  **learning of Business Education in FCEs** | VH | H | Low | VL |
| 21 | level of utilizing standard Classes for teaching and learning  process in your Department |  |  |  |  |
| 22 | Utilization of well furnished Classes with Chairs and Desks for  teaching and learning process in your Department |  |  |  |  |
| 23 | Level of utilizing Library for teaching and learning process in  your Department |  |  |  |  |
| 24 | Utilization of ICT Laboratory for teaching and learning process  in your Department |  |  |  |  |
| 25 | Ability to utilize Shorthand laboratory for teaching and  learning exercise in your Department |  |  |  |  |
| 26 | level of utilizing Model Office in your Department for teaching  and learning process |  |  |  |  |
| 27 | Ability to utilize Typewriting Laboratory due to obsolesce  equipment |  |  |  |  |
| 28 | Ability to utilize Lecturers Offices for seeking academic advice |  |  |  |  |
| 29 | Ability to utilize most classes due to poor maintenance culture  of your Department |  |  |  |  |
| 30 | Level of utilizing well-equip Typing Laboratory that will  accommodate more than 30 students in your Departments |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Level of utilization of equipment for teaching and learning of**  **Business Education in FCEs** | VH | H | Low | VL |
| 31 | Students taught with apparatus acquire more skills than those  taught in theory |  |  |  |  |
| 32 | Ability to utilize Headphones in teaching and learning shorthand |  |  |  |  |
| 33 | level of utilizing Typewriter in teaching and learning  Keyboarding |  |  |  |  |
| 34 | Level of utilizing computer/laptops in teaching and learning word  processing |  |  |  |  |
| 35 | Level of Students performance, undergone computer training  outside school in learning word processing |  |  |  |  |
| 36 | Ability to utilize one (1) computer to three students in teaching  and learning process in your department |  |  |  |  |
| 37 | level utilizing projector in teaching and learning process |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 38 | Ability to access to internet facilities in your Department |  |  |  |  |
| 39 | Level of utilizing Tape Recorder in teaching and learning  shorthand in your Department |  |  |  |  |
| 40 | Ability to utilize Adding and listening machine in teaching and  learning process |  |  |  |  |

**Appendix V Lecturers Responses on Research Questions 3 and 4**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **s/no** | **Items** | **Response categories** | | | | **MEAN** | **STD.DEV** |
| **VH** | **H** | **Low** | **VL** |
| **21** | level of utilizing standard Classes for teaching and learning  process in your Department | 14 | 9 | 3 | 2 | 3.25 | 0.45 |
| **22** | Utilization of well furnished Classes with Chairs and Desks for teaching and learning process  in your Department | 13 | 8 | 1 | 4 | 2.92 | 1.13 |
| **23** | Level of utilizing Library for teaching and learning process in  your Department | 10 | 12 | 3 | 3 | 3.036 | 1.07 |
| **24** | Utilization of ICT Laboratory for teaching and learning process in  your Department | 15 | 8 | 4 | 1 | 3.32 | 0.44 |
| **25** | Ability to utilize Shorthand laboratory for teaching and learning exercise in your  Department | 12 | 7 | 6 | 3 | 3.00 | 0.36 |
| **26** | level of utilizing Model Office in your Department for teaching  and learning process | 11 | 10 | 4 | 3 | 3.03 | 0.83 |
| **27** | Ability to utilize Typewriting  Laboratory due to obsolesce equipment | 9 | 8 | 5 | 6 | 2.71 | 0.97 |
| **28** | Ability to utilize Lecturers Offices for seeking academic  advice | 8 | 7 | 6 | 7 | 2.57 | 0.55 |
| **29** | Ability to utilize most classes  due to poor maintenance culture of your Department | 10 | 11 | 4 | 3 | 3.00 | 0.89 |
| **30** | Level of utilizing well-equip Typing Laboratory that will accommodate more than 30  students in your Departments | 8 | 7 | 6 | 7 | 2.57 | 0.88 |
|  | **Cumulative mean** |  |  |  |  | **2.943** |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **s/no** | **Items** | **Response categories** | | | | **MEAN** | **STD.DEV** |
| **VH** | **H** | **Low** | **VL** |
| **31** | Students taught with apparatus acquire more skills than those taught in  theory | 10 | 8 | 6 | 4 | 2.857 | 0.8257 |
| **32** | Ability to utilize  Headphones in teaching and learning shorthand | 6 | 11 | 4 | 7 | 2.571 | 0.9645 |
| **33** | level of utilizing Typewriter  in teaching and learning Keyboarding | 12 | 12 | 6 | 5 | 3.607 | 0.9588 |
| **34** | Level of utilizing computer/laptops in teaching and learning word  processing | 9 | 10 | 7 | 2 | 2.929 | 1.0076 |
| **35** | Level of Students performance, undergone computer training outside school in learning word  processing | 8 | 8 | 9 | 3 | 2.750 | 0.8498 |
| **36** | Ability to utilize one (1) computer to three students in teaching and learning  process in your department | 7 | 6 | 7 | 8 | 2.429 | 0.8133 |
| **37** | level utilizing projector in teaching and learning  process | 6 | 8 | 8 | 6 | 2.500 | 0.9915 |
| **38** | Ability to access to internet facilities in your  Department | 8 | 6 | 7 | 7 | 2.536 | 1.0143 |
| **39** | Level of utilizing Tape Recorder in teaching and learning shorthand in your  Department | 7 | 9 | 6 | 6 | 2.607 | 0.8907 |
| **40** | Ability to utilize Adding and listening machine in  teaching and learning | 6 | 10 | 5 | 7 | 2.536 | 1.0267 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | process |  |  |  |  |  |  |
|  | **Cumulative mean** |  |  |  |  | **2.732** |  |