STAKEHOLDERS' PERCEPTIONS ON THE PROVISION, UTILIZATION AND MAINTENANCE OF SCHOOL FACILITIES IN SECONDARY SCHOOLS IN NORTH - CENTRAL ZONE, NIGERIA

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DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND CURRICULUM, FACULTY OF EDUCATION

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NIGERIA.

October, 2018.

DECLARATION

I declare that the work in this thesis entitled, " Stakeholders' perceptions on the Provision, Utilization and Maintenance of School Facilities in Secondary Schools in North - Central Zone, Nigeria," has been performed by me in the Department of Educational Foundations and Curriculum under the supervision of Dr. E. I. MAKOJU, Prof. B. A. MAINA and Dr. A. A. IGUNNU. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this thesis was previously presented for the application of higher degree.

_________________________ ____________

Ape Tajudeen Suleman Date

CERTIFICATION

This thesis entitled ''Stakeholders' Perceptions on the Provision, Utilization and Maintenance of School Facilites in Secondary Schools in North - Central Zone, Nigeria " by APE Tajudeen Suleman meets the regulations governing the award of the Doctor of Philosophy in Educational Administration and Planning, Ahmadu Bello University, Zaria and is approved for its contribution to knowledge and literary presentation.

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Dean, School of Postgraduate Studies.

DEDICATION

This study is dedicated to my beloved parents Alhaji Ape and Hajia Sabalimatu Ape.

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LIST OF ABBREVIATIONS

ESH: Education Stakeholders

Q/AO: Quality Assurance Officers

PTAO: Parent Teachers Association Officials

MOE: Ministry of Education Officials.

NPE: National Policy on Education

WAEC: West African Senior School Certificate Examination.

FCT: Federal Capital Territory

NGOs: Non-Governmental Organisations.

NETC: National Education Technology Centre.

ICT: Information and Communication Technology.

IT: Internet Facilities.

UNESCO: United Nations Educational, Scientific and Cultural organization..

ESSPIN: Education Sector Support Programme in Nigeria

DFID: Department for International Development.

NOUN: National Open University of Nigeria.

PdM: predictive maintenance.

SSCE: Senior School Certificate Examination.

ICTFUMSQ: ICT Facilities Utilization and Maintenance Survey Questionnaire.

RT: Rating

SHSQ: School Health Services Questionnaire.

ANOVA: Analysis Of Variance.

SHPUMSFQ: Stakeholders' Perceptions of Provision, Utilization and Maintenance of School Facilities Questionnaire.

SPSS: Statistical Packages for Social Sciences

OPERATIONAL DEFINITION OF TERMS

In this study, certain concepts which definitely have different meanings to different people will be used. For this purpose and to facilitate a better clarity and avoid ambiguity the following concepts have been defined operationally as thus:

Games/Recreational Facilities: This refers to facilities like soccer field, table tennis, basketball, tennis, athletics, volleyball, gymnastics, rugby/baseball/cricket, and recreational activities such as: fitness/dance, mini- children's playground, and creativity day.

Infrastructural Facilities: This refers to classrooms, staff rooms, library, school halls, school fence, laboratories, school bus.

Instructional facilities: These are the visual and audio teaching materials and equipment that are used to support the delivery of quality education.

Maintenance of School Facilities: It entails ensuring that the school plants such as available instructional facilities, welfare/health facilities, games/ recreational facilitate and infrastructural facilities are kept near their original state as possible. This involves keeping the school sports and football field clean, periodic renovation of the buildings, servicing the school bus and generator sets, repairs etc. for the purpose of restoring the facilities to optimum working condition.

School Facilities: These are the tangible facilities that can easily be seen and observed in any institution (public or private secondary schools). In fact they are facilities which physically and spatially enable teaching and learning and by extension help in producing desirable results as evidenced by good academic performance of products of an education.

Welfare/Health Facilities: this refers to provision, utilization and maintenance of school clinic, drugs, health officials, resting room, and welfare facilities like: drinkable water, toilet facilities, Toilet and washing facilities, Separate toilet facilities for male and female pupils, sleeping accommodation, living accommodation, sick room, staff accommodation, heating and ventilation, school bus etc.

ABSTRACT

The study is titled, ''Stakeholders' Perceptions on the Provision, Utilization and Maintenance of School Facilities in Secondary Schools in North - Central zone of Nigeria''. The study employed descriptive survey design. Three (3) objectives were set among which are to: examine stakeholders' opinions on the provision of instructional facilities, welfare/health, games/recreational and infrastructural facilities in secondary schools in North - Central zone of Nigeria; and ascertain stakeholders' opinions on the utilization of instructional facilities, welfare/health, games/recreational and infrastructural facilities in secondary schools in North - Central zone of Nigeria. Three (3) research questions were raised in line with the objectives which include, how are instructional facilities, welfare/health, games/recreational and infrastructural facilities utilized in secondary schools in North - Central zone of Nigeria? what is level of maintenance of instructional facilities, welfare/health, games/recreational and infrastructural facilities in secondary schools in North - Central zone of Nigeria? Also, three(3) Null hypotheses were postulated which were stated among others that there is no significant difference in the opinions of stakeholders' on the utilization of instructional, welfare/health, games/recreational and infrastructural facilities in secondary schools in North-Central zone, Nigeria. there is no significant difference in the opinions of stakeholders' on the maintenance of instructional, welfare/health, games/recreational and infrastructural facilities in secondary schools in North-Central zone of Nigeria. Literature reviewed was on the concepts of perception, provision, utilization, maintenance of school facilities, theoretical framework, emperical studies. The total population for the study was 99,110 participants. This consists of 2,781 principals, 28,380 PTA Officials, 37, 450 public secondary school teachers, 24,090 private secondary school teachers and 6,406 Ministry of Education Officials. A total of 3,210 respondents took part in the study which consisted of 338 principals, 1,014 PTA Officials, 1,690 teachers, 56 Ministry of Education Officials, 56 Teaching Service Commission Officials, 56 Officials of Quality Assurance, The instrument used was a questionnaire. The questionnaire was duly validated and reliability coefficient of 0.97 was obtained. Hypotheses were tested using Analysis of variance (ANOVA) at 0.05 level of significance. Findings from this research work revealed that instructional materials as well as needed games/recreational facilities, welfare/health facilities and Infrastructural facilities were not adequately provided, while the available ones were not maximaly utilized and poorly maintained as expressed in the opinions of Stakeholders in North-Central zone of Nigeria. The following conclusions were made among others that Instructional materials such as visual, audio, audio/visual, equipment, textbooks and ICT materials are not adequately provided, while the available ones are not maximally utilized and not adequately maintained.The study recommends among others that state governments through Ministries of Education, TESCOM should provide adequate instructional materials such as machines, audio, visual, audio-visual materials, textbooks and ICT materials.Further studies can also incorporate the public and private primary schools in the same zone or other zones of the country

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Quality and standard education can only be achieved when there are adequate provision, utilization and maintenance of school facilities such as instructional facilities, welfare/health facilities, games/recreational facilities, and infrastructural facilities in schools. These facilities must also been maximally utilized and properly maintained to make teaching and learning more effective and efficient. The main objective of secondary school education according to National Policy on Education 2014 is providing education for individual to have a useful living within a society; a higher education. In specific term, the objectives of secondary school education include: provide opportunity for primary school leaver to have higher education, diversified curriculum to cater for different talent, foster national unity, inspire students' desire for self-improvement and achievement, provide vocational and technical manpower in area of commerce, industry, agriculture etc. develop and promote Nigeria language, art and culture, raise a generation of people who can think for themselves, respect the views and feelings of others, respect the dignity of labour, appreciate those values specified under our national broad goals and live as good citizen.

As a result of the above laudable goals and objectives, the stakeholders in education have invested a lot of resources in educating the young ones so that they can be useful for themselves and the society at large. Therefore, school can be referred to as a vehicle through which the purpose of education is achieved through the process of teaching and learning. To this end, the teachers and the learners that are involved in this process of teaching and learning need to be properly accommodated. This is the essence of school facilities.

School facilities, otherwise refered to as educational facilities include instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities which help to facilitate educational programme. The school facilities also include the school building, playing-ground, furniture, class-room, library, hostel offices, black-board, school record etc. The conditions of the school facilities should be conducive for the all-round development of the student- physical, emotional, social, cultural, aesthetic, and moral. In order to achieve this purpose, good learning environment should be created by providing, utilizing and maintenance of the school facilities. Peter (2015) sees school facilities as the sum total of building, equipment, textbook including the surrounding where teaching and learning takes place. This includes all permanent and semi permanent structures in the school. School facilities are very essential to achieving positive outcomes in the teaching and learning process.

The school facilities are the pillar and support of all teaching and learning activities. The site, size, arrangement and other aspects of the classroom, support facilities such as laboratories, toilets and other equipment can either be welcoming or repulsive to teachers and students alike. This simple fact has been noted to profoundly influence the acts of teaching and learning. So school facilities such as: instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities, are an essential part of human life and finds in many different forms which are shaped naturally by individual interests but also by the surrounding social construction.

From above, good quality and standard of school depend largely on provision, utilization and maintenance of school facilities. Provision of school facilities are defined as the state of making available needed materials in school for effective teaching and learning while school facilities utilization is the degree or extent to which an item has been put into effective use, various degree of utilization include: Non-utilization, under-utilization, maximum utilization, optimum utilization, over utilization. Also, school facilities maintenance entails ensuring that the facilities are kept near original state as possible.The provision, utilization and maintenance of the school facilities mentioned above may determine to a large extent the achievement of aims and objectives of education. Hamdallah, Ozovehe, and Olanrewaju (2013), observed that the basic focus in any institution is on plant and administration of facilities, because, effective and efficient running of the system depends on proper maintenance and use of available structural units and facilities. What prevails in most public school facilities which were installed over fifty years ago have undergone wear and tear. This is because they have been used above their estimated a mortal age and as such are begging for both minor and major repairs. On the other hand, some of these facilities such as building and physical structure are so poorly constructed that they do not last as they are expected (in terms of human resources, they are so poorly maintained that they are not working effectively).

As there too much emphasis on speeding up the process of teaching and learning process, learning environment must be given a look environment that it deserves. A beautiful, healthy and always refreshing learning environment can only be achieved by adequate provision of essential facilities. This will help in creating a congenial educative environment. Kibuthu, Ndirangu & Udoto (2016) noted that the school physical facilities require proper planning to provide inspirational setting for learning. Therefore it can be said that the school facilities are an essential aspect of educational planning because unless schools are well suited, buildings adequately constructed and equipment adequately provided much teaching and learning may not take place.

In Nigeria, the National Policy on Education (2014) clearly states that government will make effort to provide school health services to all educational institutions. Also the Federal Government guidance on minimum standards (2010) in schools nation-wide recommends that quality assurance is the management of goods, services and activities from the input stage, through processes, to the output stage of production. It aims at preventing quality problems and ensuring that only conforming products reach the customer. Indicators of quality in the basic education context include quality teachers and learners, quality content of curriculum, quality instruction, child friendly learning environment (physical and aesthetical) and quality outcomes (including academic achievement).

However, the situation in most of public schools is contrary to the national policy on education which proposes that it will make provision that ensures even and adequate distribution of educational system. Since school facilities are the space interpretation of the school curriculum, facilitating teaching and learning processes, it is therefore positively related to students' academic performance. It also ensures effective delivery of school curriculum, standard in educational productivity in terms of quantity and quality of product, rapid growth in a nation's educational sector and consequently rapid economic growth.

To this end, well provided, utilized and maintained school facilities will ease the inculcation of scientific skills and attitude in our student; it will enhance the comfort, safety of pupils and teachers, thereby increasing their performances. The quality of education received by the students bears direct relevance to the availability or lack of school facilities and the overall environment in which learning takes place. Provision of adequate and sufficient school facilities, when properly utilized and maintained is thus expected to reflect positively in the academic performances of students.

Without adequate provision, utilization and proper maintenance may affect student achievement as observed by Alsuiadi (2015) that, poor school facilities have been identified as probably affecting students negatively, resulting in high levels of absenteeism or dropping out of school due to the lack of a welcoming ambiance, modern classrooms, laboratories or sports grounds, all of which have come to be seen as obstacles to achievement. Based on the above perspectives, the present study intends to investigate the stakeholders' perceptions on the provision, utilization and maintenance of school facilities in secondary schools in North Central Zone, Nigeria.

1.2 Statement of the Problem

A review of previous educational programmes in the country shows that resource inadequacy has long been a major education shortcoming (Olelewe, Nzeadibe & Nzeadibe, 2014). The level of educational resources provided for the implementation of education programmes is inadequate and irregular. State of school facilities in secondary schools generally have called for a great concern among stakeholders in the education sector. The perceptions of Ministry of Education Officials, principals, teachers and Parent Teacher Association (PTA) officials may be as a result of inadequate provision of school facilities, over utilization as well as poor maintenance culture of few available facilities in secondary schools.

There is no doubt that inadequate school facilities were responsible for the poor performance of students in external examinations like Junior SCE and SSCE. The problem of school facilities has been linked to poor students' performance in both internal and public examination. The recently released 2017/2018 Senior Secondary School Examination by West African Examination Council, (WAEC, 2018) results showed the decline in performance when compared with those of 2016 and 2017 editions. Ogundare (2018) quoted Okebukola and Olukoya that 52.97 percent of the total candidates obtained the pass grade level in 2016 and 59.22 percent in 2017. 2018 performance with 923, 486 (representing 49.98%) obtained credits and above in at least five subjects, including English Language and Mathematics which is the benchmark for university admission, out of the total 1, 572, 396 candidates who sat for the examination. This year's performance regressed by about 10 percent. Among the indirect factors for decline, according to former executive secretary of the National University Commission (NUC), Professor Peter Okebukola is gross inadequacy of facilities for teaching and learning in most schools. Inadequate infrastructure and teaching tools, especially in science and technical schools, quality of facilities in most schools today, especially the government owned schools, including teaching and learning equipment and materials. He further observed that, more than 70 percent of all government secondary schools national are ill equipped with infrastructural facilities, including science laboratories and workshops, tables and chairs and other items that could make classes conducive.

Provision, utilization and maintenance of school facilities in secondary schools has been investigated by number of researchers like Muhammad, Muhammad, Khalid, Javed and Muhammad (2015) who found that public secondary schools provided better facilities as compared to private secondary schools in Punjab, Pakistan. Anike (2015) study revealed that private schools are more equipped with health infrastructure facilities than public secondary schools in the study area. Ayeni and Ogunbameru (2013) found that the relationship between teachers and students on the utilization of ICT facilities was low.

Izobo-Martins, Dare-Abel and Ayo-Vaughan (2014) showed that user attitude, maintenance culture and lack of fund have major influence on the present condition of the existing infrastructures. Okyere-Kwakye (2013) study revealed that facilities like furniture for pupil, urinal and toilet facilities and classroom blocks, were available but not adequate. Rufai, Umar & Idris (2013) found that, inadequate provision of infrastructural facilities is due to low level of funding of educational institutions, particularly TVE institutions in Nigeria and this made it impossible to actually achieve the aims and objectives of TVE as outlined by the Federal Republic of Nigeria (FRN) in the National Policy on Education (NPE) (FRN, 2014. In the same vein, Tadesse and Maeregu (2014) discovered that school facilities were unavailable, less in quantity and quality and that created a great challenge on teaching and learning activities that in turn had a negative impact on the improvement of the quality of education. Their studies however, were not on the perceptions of educational stakeholders on the provision, utilization and maintenance of instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities. Therefore, this study was set to investigate stakeholders' perception on the provision, utilization and maintenance of school facilities in secondary schools in North Central zone , Nigeria.

1.3 Objectives of the Study

The main objective of this study is to examine the opinions of stakeholders on the provision, utilization and maintenance of school facilities in secondary schools in North Central Zone of Nigeria. Basically, the study was set to:

1. examine stakeholders' opinions on the provision of instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities in secondary schools in North Central Zone of Nigeria;
2. ascertain stakeholders' opinions on the utilization of instructional facilities, welfare/health facilities, games/recreational facilities and

infrastructural facilities in secondary schools in North Central Zone of Nigeria; and

3. assess stakeholders' opinions on maintenance of instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities in secondary schools in North Central Zone of Nigeria.

1.4 Research Questions

The following research questions will be answered in the cause of this study:

1. What are the stakeholders' opinions on the provision of instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities in secondary schools in North Central Zone of Nigeria?
2. To what extent is the utilization of instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities in secondary schools in North Central Zone of Nigeria?
3. What is the level of maintenance of instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities in secondary schools in North Central Zone of Nigeria?

1.5 Research Hypotheses

The following null hypotheses were formulated to guide the study:

Ho_1: There is no significant difference in the opinions of Ministry of Education Officials, principals, teachers and Parent Teacher Association (PTA) officials on the provision of instructional, welfare/health, games/recreational and infrastructural facilities in secondary schools in North Central Zone of Nigeria.

Ho_2: There is no significant difference in the opinions of stakeholders' on the utilization of instructional, welfare/health, games/recreational and infrastructural facilities in secondary schools in North Central Zone, Nigeria.

Ho_3: There is no significant difference in the opinions of stakeholders' on the maintenance of instructional, welfare/health, games/recreational and infrastructural facilities in secondary schools in North Central Zone of Nigeria.

1.6 Basic Assumptions

For the purpose of this study, the following assumptions would be made that:

1. If there is adequate provision of instructional, welfare/health, games/recreational and infrastructural facilities in secondary schools in North Central Zone of Nigeria; there will be a conducive environment for teaching and learning process.
2. Maximum utilization of instructional, welfare/health, games/recreational and infrastructural facilities in secondary schools in North Central Zone of Nigeria would not only guarantee students' health/welfare needs but it would also provide staff with medical attention

3. Proper maintenance of instructional, welfare/health,games/recreational and infrastructural facilities in secondary schools in North Central Zone of Nigeria would increase their life span and make ready for the use of teaching and learning.

1.7 Significance of the Study

The findings from this study would add to the body of existing knowledge on provision, utilization and maintenance of school facilities like instructional facilities, welfare/health facilities, games/recreational facilities, and infrastructural facilities in secondary schools.

The results of this study will assist government and private individual to see to the pointer to the need for adequate provision of school facilities such as instructional facilities, welfare/health facilities, games/recreational facilities, and infrastructural facilities in secondary schools.

The outcome of this study will help teachers to put these facilities into effective use for teaching and learning. This is because, teachers are the users of facilities and effective utilization will go a long way to achieve desired educational goals.

The theory techniques of this study will be of significant benefit to teachers and school principals on various methods of maintenance of the available school facilities in their schools in order to achieve the major aim of education.

Another useful aspect of this study is that, it will help the educational planners, administrators and policy makers in giving special attention or cognizance to school facilities as an aspect of educational management in the area of school facilities maintenance in secondary schools.

1.8 Scope of the Study

This study is limited to the provision, utilization and maintenance of school facilities in secondary schools in North Central Zone, Nigeria. The study is also be limited to instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities in both public and private secondary schools in the study area. The scope of this study will cover all the states in North Central Zone, Nigeria (Benue, Kogi, Kwara, Nasarawa, Niger and Plateau) including the Federal Capital Territory (F.C.T) Abuja.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The review of literature is presented under the following sub-headings: Conceptual framework, provision, utilization and maintenance of instructional materials; provision, utilization and maintenance of welfare/health facilities, provision, utilization and maintenance of games/recreational facilities, provision, utilization and maintenance of infrastructural facilities, empirical studies and summary.

2.2 Conceptual Framework

2.2.1 Concept of Perception

According to Schacter (cited in Okonkwo, 2014), perception (from the Latin perceptio, percipio) is the organization, identification, and interpretation of sensory information in order to represent and understand the environment. All perception/ opinions involve signals in the nervous system, which in turn result from physical or chemical stimulation of the sense organs. Perception is not the passive receipt of these signals, but is shaped by learning, memory, expectation, and attention.

Webster (2016) defined perception as awareness of the elements of environment through physical sensation (color perception) or physical sensation interpreted in the light of experience. British Dictionary definitions for perception /pəˈsɛpʃən/ are as follows:

1. the act or the effect of perceiving
2. insight or intuition gained by perceiving
3. the ability or capacity to perceive
4. way of perceiving; awareness or consciousness; view: advertising affects the customer's perception of a product.
5. the process by which an organism detects and interprets information from the external world by means of the sensory receptors
6. (Law) the collection, receipt, or taking into possession of rents, crops, etc. (Collins English Dictionary-Complete & Unabridged 2017).

Perception is one of the oldest fields in psychology. The oldest quantitative laws in psychology are Weber's law which states that the smallest noticeable difference in stimulus intensity is proportional to the intensity of the reference and Fechner's law which quantifies the relationship between the intensity of the physical stimulus and its perceptual counterpart (for example, testing how much darker a computer screen can get before the viewer actually notices).

2.2.2 Concept of Provision

Oxford Dictionary (2018) defines provision as the action of providing or supplying something for use. It can also be referred to as new contracts for the provision of services like supply, providing, giving, presentation, and donation. Provision can be defined as an amount or thing supplied or provided (low levels of social provision e.g. facilities, services, amenities, resource(s), arrangements.

Social services are a range of public services provided by governmental or private organizations. These public services aim at creating effective organizations, build stronger communities, and promote equality and opportunity. Social services include the benefits and facilities such as education, food subsidies, health care, job training and subsidized housing, adoption, community management, policy research, and lobbying.

Webster (2016) defined provision as the act or process of providing or the fact or state of being prepared beforehand. It also mean a measure taken beforehand to deal with a need or Contingency. Provisions of school facilities according to the Federal Ministry of Education (1998), means providing the required school facilities as recommended in the guidelines on minimum standards in schools nationwide.

2.2.3 Concept of Utilization

According to Lackney and Picus (2014), an effective utilization of school facility is responsive to the changing programme of educational delivery, and at a minimum should provide a physical environment that is comfortable, safe, secure, accessible, well illuminated, well ventilated, and aesthetically pleasing. The school facility consists of not only the physical structure and the variety of building systems, such as mechanical, plumbing, electrical and power, telecommunications, security, and fire suppression systems. The facility also includes furnishings, materials and supplies, equipment and information technology, as well as various aspects of the building grounds. Namely: Athletic fields, playgrounds, areas for outdoor learning, and vehicular access and parking. The school facility is much more than a passive container of the educational process: it is, rather, an integral component of the conditions of learning. The layout and design of a facility contributes to the place experience of students, educators, and community members. Depending on the quality of its design and management, the facility can contribute to a sense of ownership, safety and security, personalization and control, privacy as well as sociality, and spaciousness or crowdedness. When planning, designing, or managing the school facility, these facets of place experience should, when possible, be taken into consideration. Auta (2012) defined utilization as the degree or extent to which the facilities have been put to effective use. School resources have been observed as a potent factor to quantitative and qualitative education (Owoeye 2011).

The Physical utilization will therefore be 100% on the day, but the financial utilization is actually 300% as you have earned 3 days revenue for 1 day's work (Lackney and Picus, 2014). Rental Software is normally required to assist management teams in measuring and calculating utilization figures. Asset tracking software may also be important in increasing or managing utilization figures. Profitability in relation to rental utilization, utilization in this context is heavily linked to profitability. Low physical utilization may be mitigated by keeping rental rates high, high physical utilization normally justifies keeping rental rates lower. Different types of equipment may also alter the relationship between rates and utilization.

2.2.4 Concept of Maintenance

Nakajima (2011) noted that French official norm defines "corrective maintenance" as maintenance which is carried out after failure detection and is aimed at restoring an asset to a condition in which it can perform its intended function.

Preventive maintenance (PM) has the following meanings:

1. The care and servicing by personnel for the purpose of maintaining equipment in satisfactory operating condition by providing for systematic inspection, detection, and correction of incipient failures either before they occur or before they develop into major defects (Bobby, 2016).
2. Preventive maintenance tends to follow planned guidelines from time-to-time to prevent equipment and machinery breakdown (Olakotan, 2015).
3. The work carried out on equipment in order to avoid its breakdown or malfunction. It is a regular and routine action taken on equipment in order to prevent its breakdown (Bamiro, Nzediegwu, Oladejo, Rahaman & Adebayo, 2011).
4. Maintenance, including tests, measurements, adjustments, parts replacement, and cleaning, performed specifically to prevent faults from occurring Wu, & Zuo, 2010).

Another type of maintenance is the method. This concerns facilities which follow repairs and renovating cycle. It could be in days, weeks, monthly or yearly. This type of maintenance is often accomplished by substitution of new parts or materials for old and worn – out ones. It does not entail the substitution of completely new facilities. This is sometimes called “preventive maintenance”.

Preventive maintenance includes miscellaneous jobs that are required to keep mechanical and electrical equipment operative, the painting of exterior and interior surfaces, repair of doors and windows, reflowing, repair of damage roofs and ceilings. The maintenance of these facilities is greatly necessary in order to avert colossal wastage or their total loss.

From the foregoing, it has been made clear that proper maintenance culture is an economic alternative when compared with the financial implications when the few available resources are culpably allowed to decay. When a school imbibes and assimilates the culture of maintenance of the scarce resources, the institution becomes attractive and is better equipped to deliver the goals .Uchendu (2011) mentioned that proper management of human and material resources enhances teaching and learning in secondary schools.

School Facilities Maintenance Procedures

The operation and maintenance of the school facilities are functions that are associated with keeping the physical plant and equipment in good conditions Akpan (2011). The procedures are as follows:

Identification and equipment that needed repairs: The personnel concerned with the repair and maintenance of school facilities should periodically check on these structures and equipments to ascertain which of them needed attention. These routine checks should culminate in writing annual reports about the school plant.

Selective attention: Sometimes more than eight different school facilities may require either replacement or repair at a time which may be more than the financial stand of the school. In this circumstance, the school administrator should become selective in his attention. All complex repairs that need very urgent attention should be referred to the professionals while the cleaners should handle the minor repairs.

Institution of Maintenance Workshop

To save cost and to ensure urgent attention, it is necessary that the school administrator should open a maintenance workshop where some of the skilled labourers in the employment of the school should be posted and cases of damaged furniture should be referred for urgent repairs. (Establishment of Inventory Book)

This record is very important because it helps to assess the level of damage that is going on in the school and also the amount of money that has been wasted on repairs and to determine how careless the groups of individuals in the school are and how efficient the maintenance workshop is. It can serve as reference material to the supervisor or the Parents Teachers Association.

Maintenance Strategies

There are a number of maintenance strategies or policies which can be specified either separately, or in combination for each item of facility.

Routine Maintenance; This form of maintenance helps to provide a safe working environment and covers such area as general clean ups inspection and minor serving instrument and tools, normal lubrication, adjustment of belts, chains, etc inspection and cleaning of fixture and stocking of frequently needed parts;

Preventive Maintenance: This is a scheduled inspection and service procedure which is designed to prevent equipment breakdowns and malfunctions through early detection and remedy of the causes.

Problems with Maintenance of Resources

Resources are the vital organs of effective and efficient functional education. Hence, the role of resources in ensuring the importance of these educational materials goes beyond their mere provision. They can only be optimally and efficient when they are adequately utilized and maintained. Studies have shown that the principal obstacle to the maintenance of resources in the school system is finance. Most of third world countries depend on the government for the financing of education just like the other sector of economy. Consequently, national budget which is based on the lean government coffers is shares among them. This to a great extent does not ensure adequate funding of the education industry. Beside financial constraints in the maintenance of education resources is the lack of skill and qualified personnel for the use and maintenance of these educational facilities. With the introduction of the 6-3-3-4 educational system and its high technological and scientific implications, sophisticated technological equipment was massively imported for the implementation of the new programme. Even though this is a step in the right direction, personnel were not trained to operate and maintained the equipment.

2.2.5 Concept of School Facilities

School facilities are made up of the indispensable systems and structures required by any viable educational institution to function effectively and achieve the objectives for which it was established in the first instance (Alimi, Ehinola and Alabi, 2012). They are facilities which physically and spatially enable teaching and learning and by extension help in producing desirable results as evidenced by good academic performance of products of an education.

School facilities are available in various forms. They may be fixed or movable and they serve various purposes in educational system. They are used in the classrooms, laboratories, offices, workshops, cafeteria, toilets, laundry, library, and for sports etc. Akpabio (2011) asserted that schools need vehicles to convey people to and from the school, it can be a bus, van or saloon and that proper and systematic school vehicle maintenance is important in providing for safe transportation of school children.

If at all there has been standard in our educational system, which is assumed to have fallen, a number of factors have been responsible for the fall in standard. These factors range from general increase in student's enrolment, inadequate supply of qualified teachers, teacher's job satisfaction, poor funding of educational sectors which arise from lack of altruistic visionary leaders to inadequate physical facilities and poor maintenance culture towards the available facilities. In a number of public schools visited in the federal capital territory while supervising teaching practice students, there were classes that contained as many as 120-130 pupils. In these classes, chairs/desk were inadequate; teachers could not effectively manage the classes which translate to very poor teaching/learning environment/experiences.

In an interview granted to Eduquest magazine, (Oct-Dec, 2010) Professor Jibril Aminu, he stated that “where a teacher had 22 students before, now he has 100 to 150 students”. The tremendous growth of students’ enrolment in our educational sector is not adequately catered for. The impact of the physical environment, in which teaching and learning takes place is very important. The reasons for this are not far-fetched and include:

1. School facilities helps improve students’ performance in achievement tests (WAEC, NECO, JAMB, SAT etc).
2. School facilities improves attendance and reduces dropout rate.
3. School facilities improves student’s attitude to learning.
4. School facilities increase teaches retention rate.
5. It boosts teaching effectiveness.

2.2.6 School Administrator

According to Rousmaniere (2013) principal or head of school is often used as the title of the head administrator of an elementary school, middle school, or high school or boarding school in some English-speaking countries, including the United States, India, Australia and New Zealand. Public schools in the United States generally use the title "principal" whereas private schools in the United States sometimes use the title Head of School (DeMatthews & Mawhinney 2014).

The Headteacher, headmaster, headmistress, head,or principal (sometimes another title is used) is the teacher with the greatest responsibility for the management of a school. Administrators, unlike teachers, work a twelve-month year and are fairly busy most of that time. Whether running a small, private day-care center or an overcrowded public high school, an administrator's tasks are many and various, ranging from curriculum development to student discipline. Gregory, Hanushek, & Steven (2013), observed that the most familiar school administrator is the principal. Assisting the principal are vice-principals, whose duties tend to be more specialized and who have more responsibility for the day-to-day operation of the school. In a central administration office, other specialists work with some or all the schools in a given district, overseeing particular programme, such as the evaluation of student academic achievement. Any one of these administrators may be responsible for infrastructure maintenance, the hiring and training of teachers, and student affairs. Administrators abound at colleges and universities as well. Among them are the deans of faculty, who handle academic issues, and the deans of students, who see to the well-being and appropriate conduct of the student body. Registrars process student records and many financial matters, while provosts serve as university-wide troubleshooters. As in smaller primary and secondary schools, colleges often require their teachers to perform administrative work. To a college student, the most familiar teacher-administrator is probably the department chair. And anyone who has applied to college knows all about the Dean of Admissions. School administration is a combination of brain work and grunt work (Gregory, Hanushek, & Steven, 2013).

Organizational skills are key, as is the ability to operate within constantly tightening budgetary constraints. Since duties can range from hiring a basketball coach to AIDS education, administrators need to be versatile and flexible. An administrator must have a great deal of patience to deal with the enormous bureaucracy often associated with educational institutions. Finally, and perhaps most importantly, since administrators are responsible for the education of young people, a particular dedication to and understanding of children's needs is essential (Rousmaniere, 2013).

While there has been considerable anecdotal discussion about the importance of school leaders, there has been very little systematic research into their impact on student outcomes. Recent analysis in the United States has examined how the gains in student achievement at a school change after the principal changes. This outcome-based approach to measuring effectiveness of principals is very similar to the value-added modeling that has been applied to the evaluation of teachers. Such research in the state of Texas found that principals have a very large impact on student achievement. Gregory, Hanushek, & Steven (2013) noted that effective school leaders have been shown to significantly improve the performance of all students at the school, at least in part through their impacts on selection and retention of good teachers. Ineffective principals have a similarly large negative effect on school performance, suggesting that issues of evaluation are as important for school administrators as they are for teachers. The impact of principals has also been measured in non-traditional ways. Some principals have focused their efforts on creating more inclusive schools for students with disabilities (DeMatthews & Mawhinney, 2014).

In the light of the above, we were made to understand that school facilities management is therefore an integral part of the overall management of the school, school managers should carry out comprehensive assessment of the facilities to determine areas of need. All these requires an integrated effort of all stakeholders who possess the expertise needed for accurate and up-to-date assessment of all aspects of school facilities. The government responsible for supply should maintain it. It is a common occurrence that when government supplies materials and facilities, they are not maintained.

2.2.7 Management

Simandan (2018) define management (or managing) as the administration of an organization, whether it is a business, a not-for-profit organization, or government body. Management includes the activities of setting the strategy of an organization and coordinating the efforts of its employees (or of volunteers) to accomplish its objectives through the application of available resources, such as financial, natural, technological, and human resources. The term "management" may also refer to those people who manage an organization. Social scientists study management as an academic discipline, investigating areas such as social organization and organizational leadership (Waring, 2016).

According to Henri Fayol, to manage is to forecast and to plan, to organise, to command, to co-ordinate and to control (Gulshan, n.d). Fredmund Malik defines it as the transformation of resources into utility. Management included as one of the factors of production along with machines, materials and money. Deslandes (2014) defines it as a vulnerable force, under pressure to achieve results and endowed with the triple power of constraint, imitation and imagination, operating on subjective, interpersonal, institutional and environmental levels. Akpabio (2015) observed that school facilities management is an integral part of the overall management of the school. The physical environment of a school is a major determining factor in the attainment of its objectives.

Challenges to Effective Management of School Facilities

Planning, as in all management processes, is the first logical step in facilities management (Akpabio, 2015). A plan for facilities management must be an integral part of the overall Federal, State and Local Government educational master plan. It is a well articulated conceptualization of the educational philosophy, goals, objectives and specification for short and long term objectives including implementation of the planned curricula and extra-curricula activities.

The most fundamental problem in facilities management is lack of policy guidelines for infrastructural development. In some schools, there are inadequate classrooms, staff, offices, laboratories, workshops, libraries and study areas. While in some schools, these facilities are adequately provided. This situation arises because the federal, state and local governments have failed to establish policy directives on minimum standards in relation to school facilities.

Facilities maintenance is an aspect of school management that is generally overlooked. The implementation of the curriculum of TVE in order for effective teaching and learning to take place in TVE institutions cannot be achieved without adequate provision and maintenance of facilities (Rufai, Umar & Idris, 2013). It is believed that when all the challenges or impediments to effective management of school facilities are removed, the goals and objectives of educational management will be realized.

Money is an absolutely crucial input of any education system. It provides the essential purchasing power with which education acquires its human and material inputs. Inadequate fund is always a problem for managers in all organizations, the school manager therefore is not left out in this problem (Akpabio, 2015). With too little money, school facilities management can be helpless. The school heads and teachers are constantly involved in decision making, planning, organizing, communicating, co-ordinating and evaluating. In carrying out these duties, they work in collaboration with the Ministry of Education, School Board, parents and guardians and other stakeholders in the internal and external environment.

2.2.8 Theoretical Framework

Theoretical Framework is a very essential feature of any study. The theoretical frameworks that will provide guide for this study are as follows: Resource Dependent Theory, Facilities Management Theory, Scientific

Management Theory, Human Relation Theory and Environmental Learning Theory.

2.2.8.1 Theory 1: Resource Dependence Theory (RDT)

Resource Dependence Theory (RDT) was propounded by Pfeffer and Salancik (1978). This theory is the study of how the external resources of organizations affect the behaviour of the organization. The procurement of external resources is an important tenet of both the strategic and tactical management of any company.

The basic argument of resource dependence theory can be summarized as follows:

Organizations depend on resources.

These resources ultimately originate from an organization's environment.

The environment, to a considerable extent, contains other organizations.

The resources one organization needs are thus often in the hand of other organizations.

Resources are a basis of power (Pfeffer and Salancik 1978).

Resource dependency theory by Pfeffer and Salancik, (1978) cited in Ojeje and Adodo (2018) states that organizations depend on multidimensional resources: labour, capital, raw materials, etc. and that though organisations may not be able to come out with countervailing initiatives for all multiple resources, they must move through the principle of criticality and principle of scarcity. Critical resources are those resources that the organization must have to function. Mcdowl (2018) opines that resource dependency theory views an organization in terms of its resource dependencies with other firms in the environment. He also stated that resources come in different forms and they are valued depending on their importance and availability, and they differ in terms of who has discretion and control over them. Explaining further, Mcdowl, (2018) pointed out that there are various types of resources that firms depend on, such as physical materials which might be actual materials that organizations build a product from. They could be technical such as information or knowledge, or social resources such as prestige or reputation that enables them to survive, all these resources differ depending on its importance. Resources dependency theory differs from a variety of factors due to their importance and availability.

According to Ojeje and Adodo (2018), there is no worthwhile education system that can ignore healthy and functional school buildings which are essential to the effective realization of its educational goals. The resources dependency theory emphasized the importance of resources to the organization's continual operation and survival. Relating this to the school system, it could be construed that schools as social a organization cannot survive without facilities as there would be no students, if schools cannot survive due to lack of resources.

It could be said that adequate provision of school facilities in secondary schools are determining factors in the realization of stated education objectives. Without mincing words, it could be hypothesized that provision, utilization and maintenance of instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities have direct impact on teaching and learning as opined by education stakeholders.

2.2.8.2 Theory 2: Facilities Management Theory

Facilities Management Theory was propounded by Chen (2015) after looking into five major management theories summarized by Jones and George (2012), it has been found that the three essential elements as a whole set of essential elements of FM are well connected with key aspects inside the five management theories in terms of their coverage to all general management issues.

The concept of total FM (Atkin and Brooks, 2015) has not only been adopted in practice, at Mitie for example, but also inspired management thought on three essential elements, including people, products and processes, to structure the FM body of knowledge (FMBOK) so as to derive a set of principles of FM. From FM profession point of view, people are FM professionals and their organisations, products are various FM services and processes are various management actions to provide FM services. A further review focussed on people, products and processes was therefore conducted into the evolution of management theory to set up a generic framework of management principles for FM. After looking into five major management theories summarised by Jones and George (2012), it has been found that the three essential elements as a whole set of essential elements of FM are well connected with key aspects inside the five management theories in terms of their coverage to all general management issues.

Generally speaking, the best practice in FM satisfies two needs on dependability and sustainability. Dependability consists of issues about conditions of built assets and related FM services in terms of reliability, maintainability, supportability and adaptability. Sustainability includes all aspects of FM in relation to social, technical, economic, ecological and political issues. Based on needs for both dependability and sustainability in FM, and a comprehensive review and technical analysis into related literatures and practice, a set of six general principles of FM can be summarised within the FMBOK framework structure. For people, it emphasises professional competence and lean organisation. For products, it emphasises quality services and resources efficiency. For processes, it emphasises effective actions and dynamic responses. The six general principles of FM are given below:

1. Domain 1: People – FM profession:

    Principle 1*:* Professional competence.

    Principle 2*:* Lean organisation.

2. Domain 2*:* Products – FM services:

    Principle 3: Dependability-driven quality services.

    Principle 4: Sustainability-oriented resources efficiency.

3. Domain 3: Processes – FM models:

Principle 5: Effective services procurement and provision.

Principle 6: Lifecycle-oriented rapid dynamic responses.

Generally speaking, the best practice in FM can satisfy two essential needs on dependability and sustainability. Dependability consists of issues about conditions of built assets and related FM services in terms of reliability, maintainability, supportability and adaptability. Sustainability includes all aspects of FM in relation to social, technical, economic, ecological and political issues. Based on needs for both dependability and sustainability of FM in secondary schools, the researcher belief that effective maintenance of school facilities such as instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities have direct effects on teaching and learning as perceived by education stakeholders.

2.2.8.3 Theory 3: Scientific Management Theory by Taylor

Taylor is recognized as the father of scientific management, who attempted to introduce a rational and systematic approach to management. Emphasis is given to planning, standardising and improving human efficiency at the different operation levels, in order to maximise output with minimum input. Taylor (1961) therefore, believed that the remedy for curing this inefficiency lay in scientifically designed jobs. Much of Taylor's research work was focused on the following ideas: improvement of working tools, analysis and innovation of work method, enforced standardization of work method and enforced cooperation. These principles have been summarized by authors and in some cases; excerpts, which reveal the characteristics of the element of management, have been presented. Principles/elements of scientific management theory:

Scientific task setting

Planning.

Study of the different works / activities

Scientific selection and training of workers

Standardising (Taylor, 1961)

Differential piece-rate system of wages

Functional organization

Mental revolution

Cost accounting

Scientific task setting Standard task is the quantity of work which an average worker can perform under ideal standardised conditions in one day, generally called 'a fair day's work', which for every worker should be fixed after a scientific study. Planning is the heart of scientific management as per Taylor (1961). He wanted to set up a planning department for every enterprise. Thus "what to do, when to do, where to do and how to do" is planned before the commencement of the project. Study of work is the critical examination of all the factors governing the operational efficiency of any specific activity. Study is conducted regarding the movement of the worker, time taken, fatigue, etc. Thus the best method of doing a job and the standard time required for its completion is determined. Scientific selection and training of workers is a systematic way for the selection of workers is to be followed, depending upon the nature of work to be done. Every job must be entrusted to the best worker considering his skill, experience and trainings undergone. Before appointment the workers are to given induction training. Proper trainings to update their knowledge in the latest techniques are also to be conducted when ever needed.

Standardisation of performance, tools, equipments, materials, working conditions, etc. is necessary as per scientific management (Taylor, 1915). Workers are to be provided with the required tools, materials and the environment, so that the works are executed with the optimum no. of workers, expenditure and time. The steps involved in standardization:

Establishing standards

Appraising performance

Taking corrective measures (Taylor, 1915).

Establishing standards: Standards of performance are set up for various operations at the planning stage, which serve as the basis for any control system. Establishment of standards in terms of quality, quantity or time is necessary for effective control. Standards may be of physical nature like units, men, hours, etc. or of monetary nature such as sales, revenue, expenses, etc. which should be precise, acceptable and workable. They should be flexible also if circumstances arises they are to be changed (Taylor, 1915).

Appraising performance: This step involves measuring actual performance of various individuals, groups, or units and then comparing it with the standards and investigates the causes of any deviation from the standards.

Taking corrective measures, if there is any deviation from the objectives of the enterprise, corrective actions are to be taken. If the standards are found to be defective, modifications are to be made (Taylor, 1961).

Differential piece-rate system of wages: Financial incentives helps to ensure efficiency and speed of work done by the workers. A worker is to be rewarded depending upon the efforts put by him for the betterment of the enterprise. This will encourage each and every worker to be committed to the company.

Functional Organisation: Planning and production activities are to be separated under different managers. Depending upon the functions the organisational set up is to be divided.

Mental Revolution: Scientific management aims at revolutionising the minds of both the workers and the management in such a way that the workers start feeling that the enterprise is their own and they put their heart and soul in the work assigned to them. Management and workers should have mutual respect and work in co- operation.

Cost Accounting: It is a direct offspring of scientific management. Right from the first stage of production to the last stage, cost accounting enables the management to plan, organise and to direct the production and marketing of the products in a manner by which it helps in reducing the production and distribution cost and increasing the profit of the enterprise.

Role of Computers Database: Is created to be manipulated and presented as reports rather than asking data processing personnel to create new programs to manipulate specialised data. The decision maker can work with unprecedented speed and accuracy due to the introduction of computers (Taylor, 1961). Inflation creates complications in the financial planning and which can be solved easily using computers. Tight control of financial aspects is required to make the project viable and profitable.

Project Management Programs: Project management is the area where the application of computer system is inevitable. Sophisticated commercial programs are available like Harward total project manager, prism, instaplan, promis, success planned, primavera project planning, microsoft project, etc.

Weakness of Scientific Management: Scientific management is confined to increasing the production and profit of the enterprise and is devoid of human element, the health and welfare of the workers. Sometimes it gives birth to the workers' trade union movements.

In respect to scientific management theory by Taylor (1961), it was observed that provision of school facilities is not enough to achieve effective teaching and learning but emphasis should be given to utilization of these plants, and enforced maintenance procedures so as to improve instructional, welfare/health, games/recreational and infrastructural facilities. This will ensure efficiency of school facilities at the different operation levels, in order to maximize output with minimum input. The researcher belief that not only maintenance of instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities were critical to the achievement of educational goals of the society, but provision of adequate school facilities and its utilization will be given attention.

2.2.8.4 Theory 4: Human Relation Theory by Marry Parker Feller (1868-1933)

Marry Parker Follett was among the first people to recognize the importance of human factors in administration. Marry Follett believed that the fundamental problem in all organizations was in developing and maintaining dynamic and harmonious relationships. Marry Parker Follett argued that the individual should be given enough opportunity to develop through better human relationships. She contended that the process of production is important to the welfare of the Society, as the products of production. That such welfare is not only monetary but also how workers relate to one another. Mary Parker Follett introduced the concept of conflict in administration; she believes that administrative process was always with conflict solution of which there were three forms. She argues that conflict is a healthy situation, and any group should be able to manage its conflict. The ability to manage such conflict shows some extent of maturity. Conflict she said should not be a confrontation.

Three Forms of Conflict — Solution

Domination: This is a situation in which victory is unilateral, that is to say that as administrators, we should be able to come out with a unilateral solution, to a particular problem.

Compromise: This is the situation in which each side agrees to make concessions and arrive at certain solutions to narrow down areas of disagreement. According to Mary Follett, this situation is a human relation component. People cannot come to compromise if the human relation is not smooth.

Integration: In which neither side claims victory. In this aspect the administrator comes out with a new idea and this comes out to be useful to both sides i.e. the victory given to the administrator. The administrator stands to benefit from the new idea. The human aspect comes in because the administrator should be able to convince himself and the two bodies involved.

She believed that administrators should be tactful, they should know the psychology of the workers, they should be humane, and at the same time quite firm, when decisions are to be taken. He stressed the ability to be able to handle human beings socially. Some major contributions of human relations to administration

Administrators' work with and through people in order to accomplish the purposes of the organization, and therefore sensitivity to the human factor is an important first step in their work. This step is required so as to motivate teachers and others in the school system. Administration is a shared responsibility and therefore the organizational structure should allow a free interplay of ideas in order to minimize the rigidity by hierarchical structures (Feller, 1933). All human beings want social recognition and esteem; the attainment of the goals of the school may be difficult; if not possible, if the principal of a school habitually ignores the opinion and feelings of the teachers, as well as those of the students, on matters which affect them.

In respect to the cited theories above, their relevance to this study are that the adequate provision of School facilities in secondary schools can only be achieved when all educational stakeholders see it as their joint responsibility to do so. The adequate provision of School facilities is not enough to achieve the stated educational objectives but their maximum utilization which is to make use of available School facilities at the individual's disposal. Systematic management approaches and human management techniques are necessary ingredients to be used by the school administrators for the proper maintenance of School facilities that are provided in the secondary schools. Because, facilities cannot manage themselves except there is good leadership that will set the ball rolling. Leadership (principals), in the secondary schools, has a vital role to play in the utilization and maintenance of School facilities. Doing these will bring about achieving the stated educational goals and objectives which lead to economic growth and realization of sustainable national development.

2.2.8.5 Theory 5: Environmental Learning Theory

Environmentalist learning theory is a recent school of taught propounded by Lipoff (2011). The theory believed that environment encompasses all things around the individual that has influence or offers an impression. Young children are greatly inspired and motivated, as well as deterred, by the environment around them. Not only does this include how furniture is arranged in the home or classroom, but peer pressure and interactions with others. And, the general environment has greater influence on development and learning of the young mind than some might think.

Environmentalist learning theory is the understanding that the child's environment shapes learning and behaviour. It is also thought that behavior and learning are reactions to the environment. This perspective encourages families, schools, and educators to understand that, child develops and learns new skills in reaction to items she finds around her. Psychologists such as Albert Bandura found through observational learning, that the young child will observe and copy behaviors of others, leading to decision-making skills and development.

Albert Bandura's social-cognitive learning theory is based on the observation of models, either in live or symbolic form. The three basic factors that his theory relies on are the interaction between the environment and the individual, a given behaviour and internal perceptive factors. The interaction of these three characteristics is known as reciprocal determinism. In general, a person watches a model interact with the environment and watches the result to learn how one should respond when placed in a similar situation. The learner must therefore pay close attention to the model and have good cognition skills to be able to recall the events at a later time.

Another that finds the environment as an important factor in learning and development of the young mind includes Julian B. Rotter. His social learning concept focused on the idea that personality represents an interaction of the individual with his or her environment. Along with taking into consideration the individual's reaction to the environment, the individual's experience plays a role, too. The combination of the environment, the individual, and her reaction encourages behavior and learning.

This theory also belief that creating an enabling environment is critical factor to effective learning**.** When the child is in an environment not conducive to learning, she will not learn to her best abilities. When the environment is altered to encourage greater learning, her educational opportunities increase (Lipoff, 2011). Whether in the home or classroom, creating an environment conducive and supportive of learning aides in the young mind's evolution to greater knowledge. It might be surprising at how simple things can be adjusted to motivate learning in your environment. Take into consideration:

- **Lighting**: Dimly lit areas make reading or studying challenging for young learners. Keeping areas that are designated for play or learning well lit encourages positive learning skills and habits. Light deprivation not only affects learning but can also lead to depression in children.
- **Music**: Incorporating music in the educational environment or home encourages memorization skills as well as creates comfortable and enjoyable surroundings. Along with listening to music, including musical instruction or instruments in a learning environment offers the child the

opportunity to explore the connection between math and music, along with self-expression and emotion.

- **Furniture Arrangement**: The way a space is arranged and created for learning affects those within it. In the classroom, the furniture arrangement not only reflects the teacher's style but also encourages the child to explore and react to her environment causing learning. Creating an arrangement, which offers eye contact with children is beneficial as well as creating quiet corners and work areas. Arranging informal learning areas is also an educational opportunity in either the classroom or home.
- **Temperature**: When a child is too warm or cold, they may not feel motivated to learn. Keeping the learning environment at a base temperature offers the child the ability to learn what her internal temperature is, and how to compensate. Encourage a child that often seems cold to bring an extra sweater to leave in the classroom or have available at home. Allow warmer children to remove clothing as needed.

According to Lipoff (2011), environmentalist theory offers the ability to change the environment for the learner potentially benefiting the young child. There are other factors, including negative elements that should be taken into consideration, such as:

- **Media**: Turning the television off, as well as video games and computers, during learning times encourages the child to use her own skills for problem solving and learning. Using the television as a babysitter or learning tool is not always effective and does not offer human interaction beneficial to learning.

- **Model Positive Behavior**: As the saying goes, “monkey see, monkey do.” When the child sees an adult behaving a certain way, she wants to emulate and copy. Avoiding drinking, smoking, or using harsh language around children in any type of environment creates positive modeling and promotes good behaviors.
- **Eliminate Unnecessary Noise**: Loud noises are not beneficial to the young learning mind. Help encourage learning by turning off or removing items that create loud noises. This way the child feels nurtured and encouraged to learn without disruption.

Education stakeholders especially, government should take the time to consider the environment when considering the learning and development of the students. Simple environmental changes offer wonderful results. Guney & Selda (2012) opined that many researchers generally consider teaching and learning issues as if independent from physical environment, whereas physical conditions play an important role in gaining knowledge; in learning. Schools’ applications of learning theories had better determine morphological characteristics of them. Designers should follow a holistic approach to create effective learning environments.

In respect to the cited theories above, their relevance to this study are that the adequate provision of school facilities in secondary schools can only be achieved when all educational stakeholders see it as their joint responsibility to do so. The resource dependent theory stressed the need for adequate provision of resources for organization to function properly. This implies that school as social organization aim at equipping and impacting knowledge and skills has to be provided with adequate and functional school facilities. In the same vein, facilities management theory with it six principle emphasized the importance of effective maintenance of facilities to achieve the desired results. This suggests that provision of facilities is not enough to achieve the stated educational objectives but their maximum utilization which is to make use of available school facilities at the individual's disposal. Utilization of resources in teaching brings about fruitful learning since it stimulates student's senses and motivates them that is the relevance of environmental learning theory. These school facilities which include the instructional materials, welfare/health facilities, games/recreational facilities and infrastructural facilities should not only be utilized but must also be properly maintained. Systematic management approaches and human management techniques are necessary ingredients to be used by the school administrators for the proper maintenance of school facilities that are provided in the secondary schools. Because, facilities cannot manage themselves except there is good leadership that will set the ball rolling. Leadership (principals), in the secondary schools, has a vital role to play in the utilization and maintenance of school plant. Doing these will bring about achieving the stated educational goals and objectives which lead to economic growth and realization of sustainable national development.

2.3.1 Provision of Instructional Materials

The provision of instructional materials cannot be discussed in isolation of the important role played by Resource Centers. Taking this into cognizance, the Federal Government reorganized and modified the National Education Technology Centre (NETC) Kaduna to provide resources to the schools. Effective and proper organization and administration of instructional resources in resource centres are basic to their use. Through this administrative systems, the user of the resources (students and teachers) have access to these instructional materials, become familiar with them and their mode of application and can plan for their use in teaching and learning activities. Agina-Obu (2015) viewed them as didactic material things which are supposed to make learning and teaching possible.

According to Adakole, Eiriemiokhale & Nnaji (2016), availability of instructional materials which ensures accreditation and reaccreditation of academic programmes have generated serious issues and concern among scholars, researchers and business educators. Study by Kalgo (2014) have shown that instructional materials may be acquired by the schools through:-

Collection of items from the immediate locality of the schools;

Production process by teachers and learners;

Distribution to schools by Government and Non- Governmental organization (NGO);

Donation from several sources;

Distribution of productions by students in tertiary institutions.

Creation of resource centers.

Improvisation of Instructional Materials in Teaching

The aim in the development of learning materials is to enhance understanding. In spite of their importance to learning, there are very few learning materials available in the market. Those that are available are very much expensive and beyond the reach of majority of people that need them. This makes improvisation of instructional materials necessary by wise, hardworking and experienced teachers (Kalgo, 2014). The success of childhood education therefore, is heavily dependent upon teacher's ability to effectively and efficiently improvise and utilize locally sourced materials, childhood education should therefore, be prepared to improvise and make effective use of locally sourced materials, which are constructed by them in order to facilitate effective teaching and learning process.

Function of Instructional Materials

The functions of materials in teaching-learning situation could be viewed from how they affect the teaching and learning outcomes. Functions of instructional materials in the teaching process include:

- Help the teacher by providing him with means of widening his pupils learning experience.

- Help the teacher to provide his pupils with meaningful source of information.
- Provide the teacher with the means of exposing the pupils to a wide range of learning activities.
- Increase the efficiency of the teacher by providing tutorials and response guidance for individual pupils and small groups.
- Allow members of a group or class share equally from the same teaching experience (Shehu, 2010).

The following instructional Materials will facilitate the effective teaching and learning of subjects in science, arts and social sciences, commercial and introduction technology in secondary school.

Table 1- List of Instructional Facilities in Secondary Schools

Department	Examples of Instructional Aids
Sciences	Chalk board, Castings, globes, and experimental models, charts, pictures, photographs, maps, diagrams, and drawings, films, radio, and television, textbooks, books of problems and exercises, books for recording scientific observations, laboratory manuals, and apparatus e.g. cylinders, burners, flannel board, magnetic boards, manuals for production training, and programmed textbooks, opaque projectors, slides, specimens, chemical like: .regents, photocopy machines, printers etc. Information and Communication Technology (ICT) /Internet facilities (IT)
Arts/Social Sciences	Music instruments, Motion pictures, maps, film clips, filmstrips, slide sequences, microphones, diapositives, transparencies, records and tape recordings, and radio and television broadcasts, computer sets such as scanners, photocopy machines, printers etc. ICT/internet facilities, Chalk board, etc. sport equipment like: jersey, shocks, shoes, whistle, baton for marathon race, javelin, basketball, basketball net, volley ball, table tennis, among others.
Commercial	Textbooks, Dictionaries, Stationary materials, computers, Teaching machines include language-laboratory machines, closed-circuit

	television systems, and computers
Technical	Drawing instruments and materials e.g. drawing board, Tee square, Z-square, $60^{0-}30^{0}$ and 45^{0}, drawing paper, clips or tape, protractor, scale ruler, French curves, eraser etc. appliances used in workbench like bench-vice, hand vice, machine vice, G-Clamp, F-Clamp, saw, rip-saw, cross cut-saw, panel saw, etc. hand cutting tools e.g. chisels, flat chisels, half chisel, cross cut chisel etc. files e.g. hand files, flat file, round file, square file, three square in triangular file, half round file, Hack saw like small hack saw, big hack saw, scrapper etc. Hammer e.g. ball pen head hammer, straight pen head hammer, block head hammer, cross head hammer, soft hammer, punches, center punch, pin punch etc. Screwdriver such as: flat screwdriver, star screw driver etc. workshop equipments, Film projectors, tape recorders, phonographs, and television sets. Monitoring devices include punched cards and various types of automatic apparatus, photocopy machines, printers etc. ICT/Web communication technology/internet facilities among others.

Field Study (2015).

Functions of Instructional Materials in the Promotion of Learning are

- Provide increased interest in learning
- Hold the leaner's attention
- Provide the learner with opportunities of interacting with their social and physical environment (excursion etc) Offer learners opportunity for independent and individualized learning.
- Supply concrete basis for conceptual thinking (Kalgo, 2014).

Based on the above perspectives, the provision of instructional facilities in schools is not only necessary but also important to the effective teaching and learning. It was also discovered from the literature reviewed that instructional materials includes: human and material resources (human resources are well qualified teachers and while materials are visual, audio, audio-visual materials etc.) welfare/health facilities (welfare facilities includes: toilets, school bus, dormitory, rest room, ventilated learning space, caring for the physically challenge students etc. health facilities are school clinic, drugs, and qualified health officials), games/recreational facilities (games facilities are: sporting facilities like school field, field and tracks, basketball court, table tennis etc. recreational facilities includes: school park, creativity day, cultural dance, music festival etc.) and infrastructural facilities in schools (Building like classrooms, staff quarters, bucarterial, hostel, electrical poles, water pipes and tanks etc.). It was clearly understood that while providing school facilities for the schools, provision should be made for the welfare of physically challenge students who may want to use the facilities. Furthermore, advances in science and technology, necessitated that all education stakeholders need to work together as team in order to improve the quality of teaching and learning.

2.3.2 Utilization of Instructional Materials

Proper utilization of instructional materials like textbooks and resource materials being the basic tools that enable effective teaching and learning, their absence or inadequacy make the teacher handle subjects in an abstract manner thus portraying it as dry and non exciting.

It is not possible to deliver effective education without some level of relevant facilities. This has been highlighted by various education analysts and professionals. As observed by Akor (2008), material facilities provide a solid basis for conceptual thinking; increase the propensity of the brain to retain information; make learning more interesting; and take care of differences that may exist among learners. Complimenting this statement, Asiabaka (2008) maintained that in the school system, there are multiplicity of facilities, which facilitate teaching and learning. They are used;

1. To illustrate concepts
2. Provide opportunity for firsthand experience
3. For experimentation and demonstration
4. For scientific investigation and discovery
5. To provide diversity of thoughts
6. For observation and inquiry
7. For development of scientific attitudes and skills

8. To protect the individual and also provide comfort.

The indirect or teaching support facilities such as offices, cafeteria, acoustics, toilets, laundry, mowers, residential halls, common rooms, cleaning materials ground and similar items satisfy the individual's physical and emotional needs (Asiabaka, 2008). They are used to:

a. Increase instructional effectiveness
b. Improve the cleanness, orderliness and safety of facilities
c. Reduce the operational cost and life cycle cost of a building
d. Extend the useful life of a building
e. Increase efficiency and effectiveness of the staff and students
f. Improve building appearance
g. Use data collection and analyses for decision making (Asiabaka, 2008)

More so, Lyons (2012) opined that the cardinal aim of teaching and learning process is to bring about in the learner desirable change in behaviour through critical thinking. This process does not take place in a vacuum but rather in an environment structured to facilitate learning. Wilson (2008) noted that educational outcomes in schools are function of utilization and adequacy of teaching/learning resources in varied ways: Schools that do not have adequate facilities such as workshops, laboratories, classrooms, teaching learning materials are unlikely to post good results. The principles of facilitating effective learning and teaching requires acquisition and use of practical skills while tapping and putting into practice the learners own experience. Students receive inputs from the external environment in form of human and material resources, process them and empty the same into the society as finished products and services. The quality of the products bears a direct relationship with the qualities of the facilities deployed in the process of production.

2.3.3 Maintenance of Instructional Materials

A report by the Department for International Development (DFID) (2010), reiterated the importance of educational facilities in schools. The report made it clear that in an environment where quality facilities are maintained and improved (especially water and sanitation facilities), enrolment and completion rates are improved, there is less teacher absenteeism and learning outcomes are also improved. Therefore it is quite evident from various studies that there is a positive correlation between availability of school facilities and their management and achievement of the set goals and objectives. From, the forgoing, it appears that the availability of instructional materials and effective utilization of instructional media have direct effect on teaching and learning and in essence on students academic performance.

Instructional facilities such as: visual media materials eg. Graphs, charts, diagrams, specimen etc. audio media materials like radio, tapes, phonographs, and wire records etc. textbooks, audio-visual materials like: television, video-taped, DVD/CD, projectors, etc. liboratory apparatus eg. Cylinders, burners, flannel board, magnetic board, chemical, computers/ICT/Web communication, pictures, models, music instruments, teachers guide/manuals and so on.

The above mentioned instructional facilities can be maintained by using the following type of maintenance namely: preventive, predictive and corrective maintenance.

Challenges Militating Against Effective Instructional Supervision in the Secondary Schools

Inadequate Funding: According to Acharu and Solomon (cited in Adakole, Eiriemiokhale & Nnaji, 2016), inadequate infrastructural (instructional) facilities are evidently linked to inadequate funding by Governments. This situation is so bad that funding is usually in response to conditionality's imposed by International Financial Institutions (IFIs). Despite the foregoing, Nigeria still remains a major defaulter in complying with the UNESCO recommendations that at least 26% of the National Budget must be committed to education. Puyate in Acharu and Solomon (2014) supported this when they said that "there is little or no concern on the part of government, lecturers and students for the improvement of the present state of facilities" in our tertiary institutions. Students must be sensitized on how to take good care of educational facilities for the benefit of effective teaching and learning. These challenges present themselves in form of problems and they are discussed hereunder:

- **Poor incentive:** Supervisors at times are dissatisfied with their job because of motivating factors that are minimal. In Nigeria context, several people who are not directly involve in a particular process or a given assignment may receive more compensation and reward more than those who actually carried out the assignment due to the high level of corruption in the country. This singular act may at times affect the way in which instructional supervision is being done in the secondary schools.

- **Limited educational resources:** The issue of scarce resources is an economic one that attempts to rationalise spending in order to avoid waste. Effective instructional supervision however would be difficult to carry out if the funds that are supposed to be available are not there. School administrators as well as instructional supervisors would require certain resources to put things in order before supervision; non-availability of such resources would affect the supervision exercise.

- **Administrative issue:** Administrative inadequacies emerge when planning fails to specify the scope of responsibilities and results that instructional supervision is expected to bring about in a school. Thus, detail planned visits should be made known to the supervisee and the agreement reached between the supervisor and supervisee on the objectives and the procedures. In other words, both instructional supervisor and school administrators must come to term if the instructional supervision is to achieve its objectives. Poor or low provision of instructional materials has been linked to inadequate funding, poor maintenance, erratic power supply and lack of technical manpower (Adakole, et al., 2016).

- **Corruption among major stakeholders in the school system:** Both the school administrators as well as instructional supervisors are found guilty in this regard. Unholy collaboration between the supervisor and the school administrators on account of funds meant to procure necessary materials for the school system would not augur well for instructional supervision in secondary schools. When funds are misappropriated in schools, instructional supervisors are in the best position to identify this problem but if they are been duly rewarded, such problem will continue unabated which would affect the standards that should be achieved in the school system.

- **Political instability:** The frequent change of government usually brings about incessant change of government policies regarding instructional supervision. In Nigeria, it is a common thing that the successive administration always discontinues the policy and programmes put in place by the previous administration. This singular act usually affects the effective supervision of instruction in schools. In other words, inconsistent policies on how instruction in schools should be supervised and the categories of people to be involved would adversely affect and pose a big challenge to instructional supervision especially in secondary schools in Nigeria.

2.4.1 Provision of Welfare/Health Facilities

According to Anike (2015), health is one of the most important services provided by the government in every country of the world. In both the developed and developing nations, a significant proportion of the nation's wealth is devoted to health. This is because in developing countries like Nigeria, with relatively low level of mechanization and automation, health assumes additional dimension of importance in terms of implications for economic activities.

Health for all is a millennium development goal that has been endorsed by all member States of the United Nations. School health has been endorsed for all levels of educational institutions in Nigeria. Provisions of health facilities and health-promotion activities have become important requirement for proprietors of schools. Government has through guidelines on minimum standard in schools nationwide and the inspectoral checklist for schools, provided for establishment of health centres, sickbays and first aid kits in schools, along with other health education programmes and activities. School health services is that part of the comprehensive school health programme provided by physicians, nurse, dentists, health educators, other skilled health personnel, social workers, teachers, and others to appraise, protect and promote the health of students and the school personnel.

Oghenewogaga & Margaret (2014) opined that school health services embraces all the services rendered which help to prevent diseases and correct defects noticeable in children. The school is responsible for the management and care for all children who become sick or injured while at school.

Welfare facilities include: sanitary conveniences and washing facilities, drinking water, accommodation for clothing and facilities for changing, facilities for rest and to eat meals, ventilation and so on. An adequate supply of high-quality drinking water, with an upward drinking jet or suitable cups, should be provided. Water should only be provided in refillable enclosed containers where it cannot be obtained directly from a mains supply. The containers should be refilled at least daily (unless they are chilled water dispensers where the containers are returned to the supplier for refilling). Bottled water/water dispensing systems may still be provided as a secondary source of drinking water. Drinking water does not have to be marked unless there is a significant risk of people drinking polluted water.

Adequate, suitable and secure space should be provided to store workers' own clothing and special clothing. As far as is reasonably practicable the facilities should allow for drying clothing. Changing facilities should also be provided for workers who change into special work clothing. The facilities should be readily accessible from workrooms and washing and eating facilities, and should ensure the privacy of the user, be of sufficient capacity, and be provided with seating. Suitable and sufficient, readily accessible rest facilities should be provided. Seats should be provided for workers to use during breaks. These should be in a place where personal protective equipment need not be worn. Rest areas or rooms should be large enough and have sufficient seats with backrests and tables for the number of students likely to use them at any time, including suitable access and seating which is adequate for the number of disabled people in the school.

Suitable and sufficient facilities should be provided where students regularly eat meals at work. Such facilities should also be provided where food would otherwise likely to be contaminated. School areas can be counted as rest areas and as eating facilities provided they are adequately clean and there is a suitable surface on which to place food. Where provided, eating facilities should include a facility for preparing or obtaining a hot drink. Where hot food cannot be obtained in or reasonably near to the school, students may need to be provided with a means for heating their own food (e.g. microwave oven). School canteens or restaurants may be used as rest facilities provided there is no obligation to purchase food. Suitable rest facilities should be provided for pregnant women and nursing mothers. They should be near to sanitary facilities and, where necessary, include the facility to lie down.

2.4.2 Utilization of Welfare/ Health Facilities

Health facilities like school clinic, rest room, drugs, and school health officials as well as welfare facilities such as: sanitary conveniences and washing facilities, drinking water, accommodation for clothing and facilities for changing, facilities for rest and to eat meals, ventilation and so on should be properly utilized.

Achalu (2012) sees school health services to be those services that take care of the health needs of members of the school community. Implementation of school health education programme is facilitated through establishment of health units in schools, mobile health services, inclusion of health education in the school curriculum, and creation of clubs and societies in school. The integration of school Health Services to the educational system in Nigeria seems not to be given its desired attention particularly at the primary and secondary school. According to the National Policy on Education (2004), effort will be made to provide School health services for all educational institutions. In developed countries of the world school health services has been fully integrated into the school system and constitute an integral aspect of the school and community life. This is due to the realization of the fact that schools constitute the most strategic places to enhance promotion of health and perpetuate healthful practices clearly in the youth life.

The recognition and treatment it deserves must be given, for the promotion and maintenance of the health of secondary school students. Unfortunately, in Nigeria, school health programmes form part of the school curriculum, but seems not to have been acknowledged and accorded the attention and treatment it deserves, particularly, the school health services. Lie (1998) stated that it is a general knowledge that basic health facilities are essential to the development of a healthful school living. In developing countries like Nigeria it has been observed that many schools exist where school health services of any kind have not been considered, medical personnel are hardly found in schools. Students health are hardly appraised counseled, protected from communicable disease; they are not carried out, in cases of sudden illness and injuries such a child is ask to go home. This is a sad development, when compared with what is obtainable in developed counties where school health services have been extended to nursing schools.

In respect to the above, the effective utilisation and maintenance of the available school facilities rest on the school management and the staff members because they are the end users of these facilities. An integral part of the overall management of the instructional facilities in the school, welfare/health facilities, games/recreational facilities and infrastructural facilities lies on the school managers who need to carry out comprehensive assessment of the facilities in their respective domain to determine areas of need and adjustment. Effort of all stakeholders who possess the expertise needed for accurate and up-to-date assessment of all aspects of school facilities was also required.

2.4.3 Maintenance of Welfare/ Health Facilities

Health facilities like school clinic, rest room, drugs, and school health officials as well as welfare facilities such as: sanitary conveniences and washing facilities, drinking water, accommodation for clothing and facilities for changing, facilities for rest and to eat meals, ventilation and so on should be properly maintained. According to Samson-Akpan (2013), school health education programme is that aspect of education programme, which is mainly concerned with the understanding of health and providing necessary experiences and services which are geared towards the maintenance and improvement of the health of both pupils and school personnel

Most of these children go to school with varied health problems that are un-noticed by the parents at home. These health problems constitute serious obstacle to learning, academic progress and many other aspects of children lives. The only measure to be adopted to detect and correct or remedy these problems is through school health services. Through school health services, numerous hidden health problems among secondary school students can be detected and appropriate remedial measures taken.

The need for health care services in secondary schools cannot be overemphasized due to the complex nature of the various physiological and sociological health problems common among adolescents of secondary school age. At this stage, health care services play an important role in addressing these health problems.

The maintenance of welfare/health facilities should be done either by preventive maintenance, predictive maintenance or corrective maintenance.

Predictive maintenance should be carried out on the school health facilities like clinic, equipments in rest rooms and drugs. Bamiro, Nzediegwu, Oladejo, Rahaman & Adebayo, (2011) noted that predictive maintenance (PdM) techniques are designed to help determine the condition of in-service equipment in order to predict when maintenance should be performed. This approach promises cost savings over routine or time-based preventive maintenance, because tasks are performed only when warranted. The main promise of Predictive Maintenance is to allow convenient scheduling of corrective maintenance, and to prevent unexpected equipment failures. The key is "the right information in the right time". By knowing which equipment needs maintenance, maintenance work can be better planned (spare parts, people, etc.) and what would have been "unplanned stops" are transformed to shorter and fewer "planned stops", thus increasing plant availability. Other potential advantages include increased equipment lifetime, increased plant safety, fewer accidents with negative impact on environment, and optimized spare parts handling. PdM evaluates the condition of equipment by performing periodic or continuous (online) equipment condition monitoring. The ultimate goal of PdM is to perform maintenance at a scheduled point in time when the maintenance activity is most cost-effective and before the equipment loses performance within a threshold. This is in contrast to time- and/or operation count-based maintenance, where a piece of equipment gets maintained whether it needs it or not. Time-based maintenance is labour-intensive, ineffective in identifying problems that develop between scheduled inspections, and is not cost-effective.

The "predictive" component of predictive maintenance stems from the goal of predicting the future trend of the equipment's condition. This approach uses principles of statistical process control to determine at what point in the future maintenance activities will be appropriate. Most PdM inspections are performed while equipment is in service, thereby minimizing disruption of normal system operations. Adoption of PdM can result in substantial cost savings and higher system reliability.

The primary goal of maintenance is to avoid or mitigate the consequences of failure of equipment. This may be by preventing the failure before it actually occurs which Planned Maintenance and Condition Based Maintenance help to achieve. It is designed to preserve and restore equipment reliability by replacing worn components before they actually fail. Preventive maintenance activities include partial or complete overhauls at specified periods, oil changes, lubrication, minor adjustments, and so on. In addition, workers can record equipment deterioration so they know how to replace or repair worn out parts before they cause system failure. The ideal preventive maintenance programme would prevent all equipment failure before it occurs (Bamiro, Nzediegwu, Oladejo, Rahaman & Adebayo, 2011).

Preventative maintenance for various equipment and facilities is quite nuanced. For instance, maintaining certain equipment like: sanitary conveniences and washing facilities, drinking water, accommodation for clothing and facilities for changing, facilities for rest and to eat meals, ventilation and so on should be maintain using preventative maintenance checklist which includes small checks which can significantly extend service life. Furthermore, other considerations such as weather and equipment are taken into account; for instance, in the case of HVAC systems, maintenance is often performed before the hottest time of the year (Preventive Maintenance Tips Crucial to Your Air Conditioner Performance, 2016).

The corrective maintenance should be done on school clinic buildings, rest rooms, water taps, tanks etc. A French official norm defines "corrective maintenance" as maintenance which is carried out after failure detection and is aimed at restoring an asset to a condition in which it can perform its intended function (Nakajima 2011). Games/recreational facilities are the third elements of school facilities discussed in this study.

2.5.1 Provision of Games/Recreational Facilities

For the purpose of clarification, games/recreational facilities will be conceptualized as all school sports and relaxation facilities in secondary schools in North Central Zone, Nigeria. This shall be discussed under the broad heading of provision of games/recreational facilities, utilization of games/recreational facilities and maintenance of games/recreational facilities respectively.

According to Ogundairo (2010) sport refers to any activity that is competitive in nature and must have recorded history of development, rules and regulations involving physical exertion and organized associations such as squash, rackets, soccer, hockey , others. These games mentioned have origins, rules and regulations governing their operation and each of these games has association (Ogundaira, 2010). In a similar view Oxford Advanced Learners Dictionary defines sport as the physical activity done for exercise and pleasure, usually on a special area and according to fixed rules.

Australia (2018) relaxation is a state where you feel calm and can manage your stress or anxiety. Benson, Casey, Dadoly (2013) observed that while there are no specific guidelines for how much relaxation a person should incorporate into their lifestyle, making time to unwind and enjoy life is an important part of maintaining good health. Deep relaxation, like meditation, when practiced regularly not only relieves stress and anxiety, but also is shown to improve mood. Deep relaxation has many other potential benefits as well—it can decrease blood pressure, relieve pain, and improve your immune and cardiovascular systems. Making time to find enjoyment is also an important element of relaxation. Laughing decreases pain, may help your heart and lungs, promotes muscle relaxation and can reduce anxiety.

Getting the appropriate amount of exercise benefits nearly all aspects of a person's health. Not only does exercise help control weight, it also improves mental health, mood, chances of living longer, and the strength of your bones and muscles. Children and adolescents need an hour of physical activity every day, with vigorous activity at least 3 days each week. They also need muscle and bone strengthening exercises at least 3 days of the week. Moderate intensive activities include briskly walking, gardening, playing doubles tennis or a leisurely bike ride. Vigorous intensive activities include jogging, running, swimming laps, jumping rope, hiking or group activities like Zumba or step aerobics. Muscle-strengthening activities to include in your routine twice a week include yoga, lifting weights, resistance band exercises and body-weight resistance activities like push ups and sit ups (http://www.cdc.gov/physicalactivity, 2018).

The importance of sports and games in school encompasses more than just the benefit of physical activity. Increases in self-esteem and mental alertness make school sports and games necessary for every school age child. Games and sports are an integral part of a student's life. A student should study hard to be successful in competitive examinations. But, he should also play games and sports to enjoy the health and vigor of life. The benefits of playing sports are multiple, and it leads to balanced mental and physical growth. It teaches the children life skills like teamwork, leadership, patience. It inculcates discipline and playing within the rules. Builds sportsmanship, which is to play within the spirits of the game and to deal with both winning and losing with grace. All of these experiences and habits are also useful in adult life.

Playing and excelling in sports also teaches kids the importance of hard work, perseverance, learning from failure, and importance of grasping opportunities. Schools need to provide both a supervised and unsupervised sports environment. Supervised is a focused approach with coaches in different sports, which children can choose. But too much supervised sports can also be a detriment, because it may be like a chore and lead to pressure, especially for younger kids. Western world has made the sporting structure in schools quite rigid, which can have negative effects. Unsupervised sporting activities give children a choice of sports and let them loose on the fields, with just basic monitoring to ensure everyone is safe. Let them form their own teams, rules etc. Let it be fun and the creativity flow without adult intervention.

Sports equipment are different from sport facilities though they are all classes of physical education apparatus. Ogundairo (2010) also define sport equipment as those disposable items used in sports. Lee (2014) opined badminton rackets can be made from several types of materials. Depending on the material selection, this can result in different combinations of racket weight, balance points and string tensions. There are two types of shuttlecocks - plastic and feathered shuttlecocks. Plastic shuttlecocks are far more durable compared to the feathered types which are commonly used. However, plastic shuttlecocks are only recommended for beginners who are just starting out. This is because feathered shuttlecocks are expensive and fray easily especially if the wrong technique is used. Hence, plastic shuttlecocks are good for beginners to use for training. Plastic shuttlecocks are usually used by young children who play badminton for recreation. Plastic shuttlecocks tend to travel shorter distances as they are heavier. Hence, they are good for building strength as you make the transition to feathered shuttlecocks. Most people will progress to using feathered shuttlecocks as they are used at all competitive tournaments (Lee, 2014).

2.5.2 Utilization of Games/ Recreational Facilities

Ogundairo (2010) define sport equipment as those disposable items used in sports. He identified sport equipment as follows: Horizontal bars, Weight-lifting materials, Basket ball posts and Hockey posts athletic track, stadia, soccer pitches, basket ball court, lawn tennis court, gymnasium, badminton courts, and volley ball courts. He observed that sport equipment as those disposable items used in sports. According to Lee (2014), table tennis equipment, consisting of racket, ball, net, and table, come in a wide variety from a multitude of manufacturers. Choosing the correct equipment to fit your skill level and playing style is very important. Luckily, there are standards/ratings in table tennis equipment that takes much of the guesswork out of determining the characteristics of a particular blade (the main body of the paddle) and rubber (the playing surface).

According to Anejo & Okwori (2004) the administrator should determine carefully in priority order, if necessary, those facility areas and items of equipment mostly needed to enable the various programmes to function at optimum levels of educational efficiency. In conjunction with school authorities and staff personnel the administrator should establish a policy to be employed in the use, acquisition and maintenance of facilities and equipment (Akinsanmi, 1992). He should introduce policies assuring safeguarding of participants as well as the protection of the facilities. A well-planned schedule, which takes into consideration, times of use, groups involved and supervisory coverage should be made. Every effort should be made to orientate all personnel who use school facilities and equipment. The administrator should institute on accurate system of record keeping which can function to advantage in improving the management of facilities and equipment. The Journal of Nigeria Academy of Sport Administration 1 (1 and 2) p.64 says the extent to which facilities and equipment are properly used and maintained will depend in large measure upon the attention devoted to this area of school operation by instructional supervisory personnel in the school. Without their understanding and help it is difficult to accomplish a genuine concern on the part of the students in the use of facilities and equipment.

A well planned schedule which takes into consideration times of use of facilities, groups involved in the use, activities involved and supervisory coverage should be made as a control measure. Supervision of facilities should be done regularly to detect areas that need servicing and repairs.

Maintenance personnel who are trained and qualified in the area of facilities should be employed to take charge of sports facilities maintenance. Only bana-fide students and authorized groups from the community should be allowed the use of the school's sport facilities. A policy to be employed in the use, acquisition and maintenance of facilities should be established. There should be written rules, regulations and safeguard activities being engaged in.

2.5.3 Maintenance of Games/ Recreational Facilities

One of the most important areas of administrative concern of the sports administrators involves the management of facilities and equipment in physical education and sport programmes (Harun, Salamudin & Hushin, 2013). The existence of sports facilities and equipment is of vital importance in the conduct of physical education, intramural sports and other sport programmes. The facilities and equipment available in a school for the conduct of sports and games programmes determine to considerable extent the type of sports programmes that can be offered. The issue of poor maintenance does not only involving sports facilities, but is a national problem plaguing management of government assets and all government-owned premises (Harun, Salamudin & Hushin, 2013).

Lee, Macfarlane & Cerin (2013), The Recreational Facility Audit Tool (RecFAT) was developed to objectively measure the characteristics of recreational facilities across 10 domains: the availability of sports facilities, accessibility to the facility, availability of supportive amenities, conditions of changing rooms, conditions of toilets, management, policy, environmental safety, aesthetics, and social environment. Ten Domains of the RecFAT At the start of the facility audit, the auditors were first required to specify the Context (indoor or outdoor) and Nature (public, residential, or commercial) of the examined recreational facilities, followed by the evaluation of the 10 domains. Each domain is discussed below.

Availability of Sports Facilities: Availability of sports facilities examined the presence of sports courts and equipment within the examined recreational facilities. The presence of the following 14 types of sports facilities was examined: tennis courts, table tennis courts, badminton courts, basketball courts, volleyball courts, soccer pitches, squash courts, walking trails, bike lanes, playgrounds for children, weight training gyms, cardio training gyms, sport climbing walls, and swimming pools.

Accessibility: Accessibility examined the degree of ease by which people can access the recreational facility. It was important to identify potential barriers and facilitators such as the presence of slopes, staircases, highways, public transport and parking lots near or within the recreational facilities.

Availability of Supportive Amenities: According to Crawford (cited in Lee, et al., 2013), this domain examined the presence of complementary resources that support the facility users during their visits. These amenities included free water fountains, rubbish bins, seats, bins for pet droppings, kiosks or shops for snacks or beverages, lockers, air conditioning, changing rooms and toilets.

Conditions of changing rooms: This assessed the hygiene and security as well as the presence of showers and other supportive equipment, including availability of hand dryers or paper towels. Similarly, Conditions of toilets assessed the hygiene, security, availability of flushable sit-toilets (some provide non-flushable squat toilets only), toilet paper, water taps for hand-washing, as well as the dryness of the floors. The auditors also evaluated the presence of any unpleasant smell inside the changing rooms and toilets. Although the conditions of changing rooms and toilets have not been commonly examined in previous studies, the panel of experts believed these measures may contribute to the general impression of the cleanliness and safety of the recreational facilities and hence affect usage.

Management: Management assessed the maintenance practices and operations within the recreational facilities, including items such as the repair of broken equipment, emptying of rubbish bins and daily cleaning of facilities. The availability of clear signage and well-posted regulations was also assessed, along with the presence of helpful and friendly staff (Lee, et. al. 2013) by making standardized enquiries to the staff during the audits. If an indoor sports facility was examined, the indoor temperature was measured using an electronic thermometer.

Policy: Policy assessed if regulations restricted certain behaviors at the facility, including smoking, mobile phone use, dog walking, cycling, and food consumption. In addition, opening hours, the nature of the booking system, and costs of using the facilities were assessed. Although this policy domain was also not commonly included in previous studies, the panel of experts maintains that the regulations imposed on the facility users may influence facility usage.

Environmental safety: This domain assessed safety signage and conditions inside and near the recreational facilities, and included features such as the presence of undesirable gangs, well-fenced sports grounds, broken glass or needles, stray dogs and cats, good lighting within and near the facilities, plus well-maintained equipment, floors and pathways.

Aesthetics: Aesthetics assessed the pleasantness of the environment. The auditors examined if there were trees, flowers, natural sights, sounds of birds, rubbish, animal waste and unpleasant smells inside the examined recreational facilities. In addition, undesirable behaviours such as spitting or smoking visible inside the recreational facilities were also examined.

Social environment: Social environment assessed the presence of physically active or sedentary people of different ages inside the recreational facilities.

The equipment room is a very important part of equipment care and use. The room should be clean, dry and well ventilated, and must be provided with the greatest degree of security. Maximum security, controlled conditions and storage devices facilities the long-range preservation of equipment and supplies. A policy in maintenance of and administrative responsibility should be clear to all in the programmes. All directors or coaches must be made responsible for the basic care of equipment. Information must be given to those responsible as to the proper handling of leather goods, athletic shoes, and inflated materials, all rubber equipment, and fabrics used in sports uniforms, plastic protective equipment and laundering factors.

For proper management and care of sport equipment, inventories of all equipment should receive the undivided attention of every sports director and coach. This is necessary if the funds used to purchase the equipment are to be employed efficient.

2.6.1 Provision of Infrastructural Facilities in Secondary Schools

For the purpose of clarification, provision of educational facilities in Nigeria schools shall be discussed from the historical perspective, meaning and categories of school facilities provision. Availability of educational facilities enhances students' learning by allowing them to be involved in demonstrations and practice which would continue to build their skills (Oyinloye and Oluwalola, 2014).

According to Uzuegbu, Mbadiwe and Anulobi (2013), the term "availability" relates to how much instructional materials are on hand, to which teachers and learners have access. It refers to the condition of being obtainable or accessible at a particular point in time. It expresses how materials can easily be gotten and used for a particular purpose and time. It also states how operable or usable resources are upon demand to perform its designated or required functions. In this study, availability means the condition with which teachers have access and make use of functional instructional materials for effective teaching and learning. It refers to the quality, quantity, functionality and disposability of such instructional materials to teachers at every point in time for effective utilization. As a concept, it is an umbrella term that denotes the serviceability, resilience, reliability and maintainability of a component instrument. It is vital to note that the development of education in any society irrespective of its level depends largely on availability and adequacy of educational materials (Adakole, et al., 2016).

Historical Perspective of School Facilities Provision

The historical perspective of school facilities provision in Nigeria schools shall be discussed from two perspectives which include colonial era and post - colonial era:

Colonial era: During the colonial era, the provision of education and its facilities was largely in the hands of Christian missionaries, especially in the southern part of the country, during this period there was inadequate provision of classrooms and school buildings for teaching and learning. This under provision of learning facilities was attributed to the fact that formal education was being provided mainly by the Christian missionaries who received little or no financial assistance from their home governments. With the little financial assistance they received from their friends and home churches they could not provide enough buildings to accommodate their pupils and teachers. Consequently church buildings, tree shades and some private homes were also used for teaching and learning purposes. The interest of the colonial government as manifested in 1872 with the provision of some grants-in-aid of thirty pounds to each of the major missions that met certain criteria in educational provision. The grants were mainly used for erecting school buildings. Before that year, there was no coordination of the efforts of the missionary bodies in regards to education provision, nor did the colonial government exercise any control over education. Government supervision and control of education started in 1882 with the passage of the Education ordinance covering the whole of British West Africa. This code provided for the establishment of an inspectorate to serve their focus colonies. With the increase of the grants-in –aid to the qualified missions and the inspection of schools by the colonial government, there was a general improvement in the standards of school facilities and sanitary conditions in primary school (Adesina, 1981).

During the depression of the 1930's government grants in- aid was stopped. No new school buildings were constructed and the existing ones were overcrowded. This state of affairs continued until the late 1940’s when the government was in a position to continue giving grants to qualified schools. In spite of the resumption of payment of grants to qualified schools there was still acute shortage of school buildings and classroom in the early 1950’s. The problem of acute shortage of school buildings and classrooms characterized the introduction of universal primary education in the then Eastern and Western Regions shortly before Nigeria attained independence in 1960. This was in spite of the extra efforts made by the two regional governments to expand their school facilities in anticipation of increases in primary school enrolments. In sum, this period was marked by poor provision of school facilities especially for primary education in mission schools. School buildings served the primary purpose of providing shelters for pupils and their teachers, not necessarily to accommodate the educational programme. There was no recorded case of any sum of money being budgeted for maintenance of school buildings either by the missions or the government. There was virtually no involvement of school staff or members of the local community in planning and designing new schools or the extension of the existing ones.

Post- colonial era: After the attainment of independence in 1960 the then Regional Governments made concerted efforts to expand their educational facilities. These efforts were, however, generally short of meeting the demand for adequate learning spaces in both mission and government-owned primary and secondary schools. The situation became worsen, especially the Eastern states of the country following the end of the Nigerian civil war in 1970 and the destruction of many school buildings during the war. The end of the war marked the beginning of the take-over of mission and other privately owned schools by the then existing state governments all in bid to exercise greater control over education in their states. More pressure was exerted on school facilities following the launching of the universal primary education (UPE) throughout the country in 1976. There was, again, a shortage of classrooms in the primary schools as was the case with the launching of a similar scheme in the then Western and Eastern Regions. This was due to an underestimation of the number of prospective school enrolment. Nwagwu (2004), reporting on the state of affairs after the landing of the UPE, observed that the provision of school facilities in the country had always been inadequate.

The Federal Government, in its second and third national development plans, noted the inadequacy of school facilities and its impact on educational quality in the country. Consequently, it made provision for expanding and improving the existing school facilities in its third national Development plan. In recent times, the same government has continued to earmark some amount of money for renovation of facilities (Ehiametalor, 2001).

Types of Infrastructural Facilities in Secondary Schools

Olelewe, Nzeadibe and Nzeadibe (2014) observed that physical resources include school facilities such as classrooms, lecture theatres, auditoriums, typing pools, administrative block, libraries, laboratories, workshops, gymnasia, assembly halls, special rooms like sickbay, staff quarters, students' hostels, kitchen, cafeteria, lavatory, etc while financial resources are the monetary inputs available for and expended on the education system. According to Abdullahi and Wan-Zahari (2015), facilities can be categorized into physical and non-physical facilities.

Physical Facilities in Secondary Schools: Abdullahi &Wan-Zahari (2015) opined that the physical facilities comprise of buildings, land, compound, equipment's, tools, space and so on. In this study, the following physical facilities shall be examined:

Libraries: Oxford Advanced Learners Dictionary (2018) described a library as a building or room in which collection of books, tapes, newspapers etc. are kept for people to read, study or borrow. Library is an essential factor in teaching-learning process. It forms one of the most important educational services. The educational process functions in a world of books. Joseph & Philias (2011) noted that the chief purpose of a school library is to make available to the pupil, at his easy convenience, all books, periodicals and other reproduced materials which are of interest and value to him but which are not provided or assigned to him as basic or supplementary textbooks. The importance of library has been demonstrated by the government when she expressed in the National Policy on Education (NPE, 2004) that every state Ministry needs to provide funds for the establishment of libraries in all her educational institutions and to train librarians and library assistants. As a resource, it occupies a central and primary place in any school system. It supports all functions of school-teaching and provides service and guidance to its readers.

According to Rufai, BinMusta'amal, Bin Kamin, & Sukri (2013), laboratory work:

- Stimulates learners' interests as they are made to personally engage in useful scientific activities and experimentation;
- Promotes that science is not only products or process;
- Affords the learner the basic skills and scientific method of problem solving;
- Knowledge obtained through laboratory work promotes long term memory.

Laboratory helps to provide a forum wherein the learner is given the exercise to subjects, his beliefs, ideas, statements, theoretical propositions etc. to some forms of experimental test (Soyibo, 2010). However, as important, the laboratory in the process of teaching and learning, it is pertinent to note that there are not adequate in our secondary schools in Nigeria especially North-Central Zone of Nigeria.

Classrooms: Availability of classrooms in our secondary schools are prerequisite for effective teaching and learning which in effect will manifest in better academic performance of students. These classrooms should be adequately ventilated spacious and properly ceiled to ensure conducive atmosphere for effective teaching and learning. Morphet, Johns & Reller cited in Joseph & Philias (2011) agreed with the above assertion and stated that school building should be a stimulating agency and that the classroom with an adequate space and equipment will help teachers concretize teaching and may promote the growth of learning. United Nations Educational, Scientific and Cultural organization (UNESCO) (2015) having seen the effect of adequate and conducive classroom has on teaching and learning and the realization of the school objectives stipulated twenty-five pupils per class with an equivalent number of desks and chairs healthily arranged in rows.

The implication of this is that non-availability or inadequate classrooms have an adverse effect on teaching and learning and invariably on students' academic performance. Adebayo (2009) stated that "lack of classroom accommodation in many Nigerian secondary schools, North-Central States inclusive, pushes the teachers to teach under unhealthy environment" Adesina (2013) observed that this type of condition can never augur well for effective teaching and learning. Citing a News watch special report on Nigeria in the eyes of the child, Joseph & Philias (2011) quoted a school child as saying that "the classrooms are full of gallops; we need new buildings. If they will provide electricity in the school it will be Okay. The school is too tight. We need space. They stated further that many teachers who are interested and willing to teach may be frustrated when confronted with the problems offered by the school building (classroom).

Residential facilities: These include hostels and hostel materials, refectory and refectory materials, staff quarters and other associated materials meant to provide residential convenience for staff and students (Lawanson, 2011).

General–Purpose Facilities: These are materials that can easily be converted to uses other than those for which they are being used. Such materials in most cases are made of space materials. There are basically two types of open space materials namely: The developed and the undeveloped spaces. Developed Open Space is used as sporting pitches, fields, lawn, school farms, access roads, parking lots and so on. Their uses can easily be modified as occasion demands. The Undeveloped Open Spaces are all the land area within the legal authority of the institution which is yet to be developed into specific uses (Lawanson, 2011).

2.6.2 Utilization of Infrastructural Facilities in Secondary Schools

This aspect of the study will examine the utilization of infrastructural facilities.

According to SSCE (2009), it is estimated that 75% of the school infrastructure in the project states is in very poor condition. In some states, particularly, in the rural schools, the situation is worse than this. On the condition of existing school buildings and some school facilities management practices in some of the project states, the ESSPIN (2009) report as follows, most of the school buildings are in poor condition. One of the main reasons for the current chronic situation is that the education sector, particularly infrastructure, suffered from an approximately 20 years period of neglect during the military regime. The situation has been exacerbated by the fact that most of the buildings that were constructed in recent years are also of very poor quality. They have been badly built because of poor procurement practices, poor management of construction, poor workmanship, the use of poor quality materials, a lack of supervision during construction, even where building have been constructed to an acceptable standard (generally those more than 20 years old) there has been a severe lack of maintenance which has resulted in many buildings being in a state of disrepair and thus having a reduced lifespan.

There is no reason to believe that those observations are peculiar to these state projects alone. Izobo-Martins, Dare-Abel, & Ayo-Vaughan (2014) in a study of state of secondary school facilities in Ogun State, Nigeria reported that some of these infrastructures are below acceptable standards and in few cases nonexistent. The researchers also reported that most of the schools are less than 20 years old but the conditions of the infrastructure are not commensurate, since some of the older schools have better maintained and functional infrastructure. The state of the electrical installations is fair in 24. 35% of the locations but need urgent maintenance attention in 77% of the locations.

The general picture presented by the conditions of school facilities in Nigeria is that of poor state and inadequacy in terms of number and quality. The procedures adopted in planning and designing them have not been made explicit in literature, neither has there been active participation of teachers, school heads and community citizens in planning and designing the schools. The general trend seems to be that the educational architect in a state or federal ministry of education produces prototype working drawings of school buildings, based probably on experience, which are used for setting up the same type of building on different sites in different localities. Other relevant officials of the ministry of education get involved in the process mainly during site meetings with the architect, engineer and building contractors shortly before the construction work commences and as it proceeds. Once the building project has been completed, inspected by the ministry of works and taken over by the Ministry of Education, everything about its maintenance is usually forgotten.

Despite the inadequacy of educational facilities, the fact remains that even those that are available are not properly utilized and maintained. For example, the New Nigerian of 27th April 1974 in an article titled "Teachers' Transfer and Supervision" reports that constant transfer and lack of supervision causes under-utilization of teachers in Nigeria.

Provision and acquisition of facilities is one thing, effective utilization of such facilities is another thing. Auta (2012) defined utilization as the degree or extent to which the facilities have been put to effective use. However, facilities can also be under-utilized or over utilized. If over utilized, the facilities will be over stretched which may lead to breakdown, thereby defeating the objectives which they were meant to achieve. For example, a printing machine used for a long time without adequate service and oiling will after sometime breakdown totally. Some equipment in vocational training were bought without training the staff on how to use them accordingly. They were dumped for years. Therefore, they are under-utilized. When facilities are under-utilized, it leads to wastage of resources. For example, the biological microscope kept for long in the store, not used and cleaned properly are under-utilized, therefore, it leads to wastage of resources. Conventionally, school facilities are used by the pupils' and teachers' for effective teaching and learning.

According to Alonsabe (2011), the effective use of school buildings involves the following:

1. Ascertaining that each room in the building is used to its capacity. It will amount to under-utilisation if a classroom meant for 40 pupils is occupied by 20 pupils or less for most of the school year. On the other hand assigning 50 or more children to a classroom meant for 40 of them is tantamount to overcrowding which is educationally unadvisable.
2. Ensuring that assignment of space reflects the best educational use of that space. Educational effectiveness in the use of space is not ensured by holding literature or history lessons in chemistry or biology laboratories, for instance. Nor is it educationally effective to English or biology lessons in the fine arts room. In each of the above-cited cases, there may be much distraction of students' attention when lessons are not conducted in the appropriate learning spaces.
3. Ensuring that special rooms like music rooms, the science laboratories and fine arts rooms are used only for the study of the special subjects for which they were designed.
4. Making sure that all non-instructional spaces are used for their intended purposes. When stores are used for purposes other than storing equipment, materials and supplies, they may be put in places where they may easily be damaged or stolen. Unless adequate care is taken, it may take some time to locate some of them when they are needed.

By studying the allocation of students to learning spaces as reflected on the school time table and armed with a good knowledge of student enrolment in each class, the school head can have an idea of how spaces are scheduled for use in the school. He/she can get better results by occasionally conducting space utilization studies in the school. Following this he/she can make such necessary amendments as will ensure the optimal use of spaces in the school. As in the case of teaching aids, the school head has to make sure that they are available in the school and are optimally used to facilitate students' learning. It is not uncommon to find some useful audiovisuals, some scientific equipment and other materials in some school stores that have not been put into use for years. The reason for this may be either that the teachers do not know that such materials exist in the school, or that they are not skilled in using them. In some cases the teachers may be aware of the availability of the materials, where they are aware, they may know how to use them or they may not be willing to use them. Alonsabe (2011) opined that the school head teacher can encourage effective utilization of school materials and equipment by:

a. Producing and giving to every teacher, a list of the available teaching equipment, materials and supplies in their respective subject areas and encouraging them to sign them out and make use of them regularly.
b. He should make them aware of any newly purchased equipment in the school and if necessary, organize a workshop, demonstration or talk on how to use them by relevant teachers.
c. He should undertake classroom visits from time to time to see how they use the available teaching materials effectively.
d. Complementing his/her observation with analysis of data on how such equipment are signed out by the teachers. This presupposes that such

records are kept by the stores man or whoever is in charge of the equipment and materials. By this approach, teachers will be willing to use these teaching aids, and the principal will be aware of the one that may require replacement or repairs or those that can be improvised.

It is often the case that some equipment and materials in some schools cannot be put into any use either because they are unserviceable or because of obsolescence. In such cases it may be advisable to sell them if there are any buyers. In the absence of any buyers, it may be better to give them out or dispose of them in any way possible instead of leaving them in the school store occupying space unnecessarily. All these have to be done, however, with the approval of the appropriate ministry of education authorities and the school proprietors (Alonsabe, 2011).

2.6.3 Maintenance of Infrastructural Facilities in Secondary Schools.

Maintenance of infrastructural facilities is a process where one endeavours to continue keeping facilities in existence, in good condition and working order (Boniface, Chegge, Thinguri & Makatiani, 2014). To Auta (2012) maintenance literarily mean the act of keeping something in good condition by checking or repairing it regularly. It could also be the act of making a state or situation continues as far as the usage of a particular school facilities are concerned. This involves an act of taking proper care of equipment by strictly being guided by specific regulations governing the use of such equipment. Maintenance of infrastructural facilities implies activities put in place to restore the physical conditions of facilities. In similar vein, NOUN (2014) maintained that maintenance can also be those activities put in place to keep and restore the original condition of an item. When activities such as repairs, servicing, painting, etc., are put in place to keep or restore the original condition of an item, the item is being maintained.

Maintenance of school infrastructural facilities therefore implies the process of or any other activities that involve repairs, servicing, painting, etc and which is been carried out on any of the components of school facilities in an attempt to keep or restore it back to the original condition and more importantly to ensure that the school facilities are in good shape.

In similar vein, the National Open University of Nigeria (2014) opined that, the rapid expansion of students' enrolment in Nigeria since the attainment of political independence has led to inadequacy of resources available to education. Poor funding of schools hinders them from expansion and replacement of ageing school buildings. The classrooms are overcrowded owing to the increase in enrolment and inelastic condition of school buildings.

Types of School Infrastructural Facilities Maintenance

Maintenance services of school infrastructural facilities may take any of the following forms:

According to Okeke (2014), approaches to facilities management in the classroom is incomplete without facilities maintenance which involves renovation and modernization of old structures and materials. Human resources which include teaching and non-teaching staff also need maintenance to keep them functioning effectively. Facility maintenance plan should take the following approaches.

1. Preventive maintenance
2. Routine maintenance
3. Emergency repairs and
4. Predictive maintenance.

Preventive maintenance is carried out to avoid breakdown and ensure optimal performance of the facility. Routine maintenance is carried out periodically - monthly, quarterly or even annually depending on the agreed schedule by the class/school manager, Follow manufacturers guide to avoid breakdown.

Emergency Repairs takes place when a facility breaks down and urgent measures or steps had to be taken to remedy the situation. This normally occurs where people lack maintenance culture. It does require collective decision making because of limited time. It is expensive because the extent of damage may demand total replacement or high cost of repair. This type of maintenance is otherwise known as emergency maintenance; it is that maintenance that aimed at rectifying breakdowns in any component of the school facility. It involves preparation for a possible but unpredictable breakdown of school facility by procuring in advance spare parts that will be needed in case of breakdown. Breakdown maintenance is the maintenance carried out after the breakdowns of the school facilities which will require heavy monetary outlay (NOUN, 2014).

Predictive maintenance - Here computer software is used to predict equipment failure. This is based on age, user demand and performance measures, (Okeke, 2014). This form of maintenance is aimed at preventing the occurrence of total breakdowns of school facilities available for use. It is also aimed at preventing situations which can put parts of the school facilities out of use. Examples of services under preventive maintenance are timely and regular servicing of vehicles, generating sets, duplicating machines, cutting of trees, periodic repair and painting of classroom building and other school buildings (NOUN, 2014). Ineffective and inefficient maintenance leads to total breakdown and invariably breakdown maintenance.

In this regard, collective decision-making may not be possible because there may be limited time to bring together all the necessary individuals to make decisions. It is also expensive because the extent of damage may demand total replacement of the facility or high cost of repair. In some cases, the breakdown may cause injury or even death to staff and or students of the school. The resultant effect may be high insurance premium or prevent the use of the facility for teaching and learning until repair had been effected. School managers should proactively develop and implement facilities management plan for addressing facility needs.

No maintenance at all policy: - It suggests that there is no need to charge maintenance against public fund. Government intervenes only when there is a disaster.

Adhoc Maintenance:- Certain amount of money is planned for unplanned maintenance to be used at the discretion of the school administrator. If it is centrally reserved or disbursed to the school administrator, it is given to the officer in charge of works, who determine what maintenance to effect. However, the money is always too small in relation to the work to be done and the funds are disbursed according to priority.

Running Maintenance: For example the repair carried out on the school generating set in the day while the lesson is going on and before it will be needed at night, the repair is completed, and the repair/servicing done on the school van during the school lesson period and before the students are ready to be taken back to their various homes/bus stop, the repair is over. This type of maintenance is referred to as running maintenance.

Shutdown Maintenance: This type of maintenance is carried out only when the operations of the school have been closed or postponed or suspended for a given period of time to carry out the maintenance work. This type of maintenance is carried out when a major work/repair is to be done in a classroom. For example, if a windstorm damages a classroom block or if a building collapse in the school, the school may be shut for a specific period of time to carry out major repair on the dilapidated building occasioned by storm.

Fixed – Time Maintenance: Which is dependent on time is only effective in the following circumstances; when failure is clearly time dependent; When the component is expected to wear out within the time of the unit. Example of this type of maintenance are changing brakepads, changing weak engine oil, draining burnt coolants (Uchendu, Ekanem & Jonah, 2013).

Routine maintenance- This is carried out periodically as scheduled by the school managers. Facilities may be serviced monthly, quarterly or even annually depending on the agreed schedule. Manufacturers guide provide information on the nature and maintenance intervals.

School Infrastructural Facilities Maintenance Procedures

From its conceptualisation, it is apparent that school facilities maintenance is a challenging function and its execution requires apposite knowledge and skills.

Certain issues according to Amanchukwu & Nwachukwu (2015) might affect school facilities maintenance in various ways: One of the ways is that initially, it might be that the school facilities were put in place to accommodate a certain number of learners. As years roll by, more children are enrolled in the school system and no additional structures were built. Things will start breaking down and learners would start struggling for the few available facilities/equipment. The typical example is when the learners start rushing for a few seats available for their lectures; some of these benches are damaged and at times injuries occurs among the students. This is part of the dilemmas in the classroom as identified by Amanchukwu & Obijuru (2013). It is absolutely necessary to add more facilities and equipment as population increases to avoid unnecessary disruptions during teaching and learning.

Also, many people claim to know how to repair a lot of things in the school premises and end up doing shabby job that do not last. It becomes obvious that either we do not employ the services of the right people or we are trying to cut corners; that actually create more problems than expected and leads to more wastages. Another important factor is that many Heads of secondary schools do not delegate duties. They want to have an eye on everything that is being done thereby delaying other areas that need urgent attention. There should be decentralization of authority and duty so as to achieve success, since the essence of management is to achieve success.

It has been observed that government property suffer a lot of neglect. The users of these properties occasionally feel that they are government property therefore it is nobody's business. This non-challant attitude must stop so as to detect faults in good time and adequate and instant repairs made to avoid wastages. In addition, lack of maintenance culture has eaten deep into the fabrics of the nation's citizenry. If the school authorities (Head teachers, teachers) and other workers take care of these properties, learners will emulate them and go a long way preventing damages to those properties.

Furthermore, some school Heads state clearly that even though they detect these faults in good time the school does not generate enough funds for such repairs. In this case it becomes obvious that they are willing to carry out repairs but the financial resources are not there. At times one discovers that there is lack of cooperation in the school which makes it difficult for the principal to take vital decisions. If the idea is put into vote, the principal might not get enough votes to support his/her noble ideas about what he/she want to do. There should be cooperative attitude among teachers in the Nigerian secondary schools for success to be achieved.

It has also been established that most of the time the ministry officials fail to attend to the needs of the schools due to lack of funds (Amanchukwu & Nwachukwu, 2015). The latter is necessary for the smooth running of the school. It is very essential to reserve some funds for emergences at our various schools of learning if educational goals will be achieved.

Vandalization of school facilities is another factor that should be looked into. Schools should teach the learners the culture of maintaining school property, which will help them not to destroy but cherish them. Regular supervision is not carried out by the ministry of education officials regularly and that contributed to the chaotic situation of school plant. When officials from the ministry do their work as and when due, sorry sight situations will be avoided and school activities will not be interrupted.

The role of head teachers in imbibing, promoting and sustaining maintenance culture in primary school cannot be under estimated. Yusuf & Adigun (2012) opined that the obsolete and inadequate structures in Nigerian secondary schools need to be well kept and restored to optimum working condition if only to ensure the continuity or the system and make teaching and learning effective. The head teacher as the custodian of the school facilities must ensure the proper utilization and maintenance of school plant in order to present loss of time, money and space. He has the responsibility of ensuring that school plants are well protected against fire outbreak, pest as well as thieves and kept in functioning conditions.

2.7 Empirical Studies

This aspect of the study examines the previous works done in the provision, utilisation and management of school plants, so as to appreciate the level of work done so far in the area of subject matter.

Muhammad, Muhammad, Khalid, Javed & Muhammad (2015) carried out a comparison of the provision of physical facilities in public and private secondary schools in Punjab, Pakistan. The study adopted a quantitative and survey technique type of research design. The population of the study comprises 3780 of principals and teachers. The researchers used simple random sampling techniques where 120 schools were randomly selected. That is (60 public & 60 private) to collect the data. These schools were randomly selected from Faisalabad division. The researchers developed a checklist titled Physical Facilities Check List (PFC). The check list was validated by the experts before the actual collection of data. The finding of the study revealed that public secondary schools provided better facilities as compared to private secondary schools in Punjab, Pakistan. In view of the findings of the study, it was concluded that there are inadequate supplies of the various physical resources that can be used in the teaching and learning in secondary schools within the area of study. The study recommended that, there is a need for an enabling policy to improve awareness level of both teachers and students on the use of physical resources in the teaching and learning of the subjects.

The relevance of the study to the present study is that effective provision of physical facilities is a prerequisite for achieving instructional objectives in the secondary schools. The findings of this study cannot be generalized since only Geo Political Zone was considered. The research is also related to this study because both centered on the provision of facilities in secondary schools and utilized similar participants' i.e., principals and teachers of public and private secondary schools. Also, both adopted similar method, the inferential statistic using mean and standard deviation. Although Muhammad, Muhammad, Khalid, Javed & Muhammad research has broadening spectrum, covering the entire country, this study has been narrow to cover only a Geo-Political Zone in Nigeria.

Anike (2015) carried out an investigation on the availability of health care infrastructure facilities in private and public secondary school of Kogi State. The study formulated seven objectives that related to the research questions and the hypotheses. Among the objectives is to assess the status of availability of health care infrastructure facilities in Private and Public Secondary School of Kogi State. The study adopted descriptive research design survey. The population of the study comprises of Twenty four (24) that is 12 public and 12 private secondary schools selected across the three senatorial districts of Kogi State i.e Kogi Central, Kogi East and Kogi West. The instruments used were self-structured questionnaire titled "School Health Services Questionnaire" (SHSQ). The instrument was validated by the researcher supervisors. Pilot study was conducted with the reliability coefficient of 0.91 that shows that the instrument was reliable. Data collected for the study was analyzed using descriptive statistics, Analysis of

Variance (ANOVA). Based on the findings, the study revealed that private schools are more equipped with health infrastructure facilities than public secondary schools in the study area. The study therefore concluded that there are inadequate provision of health facilities most especially, public secondary schools in the study area. The study therefore, recommended that Government should put more effort in providing adequate and effective health facilities most especially in the public secondary schools as this will improve the standard and quality of education in the area.

The research is related to this study because both centered on school facilities and utilized similar participants' i.e., principals and teachers of public secondary schools. Also, both adopted similar method, the inferential statistic using mean and standard deviation. While Analysis of Variance (ANOVA) was used for both study. Although Anike (2015) research has narrow spectrum, covering only one state and the availability of the school health facilities, this study has been broadening to cover the entire North Central Zone in Nigeria and as well on provision, utilization and maintenance of school facilities like Welfare/Health, Games/Recreational, Instructional and Infrastructural facilities.

Izobo-Martins, Dare-Abel, & Ayo-Vaughan (2014) examined the availability and condition of infrastructures in public secondary school buildings in Ado-Odo/ Ota L.G.A, Ogun State, Nigeria. The study used descriptive survey research method. The population of the study was one thousand and twenty five (1,025) public and private schools with fourteen thousand, two hundred (14,200) teachers while the sample size was determined using 10% and the sample size for the schools was 125 principals and 1420 teachers and the total number for the sampled was 1,545. Stratified random sampling technique was used to sample thirty-six public secondary schools out of forty-seven in Ado-Odo/Ota Local Government Area. Data were collected using questionnaire and observation methods. The analysis was done through descriptive statistics and chi square tests. The result shows that user attitude, maintenance culture and lack of fund have major influence on the present condition of the existing infrastructures. The study concluded that a sizeable portion of the infrastructures in the public secondary school are in the state of disrepair and there is high need for resolving them.

The study has similarity with the present study because it all centered round school facilities though, the study mainly focus on infrastructural facilities while the present study focused on provision, utilization and maintenance of school facilities. Also the relevance of this study to the present study is that in school facilities maintenance, teachers need to equip themselves with various knowledge that will help in the maintaining the facilities provided, so as to increase the effectiveness and efficiency of students in the school. However, while this study focused on local government area and the present study focuses in the whole North Central Zone, Nigeria.

Tadesse & Maeregu (2014) also studied the availability of school facilities and their effects on the quality of education in government primary schools of Harari Regional State and East Hararghe Zone, Ethiopia. Survey method was used. Five objectives were design in line with the research questions and hypotheses guided the study. The design used for the study was survey type. The population of the study was 3650. The study sample was selected through simple random sampling technique and available sampling techniques. School principals, district and regional education bureau heads were the sample of the research with 24 primary schools in Eastern Hararge Zone and 12 primary schools in Harari regional state. The instruments were questionnaire, interview and observation. The instrument was validated by the research supervisors and experts in the department. Pilot study was conducted outside the study area that yielded reliability co- efficiency of 0.79 which shows that the instrument was reliable. The data analysis was done using statistical tools such as percentages, frequencies, means and grand means. The findings showed that school facilities and instructional materials were unavailable, less in quantity and quality and that created a great challenge on teaching and learning activities that in turn had a negative impact on the improvement of the quality of education.

The study has similarity with the present study because it centered on availability of school facilities, while the present study focused on provision, utilization and maintenance of school facilities. Also the relevance of this study to the present study is that in provision, utilization and maintenance of school facilities, both the principal and teachers need to equip themselves with knowledge that will help in the utilization and maintenance the facilities provided, so as to increase the students knowledge in the school. However, while this study focused on regional and the present study focuses in the whole North Central Zone, Nigeria.

Oghenewogaga & Margaret (2014) assessed the availability and application of school health services in both public primary and secondary school in Ovia Local government Area of Edo State. The study was carried out with four objectives that were designed in line with research questions and hypotheses. The study had four variables on availability of school health service, qualified personnel, facilities & equipment and financial & material resources. The design used for the study was survey type. The population of the study was 10 principals and 102 teachers making a total of 112. While 45 respondents were used as the sample study. The instrument used was questionnaire. The instrument was validated by the researcher supervisors. The face and content validity was used to determine the validity of the instrument while the Test re-test method of reliability was use to test the reliability with r value as 0.85. Inferential statistic of Pearson product moment correlation coefficient to test all the hypotheses at 0.05 alpha level. The findings of the study were that there is a correlation between availability of school health services, qualified personnel, facilities and equipment; financial and material resources; and health habits of pupils and students.

The research is related to this study because both centered on school facilities and utilized similar participants' i.e., principals and teachers of public secondary schools. Also, both adopted similar method, the inferential statistic using mean and standard deviation. While t-test was used for the study and Analysis of Variance (ANOVA) was used for the present study. Although Oghenewogaga & Margaret research has narrow spectrum, covering only one local government area of the state and the availability of the school facilities, this study has been broadening to cover the entire North Cntral Zone of Nigeria and as well on provision, utilization and maintenance of school facilities.

Ayeni & Ogunbameru (2013) assessed the level of availability and utilization of Information and Communication Technology (ICT) facilities for the attainment of quality learning outcome in secondary schools in Ondo State, Nigeria. A survey research design was adopted and quantitative technique was used for data collection and analysis. A total of 404 participants comprised 60 teachers and 344 students completed the questionnaire titled “ICT Facilities Utilization and Maintenance Survey Questionnaire (ICTFUMSQ)” in 7 randomly sampled public secondary schools. The reliability coefficient of 0.72 was obtained, using Cronbach alpha. Four research questions and one hypothesis were formulated. The simple percentage was used to answer the research questions while Pearson correlation statistics was employed to test the hypothesis at $p<0.05$. The findings indicated that the most commonly used ICT facilities were computer set (46.7%); printer (41.7%); and bulletin board (31%). The results also showed that the relationship between teachers and students on the utilization of ICT facilities was low ($r= 0.045$, $p<0.05$). The study concluded that there was shortage of ICT facilities and low capacity of teachers, irregular power supply, inadequate technical support, poor funding and maintenance.

The research study is relevant to the present study since it the focusing on availability and utilization of Information and Communication Technology (ICT) facilities for the attainment of quality learning outcome in secondary schools, while the present study focused on provision, utilization and maintenance of school facilities. The result of the findings were relevant because it shows that some teachers had problems assessing computers. This means that there was seriously need for curriculum based soft ware, training and re-training of personnel, seminars and workshops for such teachers in order to improve and update their knowledge on ICT which the present study would take into consideration so as to breach the gap.

Okyere-Kwakye (2013) also studied the availability of supportive facilities for effective teaching. The purpose of this study is to identify the availability and the adequacy of certain necessary school facilities within the environment of Junior High Schools in the New Juaben Municipality, Eastern Region of Ghana. This study used descriptive survey design. The target population of the study was all the 35 principals 268 teachers and 2680 students. Simple random sampling techniques were used to determine the sample size with 560 respondents used for the sample size. The instrument used was structured questionnaire. The researcher used three sets of questionnaires, one for the principal, and the other for the teachers and another for students. The instrument was validated by experts. Pilot study was conducted outside the study area and yielded 0.87 co efficient coloration at 0.05 level of significant. Questionnaire was used to collect data from two hundred (200) teachers who were selected from twenty (20) Junior High Schools in the New Juaben Municipality. The results reveal that facilities like furniture for pupil, urinal and toilet facilities and classroom blocks, were available but not adequate.

The research study is relevant to the present study since it the focusing on availability of supportive facilities for effective teaching in secondary schools, while the present study focused on provision, utilization and maintenance of school facilities. Also, both adopted similar method, the inferential statistic using mean and standard deviation. Though t-test was used for the analysis of the study while, Analysis of Variance (ANOVA) was used for the present study. Although Okyere-Kwakye research has narrowed spectrum, covering the only one region in Ghana and availability of supportive facilities for effective teaching, this study has been broadening to cover a Geo-Political Zone in Nigeria and as well on provision, utilization and maintenance of school facilities.

Asiyai (2012) investigated school facilitates in public secondary schools in Delta State, Nigeria. The purpose of the study was to find out the state of the facilities, the types of maintenance carried out on the facilities by school administrators, the factors encouraging school facilities depreciation and the roles of school administrators in the management and maintenance of school facilities. The target population of the study was all the 135 principals and 2,568 teachers. Simple random sampling techniques was used to determine the sample size with 860 respondents used for the sample size. The instrument used was structured questionnaire. The instrument was validated by experts. Pilot study was conducted outside the study area and yielded 0.87 co -efficient coloration at 0.05 level of significant. The study employed the Chi-Square. Findings revealed that school facilities in the schools are generally in a state of disrepair. The findings further revealed that the maintenance carried out on school facilities were inadequate for majority of the facilities.

The research study is relevant to the present study since it the focusing on school facilitates, while the present study focused on provision, utilization and maintenance of school facilities. Also, both adopted similar method, the inferential statistic using mean and standard deviation. Chi-Square was used for the study while Analysis of Variance (ANOVA) was used for the present study. Although Asiyai research has narrowed spectrum, covering the only one state and school facilitates, this study has been broadening to cover a Geo-Political Zone in Nigeria and as well on provision, utilization and maintenance of school facilities.

Joseph & Philias (2011) investigated school facilities and academic achievement of secondary school in agricultural science in Ekiti State, Nigeria. The study looked at the provision of facilities as it relates to academic performance of students in agricultural science in Ekiti state of Nigeria between 1990 and 1997. The design used for the study was survey type. The study population was results of the West African School Certificate Examinations (WASCE) conducted between 1990 and 1997 in 50 secondary schools in both rural and urban areas of the state. One validated instrument (STQF) was used for data collection. One hypothesis was formulated and answered. Data were analysed using mean and t–test statistics. The results showed that there were no significant differences in the performance of students between rural and urban secondary schools in term of availability of library facilities ($t = 1.79$, $p<0.05$), availability of textbooks ($t= 1.20$; $p <0.05$) and availability of laboratory facilities

($t = 1.83$, $p<0.05$). It was concluded that facilities are potent to high academic achievement of students. Therefore, recommended that Ekiti State Government should provide adequate material resources to rural/urban locations to enhance teaching and learning processes.

The research study is relevant to the present study since it the focusing on school facilities and academic achievement of secondary schools in agricultural science in Ekiti State, Nigeria, while the present study focused on stakeholders perceptions on provision, utilization and maintenance of school facilities. Also, both adopted similar method, the inferential statistic using mean and standard deviation. Though t-test was used for the analysis of the study while, ANOVA was used for the present study. Although Joseph & Philias research has narrowed spectrum, covering the only one state and school facilities and academic achievement of secondary schools in agricultural science in Ekiti State, Nigeria, this study has been broadening to cover a Geo-Political Zone in Nigeria and as well on provision, utilization and maintenance of school facilities.

Ogbiji & Ekpo (2011) investigated the implementation of health services programme among public and private secondary schools in Cross River State of Nigeria. The five research questions aimed at finding out the state of access to module health services, nursing services, and health education. Other areas of the research are participation in games and sports and participation in health promoting clubs in public and private secondary schools in the State. The study used survey type as the research design. Population of the study comprises 3630 respondents. Samples comprising of 336 teachers from 104 secondary schools responded to a 12-item Principals and Teachers opinion on secondary school health services. The instrument used was structured questionnaire. The instrument was validated by the researcher supervisors which yielded the co efficient reliability of 0.76 at 0.05 level of significant. T-test was used for the analysis of the study. The findings show that there are significant differences between public and private secondary schools on administration of health services, health education and health-related programmes. The study therefore recommended that government and others stakeholder should help in providing health services, health education and health-related programmes for the students in the study area.

The research study is relevant to the present study since it the focusing on implementation of health services programme among public and private secondary schools in Cross River State of Nigeria, while the present study focused on stakeholders perceptions on provision, utilization and maintenance of school facilities. Also, both adopted similar method, the inferential statistic using mean and standard deviation. Though t-test was used for the analysis of the study while, ANOVA was used for the present study. Although Ogbiji & Ekpo research has narrowed spectrum, covering the only one state and implementation of health services programme among public and private secondary schools in Cross River State of Nigeria, this study has been broadening to cover a North Central Zone in Nigeria and as well on provision, utilization and maintenance of school facilities.

2.8 Summary

This study investigated the stakeholders' perceptions on the provision, utilization and maintenance of school facilities in secondary schools North

Central Zone, Nigeria. efforts was made to present the conceptual framework for this study, various concepts such as perception, provision, utilization, maintenance, school facilities, school administrator, management were fully explained. The four independent variables in this study were discussed by the following headings: provision of instructional materials, utilization of instructional materials, maintenance of instructional materials, provision of welfare/health facilities, utilization of welfare/health facilities, maintenance of welfare/health facilities, provision of games/recreational facilities, utilization of games/recreational facilities, maintenance games/recreational facilities, provision of infrastructural facilities, utilization of infrastructural facilities, maintenance of infrastructural.

Concept of infrastructural facilities, types of school facilities in secondary schools, provision of infrastructural facilities, historical perspective of school facilities provision, meaning and categories of school infrastructural facilities provision and school infrastructural facilities maintenance procedures

Theoretical framework is a very essential feature of any study. The theoretical frameworks that provided guide for this study are as follows: Resource dependent theory, facilities management theory, scientific management theory, human relation theory and environmental learning theory.

Empirical studies as well as summary were presented. However, the empirical studies above differ with this study as none of the above studies investigated perceptions of education stakeholders on the three important variables (provision, utilization and maintenance of school facilities in the North

Central Zone, in Nigeria) as in the present study at the same time, This has created a knowledge gap which the present study is trying to fill, therefore; this study intends to investigate the stakeholders' perceptions on the provision, utilization and maintenance of school facilities in the North Central Zone in Nigeria.

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CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, the procedures used for gathering data on the stakeholders' perceptions on the provision, utilization and maintenance of school facilities in secondary schools North Central zone, Nigeria are presented. Thus, the chapter contain research design, population of study, the sample and sampling techniques, instrument, procedure for data collection and procedure for data analysis.

3.2 Research Design

Descriptive survey design was used in this study. The choice of survey design enabled the researcher to assess stakeholders' perceptions of the provision, utilization and maintenance of school facilities in secondary schools in North-Central zone of Nigeria. It also allowed the researcher to carefully record observation through expert and imaginative planning, careful analysis, interpretation of the data gathered and logically and skilfully reported the findings of this research endeavour.

3.3 Population of the Study

The total population for this study was 99,110 participants from all the 2,781 secondary schools in North Central states in Nigeria as at the time of this research which have been in operation. These secondary schools include both state owned (government) and registered privately owned schools. Table 3 indicates the total numbers of secondary schools in North Central zone of Nigeria.

Table 2: Population of Secondary Schools in North Central, Nigeria

S/N0	State	N0 of Public Sec. Schools	N0 of Registered Private Sec. Sch.	Total N0 of Sec. Schools .	Principal	Public Sec. Sch. Teachers	Private Sec. Sch. Teachers	MOE Officials	PTA Officials
1	KWARA	333	186	519	519	7,025	4,211	1,113	6,232
2	KOGI	258	198	456	456	6,032	3,653	750	4,560
3	NIGER	250	122	372	372	5,223	3,021	1,002	3,532
4	PLATEAU	301	216	517	517	6,585	4,122	1,021	4,565
5	NASARAWA	202	95	297	297	4,485	2,517	856	3,255
6	BENUE	276	153	429	429	4,145	3,762	1,115	4,121
7	ABUJA(FCT)	84	107	191	191	3,955	2,809	552	2,115
	TOTAL	**1,704**	**1,077**	**2,781**	**2,781**	**37,450**	**24,090**	**6,409**	**28,380**

Source: State Ministries of Education, Nigeria (2015)

Also, the study focused on 2,781 principals, 28,380 PTA Officials, 37, 450 public school teachers, 24,090 private secondary school teachers and 6,409 Ministry of Education officials. It is from this population that a representative sample was drawn.

3.4 Sample and Sampling Techniques

The technique adopted in the selection of the samples for this study was a multi-stage sampling technique. This technique was found appropriate for a study of this magnitude because it is the most widely acceptable technique for studying a geographically dispersed population (Saunders, Lewis and Thornhill, 2007) which involves various stages. It usually starts with cluster sampling (Blaikie, 2000), and followed by other techniques, until the units of interest are sampled.

Stage 2 involves stratification of and selection of the study population based on types of schools (public secondary schools and private secondary schools). This involves the selection of 169 public secondary schools and 169 registered private secondary schools in North Central Zone of Nigeria. The method of selection was simple random sampling technique. Krejcie & Morgan (1970) used to arrive at 169 sample size for both public and private school respectively, in their table for determining sample size for a given population, opined that 338 sample sizes is appropriate for population of 2,781 in order to have fair representation. Table 4 shows the sample distribution of the secondary school in North Central Zone, Nigeria.

Step 3 also involves the selection of respondents for the study. Thus, 9 research respondents from each of the sampled schools were purposively selected.

This comprises of the principal (1), teachers (5) PTA officials (3). Also, coincidence sampling approach was used to sample Ministry of Education officials in which (8) research respondents were selected in each state which included eight research respondents from each of the following, ministry of education (8), teaching service commission (8), and Quality Assurance officials (8). The total sample size for this study consisted of 1,690 teachers, 5 from each school, 168 ministry of education officials, 338 principals and 1,014 PTA officials. (In all, 3,210 research respondents were used in the study). It is assumed by the researcher that the above respondents were able to give a vivid situation of the school as regards provision, utilization and maintenance of school facilities in their respective schools.

Table 3: Total Sample of Secondary Schools (Public and Private) in North Central Zone, Nigeria.

S/N0	State	N0 of Public Sec. Schools	N0 of Sampled Public Sec. Sch.	N0 of Registered Private Sec. Sch.	N0 of Sampled Private Sec. Sch.	Total N0 of Sampled Schools
1	KWARA	333	33	186	29	62
2	KOGI	258	26	198	31	57
3	NIGER	250	25	122	19	44

4	PLATEAU	301	30	216	34	64
5	NASARAWA	202	20	95	15	35
6	BENUE	276	27	153	24	51
7	ABUJA(FCT)	84	8	107	17	25
	TOTAL	**1,704**	**169**	**1,077**	**169**	**338**

Source – Field Study (2015).

3.5 Instrumentation

The focus of the study was to assess the provision, utilization and maintenance of facilities in secondary schools North Central Zone, Nigeria. Data for the study were gathered through the use of questionnaire. Questionnaire is very crucial to cover large study areas. The Researcher developed questionnaire titled "Stakeholders' Perceptions of Provision, Utilization and Maintenance of School Facilities Questionnaire (SHPUMSFQ)". The questionnaire was made up of two parts, part 1 and 2. Part 1 consisted of one section (A), items seeking the demographic information of the respondents. Part 2 consisted of three sub-sections (B–D).

Sub-section B consisted of twenty (20) questions related to the provision of instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities.

Section C consists of a total of (20) items used to obtain information on the utilization of instructional facilities (5), welfare/health facilities (5), games/recreational facilities (5) and infrastructural facilities (5).

Section D contains (20) items each soliciting information from respondents on maintenance of instructional facilities, (5), welfare/health (5), games/recreational facilities (5) items, infrastructural facilities (5) questions.

The questionnaire was structured using five-point Likert scales ranging from 5 –Strongly Agreed (SA) 4 – Agreed (A), 3 – Undecided (UD), 2 - Disagreed and 1 – Strongly Disagreed (SD)

3.5.1 Validity of the Instrument

Validity refers to whether a tool measurement may achieve its intended function or purpose. The research instruments for this study was (SHPUMSFQ) subjected to both content and face validation by Six experts, that is, the supervisor, four lecturers in the Department of Educational Foundations and Curriculum and an Evaluation expert, all in Ahmadu Bello University, Zaria, Nigeria. These experts examined the instrument with regards to its relevance and language, comprehensiveness of the items, appropriateness of the contents and representativeness of the various areas of the study to ensure that they measure what they suppose to measure. The comments and corrections made independently by these experts helped the researcher to modify and produce the final instruments.

3.5.2 Pilot Study

The pilot study was conducted to ascertain the reliability of the instrument. The pilot test was carried out in five selected schools which were excluded from the main study within a time interval of two weeks this was done. At the end, the researcher collected the questionnaires and made amendments where necessary. Reliability test on the instrument becomes necessary because, according to Phelen and Leydene (2006) is the degree to which an assessment tool produces stable and consistent results. Pilot test was considered to determine both content and face validity of an instrument while face validity assesses how the instrument measure what is supposed to measure, content validity ascertain the extent to which the instrument adequately covers the area desired to measure. Using several test measurement, Sangoseni, Hellman & Hill (2013) established content validity as degree to which the instrument assesses or measures the construct of interest. The outcome of the pilot study was related to 0.5 standard alpha to ascertain the research validity.

3.5.3 Reliability of the Instrument

Reliability refers to being consistent and steady in terms of measurement. To ascertain the reliability of the instrument, the test re-test method was adopted to determine the co-efficient of the data that were generated and Spearman-Brown statistics was used to calculate the co-efficient. The established reliability level of equal length for the instrument was 0.97 which shows that the instrument for this research work was reliable. According to Chronbarch Alpha (1971), 0.7 is the standard to ascertain the research instrument reliability.

3.6 Procedure for Data Collection

The researcher used a direct administrative technique in the administration of the instrument to the research respondents. Copies of the questionnaire were distributed by the researcher and two research assistants who are friends. It is believed that the presence of researcher during the administration of the questionnaires would enhance better understanding of the items in the instrument. The researcher also explains to them the purpose of the study, as well as the explanation of the items in the questionnaire. It was necessary to use research assistants to make sure that the actual respondents for whom the instruments were meant for were indeed those who completed the instrument and also help to make clarifications to the respondents on the items whenever the need arises. In addition, a total number of 3,210 copies of questionnaire were administered to the respondents in selected public and private secondary schools to get or gather information for the provision, utilization and maintenance of schools facilities in secondary schools in North-Central Zone of Nigeria. The instruments were retrieved, scored and subjected to statistical analysis.

3.7 Methods of Data Analysis

Data Collected for this study were analyzed using relevant descriptive and inferential statistics. Descriptive statistics such as frequencies counts, simple percentages, were used to analyze the demographic data of the participants as well as the research questions postulated earlier. Also, inferential statistics such as the ANOVA statistics was used to test all the hypotheses formulated at 0.05 level of significance to test the level of difference in the perceptions of stakeholders on the provision, utilization and maintenance of school facilities in secondary schools in North-Central Zone of Nigeria. Sheffe post hoc caparison test were employed to explain variance in the opinions stakeholders. Specifically, the analysis was computed electronically using the Statistical Packages for Social Sciences (SPSS) version 20.0 statistical software. Details of data used for the analysis is available in the appendix F.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter is on the presentation of results and analysis of data and discussion of research findings. Demographic data of respondents such as: state, types of school, status of respondents, qualifications and working experience of respondents were presented in table 5. The 60 items on the (PUMOSPQ) were scored 5, 4, 3, 2, 1 for Strongly Agreed (SA), Agreed (A), Undecided (UD), Disagreed (D), and Strongly Disagreed (SD) responses respectively. As a result, high scores (50% and above) indicate positive perceptions and below 50% indicate negative perceptions on the provision, utilization and maintenance of school facilities respectively. Answers to research questions were presented in table 10 – 13 using frequency and simple percentages, while One-Way ANOVA statistical tools were used to test the significant difference in null hypotheses at 0.05 level of significant.

4.2: Demographic Data of Respondents

This section covers demographic information of the respondents which include state, work status, academic qualifications, working experience and types of schools (public/private secondary schools),

Table 5: below shows states of the respondents and the corresponding number of the respondents in each state.

Table 4: State of Respondents

S/N0	State of the Respondents	Number	%
1	KWARA	582	18.1
2	KOGI	537	16.7
3	NIGER	420	13.1
4	BENUE	483	15.0
5	NASARAWA	339	10.6
6	PLATEAU	600	18.7
7	FCT ABUJA	249	7.80
	TOTAL	**3,210**	**100%**

Source: Field Study (2016).

Table 4 showed state distribution of the respondents. Detail showed that 582(18.1%) of the respondents were from Kwara State, 537(16.7%) of the respondents were from Kogi State, 420(13.1%) of the respondents were from Niger State, 483(15.0%) of the respondents were from Benue State, 339(10.6%) of the respondents were from Nassarawa State, 600(18.7%) of the respondents were from Plateau State while 249(7.8%) of the respondents were from FCT, Abuja.

Table 5 below shows types of school of respondents. This includes Public and Private secondary schools in North Central of Nigeria.

Table 5: Types of School of Respondents

Types of School of Respondents	N	%
Public	169	50

Private	169	50
Total	**338**	**100%**

Source: Field Study (2016).

Table 5 showed types of school of respondents. Detail showed that 169(50.0%) of the respondents were from public, while 169(50.0%) of the respondents were from private.

Table 6 below shows gender distribution of respondents which are male and female.

Table 6: Work Status of Respondents

S/N0	Status of the Respondents	Number	%
1	Principal	338	10.5
2	Ministry of Education Officials	56	1.7
3	Teachers	1,690	52.8
4	PTA Officials	1,014	31.6
5	Quality Assurance	56	1.7
6	TESCOM Officials	56	1.7
	TOTAL	**3,210**	**100%**

Source: Field Study (2016).

Table 6 shows work status of the respondents. This include Ministry of Education, Quality Assurance officials, , TESCOM Officials, Principal and Teachers of both public and private secondary and PTA Officials. The result revealed that 338 (10.5%) of the respondents were principals, 56(1.7%) of the respondents were Ministry of Education officials, 1,690(52.8%) of the respondents were class teachers, 1,014(31.6%) of the respondents were PTA executives, 56(1.7%) of the respondents were teaching service commission (TESCOM) officials, 56(1.7%) of the respondents were officers from Quality Assurance officials.

Table 7 below shows academic qualification of the respondents. These include OND/HND, NCE, B.Sc/B.Ed/B.Sc(Ed) and Ph.D.

Table 7: Academic Qualification of Respondents

Qualification of Respondents	**N**	**%**
OND/HND	201	6.3
NCE	707	22.0
B.Sc/B.Ed/B.Sc (Ed)	2,077	64.7
B.Sc/M.Ed	202	6.3
Phd	23	0.7
Total	**3,210**	**100%**

Source: Field work (2016).

Table 7 showed academic qualification of the respondents. The result revealed that 201(6.3%) of the respondents have OND/HND, 707(22.0%) of the respondents have NCE, 2,077(64.7%) have B.Sc/B.Ed/ B.Sc (Ed), 202(6.3%) of the respondents have M.Sc/M.Ed while the remaining 23(0.7%) of the respondents have Ph.D. This shows that majority of respondents possess university degree.

Table 8 below shows working experiences of the respondents.

Table 8: Work Experience of Respondents

Working Experience of Respondents	N	%
1-5 years	146	4.5
6-10 years	748	23.3
11-15 years	1,933	60.2
16-20 years	227	7.1
21 years and above	156	4.9
Total	**3,210**	**100%**

Source: Field work (2016).

Table 8 showed working experiences of the respondents. The result revealed that 146(4.5%) of the respondents had 1-5 years working experience, 748(23.3%) of the respondents had 6-10 years working experience, 1,933(60.2%) of the respondents had 11-15 years working experience, 227(7.1%) of the respondents have put in 16-20 years in service, while the remaining 156(4.9%) of the respondents had 21 years and above working experience. This show that majority of respondents had between the 11-15 years work experience.

4.3 Research Questions.

Research Question 1: What are the stakeholders' opinions on the provision of instructional, welfare/health, games/recreational and infrastructural facilities in secondary schools in North Central Zone, Nigeria?

4.3.1 Opinion of Stakeholders' on provision of instructional, welfare/health, games/recreational and infrastructural facilities in public and private secondary schools in North Central Zone, Nigeria.

Table 9: Stakeholders' perception on provision of instructional, welfare/health, games/recreational and infrastructural facilities in public and private secondary schools in North Central Zone, Nigeria.

S/N0	Item	ESH	A	%	UN	%	D	%
1	Instructional facilities such as machines, Audio, visual, Audio/visual materials, chalk boards, stools and workshop equipment are provided in my school.	Teacher	415	24.6	211	12.5	1064	63.0
		PTA	349	34.4	23	2.3	642	63.3
		MOE	14	25.0	4	7.1	38	67.9
		Principal	165	48.8	41	12.1	132	39.1
		QA	7	12.5	3	5.4	46	82.1
		TESCOM	10	17.9	6	10.7	40	71.4
		TOTAL	**960**	29.9	**288**	9.0	**1962**	61.1
2	There is provision of relevant text books in my school.	Teacher	230	13.6	166	9.8	1294	76.6
		PTA	412	40.6	14	1.4	588	58.0
		MOE	15	26.8	3	5.4	38	67.9
		Principal	134	39.6	16	4.7	188	55.6
		QA	17	30.4	3	5.4	36	64.3
		TESCOM	14	25.0	1	1.8	41	73.2
		TOTAL	**822**	25.6	**203**	6.3	**2185**	68.1
3	Computers sets like scanners photocopy machines, printers etc are adequately provided in my school.	Teacher	427	25.3	180	10.7	1083	64.1
		PTA	291	28.7	51	5.0	672	66.3
		MOE	22	39.3	4	7.1	30	53.6
		Principal	162	47.9	7	2.1	169	50.0
		QA	14	25.0	6	10.7	36	64.3
		TESCOM	15	26.8	6	10.7	35	62.5
		TOTAL	**931**	29.0	**254**	7.9	**2025**	63.1
4	Laboratory apparatus e.g. cylinders, burners, flannel board, magnetic board, chemical e.g reagents are provided in my school.	Teacher	419	24.8	61	3.6	1210	71.6
		PTA	401	39.5	31	3.1	582	57.4
		MOE	12	21.4	7	12.5	37	66.1
		Principal	109	32.2	19	5.6	210	62.1
		QA	14	25.0	3	5.4	39	69.6
		TESCOM	16	28.6	5	8.9	35	62.5
		TOTAL	**971**	30.2	**126**	3.9	**2113**	65.8

5	There is provision for ICT/ Web communication like internet facilities in my school.	Teacher	277	16.4	70	4.1	1343	79.5
		PTA	303	29.9	8	0.8	703	69.3
		MOE	13	23.2	4	7.1	39	69.6
		Principal	125	37.0	16	4.7	197	58.3
		QA	15	26.8	6	10.7	35	62.5
		TESCOM	17	30.4	3	5.4	36	64.3
		TOTAL	**750**	23.4	**107**	3.3	**2353**	73.3
		TOT. 1-5	**4434**	**27.6**	**978**	**6.1**	**10638**	**66.3**
6	School health facilities like: clinic, ambulance, drugs are provided in my school.	Teacher	247	14.6	70	4.1	1373	81.2
		PTA	403	39.7	55	5.4	556	54.8
		MOE	16	28.6	4	7.1	36	64.3
		Principal	150	44.4	31	9.2	157	46.4
		QA	14	25.0	2	3.6	40	71.4
		TESCOM	12	21.4	3	5.4	41	73.2
		TOTAL	**842**	26.2	**165**	5.1	**2203**	68.6
7	Financial and material resources for implementing school health service programme are provided in my school.	Teacher	507	30.0	36	2.1	1147	67.9
		PTA	372	36.7	52	5.1	590	58.2
		MOE	17	30.4	3	5.4	36	64.3
		Principal	160	47.3	41	12.1	137	40.5
		QA	14	25.0	5	8.9	37	66.1
		TESCOM	13	23.2	2	3.6	41	73.2
		TOTAL	**1083**	33.7	**139**	4.3	**1988**	61.9
8	School welfare programmes such as: safety measures, proper nutrition, exercises, rest, sleep and medical care are adequately provided.	Teacher	337	19.9	219	13.0	1134	67.1
		PTA	409	40.3	21	2.1	584	57.6
		MOE	13	23.2	5	8.9	38	67.9
		Principal	175	51.8	23	23	140	41.4
		QA	15	26.8	6	6	35	62.5
		TESCOM	13	23.2	5	5	38	67.9
		TOTAL	**962**	30.0	**279**	8.7	**1969**	61.3
9	The welfare of students in terms of ventilation which removes and dilutes warm and humid air thereby giving a sense of freshness without causing a draught is provided adequately.	Teacher	554	32.8	77	4.6	1059	62.7
		PTA	139	13.7	33	3.3	842	83.0
		MOE	16	28.6	2	3.6	38	67.9
		Principal	132	39.1	21	6.2	185	54.7
		QA	15	26.8	4	7.1	37	66.1
		TESCOM	16	28.6	3	5.4	37	66.1

		TOTAL	**872**	27.2	**140**	4.4	**2198**	68.5
10	Basic health and safety requirements such as good and clean environments, first aid facilities are provided in my school.	Teacher	153	9.1	51	3.0	1486	87.9
		PTA	179	17.7	35	3.5	800	78.9
		MOE	15	26.8	2	3.6	39	69.6
		Principal	149	44.1	25	7.4	164	48.5
		QA	14	25.0	3	5.4	39	69.6
		TESCOM	12	21.4	4	7.1	40	71.4
		TOTAL	**522**	16.3	**120**	3.7	**2568**	80.0
		TOT.6-10	**4281**	**26.7**	**843**	**5.3**	**10926**	68.0
11	There is provision of game facilities and equipment like Soccer pitches, Athletic track, are in my school.	Teacher	277	16.4	70	4.1	1343	79.5
		PTA	372	36.7	64	6.3	578	57.0
		MOE	14	25.0	5	8.9	37	66.1
		Principal	158	46.7	42	12.4	138	40.8
		QA	15	26.8	5	8.9	36	64.3
		TESCOM	12	21.4	3	5.4	41	73.2
		TOTAL	**848**	26.4	**189**	5.9	**2173**	67.7
12	Recreational facilities such as relaxation rooms for students' enjoyment, amusement, or pleasure and are provided in my schools.	Teacher	467	27.6	110	6.5	1113	65.9
		PTA	372	36.7	45	4.4	597	58.9
		MOE	14	25.0	3	5.4	39	69.6
		Principal	183	54.1	35	10.4	120	35.5
		QA	15	26.8	2	3.6	39	69.6
		TESCOM	15	26.8	1	1.8	40	71.4
		TOTAL	**1066**	33.2	**196**	6.1	**1948**	60.7
13	Lawn tennis court and table tennis courts are provided in my school.	Teacher	578	34.2	117	6.9	995	58.9
		PTA	391	38.6	63	6.2	560	55.2
		MOE	13	23.2	2	3.6	41	73.2
		Principal	88	26.0	43	12.7	207	61.2
		QA	14	25.0	3	5.4	39	69.6
		TESCOM	15	26.8	4	7.1	37	66.1
		TOTAL	**1099**	34.2	**232**	7.2	**1879**	58.5
14	There is provision of basket ball court, Volley ball courts in my school.	Teacher	380	22.5	166	9.8	1144	67.7
		PTA	371	36.6	71	7.0	572	56.4

		MOE	14	25.0	2	3.6	40	71.4
		Principal	158	46.7	31	9.2	149	44.1
		QA	13	23.2	2	3.6	41	73.2
		TESCOM	15	26.8	1	1.8	40	71.4
		TOTAL	**951**	29.6	**273**	8.5	**1986**	61.9
15	There is provision for recreational activities designated as hobbies. Facilities for reading, playing or listening to music, watching movies or TV, gardening, hunting, sports, studies, and travel are provided in my school.	Teacher	427	25.3	180	10.7	1083	64.1
		PTA	412	40.6	81	8.0	521	51.4
		MOE	11	19.6	5	8.9	40	71.4
		Principal	150	44.4	27	8.0	161	47.6
		QA	14	25.0	3	5.4	39	69.6
		TESCOM	15	26.8	4	7.1	37	66.1
		TOTAL	**1029**	32.1	**300**	9.3	**1881**	58.6
		TOT.11-15	**4993**	**31.1**	**1190**	**7.4**	**9867**	**61.5**
16	Infrastructural facilities like building of Classrooms and staff rooms and School Halls, Library block with updated materials are provided in my school.	Teacher	153	9.1	51	3.0	1486	87.9
		PTA	179	17.7	35	3.5	800	78.9
		MOE	29	51.8	4	7.1	23	41.1
		Principal	149	44.1	25	7.4	164	48.5
		QA	28	50.0	4	7.1	24	42.9
		TESCOM	31	55.4	6	10.7	19	33.9
		TOTAL	**569**	17.7	**125**	3.9	**2516**	78.4
17	Students and Teachers' Toilets and School Fence are provided in my school.	Teacher	445	26.3	211	12.5	1034	61.2
		PTA	349	34.4	23	2.3	642	63.3
		MOE	22	39.3	4	7.1	30	53.6
		Principal	165	48.8	41	12.1	132	39.1
		QA	23	41.1	4	7.1	29	51.8
		TESCOM	30	53.6	1	1.8	25	44.6
		TOTAL	**1034**	32.2	**284**	8.8	**1892**	58.9
18	Computer rooms/ICT center are provided in my school.	Teacher	1176	69.6	41	2.4	473	28.0
		PTA	605	59.7	39	3.8	370	36.5
		MOE	29	51.8	2	3.6	25	44.6
		Principal	188	55.6	16	4.7	134	39.6
		QA	20	35.7	2	3.6	34	60.7
		TESCOM	21	37.5	2	3.6	33	58.9
		TOTAL	**2039**	63.5	**102**	3.2	**1069**	33.3

19	There is adequate provision of furniture (chairs and tables), wall brackets for hanging educative pictures.	Teacher	246	14.6	45	2.7	1399	82.8
		PTA	87	8.6	31	3.1	896	88.4
		MOE	41	73.2	3	5.4	12	21.4
		Principal	84	24.9	13	3.8	241	71.3
		QA	30	53.6	1	1.8	25	44.6
		TESCOM	40	71.4	5	8.9	11	19.6
		TOTAL	**528**	16.4	**98**	3.1	**2584**	80.5
20	Sport and equipment facilities (open space for sport), school bus, are well provided in my school.	Teacher	391	23.1	51	3.0	1248	73.8
		PTA	491	48.4	39	3.8	484	47.7
		MOE	26	46.4	2	3.6	28	50.0
		Principal	144	42.6	44	13.0	150	44.4
		QA	31	55.4	3	5.4	22	39.3
		TESCOM	31	55.4	1	1.8	24	42.9
		TOTAL	**1114**	34.7	**140**	4.4	**1956**	60.9
		TOT.16-20	**5284**	**32.9**	**749**	**4.7**	**10017**	**62.4**
	Total		**18,992**		**3,760**		**41,448**	
			(29.6%)		**(5.9%)**		**(64.5%)**	

Source: Field Study (2016)

Table 9 shows responses on the stakeholders' opinions on the provision instructional, welfare health, games/recreational and infrastructural facilities in public and private secondary schools in north central zone of the country.

Analysis revealed that, 960 (29.9%) of the respondents agreed that instructional facilities such as audio, visual, audio-visual materials, stools and workshop equipment were provided, 1,962 (61.1%) disagreed While, 288 (9.08) of the respondents undecided. From above responses, majority of the stakeholders especially teachers, PTA, MOE, QA, TESCOM, were of the view that instructional facilities are not available in secondary schools however, almost half of the participating principal 165 (48.8%) agreed that instructional facilities are available in schools, while 132(39.1%) of the principal disagree and 41(12.1%) undecided. In what could be called a display of confirmation of the respondents that instructional facilities were not available in schools, 2,185 (68.1%) of the respondents disagreed that there is provision of relevant textbooks, journals, and newspaper in the school while a relatively low percentage of the respondents 822 (25.6%) and 203 (6.3%) agreed and undecided respectively. The non-availability of instructional facilities was further demonstrated in item 3 of the table where 2,025 (63.1%) of the respondents disagreed, with the notion that computer set like scanners, photocopy machines, printers e.t.c., are adequately provided in the schools. In the like manners, 254 (7.9%) of the respondents were undecided while 931 (29%) of the respondents agreed with the statements ironically, almost half of the respondents were of the view that such items were not available in schools. As regard the school principals, 162 (47.9%) of them agreed while 7(2.19%)

undecided and most of the principals 169 (50.0%) disagreed with the statement. This indicated that certain fractions of schools in North Central Zone of the country have computers sets like scanners, photocopy machines, printers but based on the outcome of the responses, particularly those with high percentage of disagreement, like teacher 1,083 (64.1%), PTA 672 (66.3%), MOE 30 (53.6%), QA 36 (64.3%), and TESCOM 35 (62.5%), it can be concluded that these instructional facilities were not adequately provided in most of the secondary schools in North Central Zone of the country. Responses to item 4 and 5 which seek answers to whether there is provision of laboratory apparatus and provision of ICT web communication like internet facilities also show laboratory apparatus were not available in secondary schools in which as high as 2,113 (65.8%) and 2,353 (73.3%) disagreed that there is provision of the laboratory apparatus e.g. cylinder burners and ICT web communication like internet in the schools. The analysis of item 1-5 above shows that out of 16,050 responses, 4,434 (27.6%) of the respondents agreed with the statement, 978 (6.1%) of the respondents undecided while 10,638 (66.3%) of the respondents disagreed. This result indicated that majority of the education stakeholders were of the opinions that instructional facilities are not adequately provided in secondary school in North Central Zone of the country.

Examination of items 6-10 sought to seek the opinion of education stakeholders on the provision of health and welfare facilities in secondary schools in North centre Zone of the country. The results shows that a large proportion of the respondents, 2,203 (68.6%) of the total of 3,210 respondents among the stakeholders disagreed that health facilities like clinic, ambulance and drugs were provided in secondary schools. Only 842 (26.2%) agreed, while 165 (5.1%) were undecided. A healthy body and a sound mind are needed for optimum teaching and learning which enhances performance of both the students and staffs in any educational set up. Results from this study shows to be grossly inadequate in the public and private secondary schools in North Central Zone, Nigeria.

A close examination of items 7 and 8 revealed that, 1,988 (61.9%) and 1,969 (61.3%) of the respondents disagreed that financial and material resources for the implementing school health services programme and school welfare programme were provided in schools. Health and welfare facilities such as safety measures, propels nutrition exercises, rest, sleep and medical care were not available in schools. Only about one out of every three 1,083 (33.7%) and (962) 30.0% of the respective respondents agreed, while a staggering 139(4.3%) and 279 (8.7%) were undecided. These data shows poor health and welfare facilities in secondary schools in the North Central Zone, Nigeria. Students do not observe siesta and light out in most of the schools. One should not expect them to be medically fit for learning, the next day, hence the poor performance of students in both internal and external examinations.

A breakdown of items 9 and 10 show a remarkable disagreement concerning the opinions among the stakeholders, 2,198 (68.5%) and 2,568 (80%) of the respondents like; Teacher, PTA, MOE, Principal, QA and TESCOM, expressed reservation about availability of good ventilation, basic health and safety requirements, facilities like clean environment and first aid facilitation were not available in the secondary schools in the North Central Zone, Nigeria. 872 (27.2%) and 522 (16.3%) disagree while 140 (4.4%) and 120 (3.7%) were respectively undecided. It was observed that most secondary schools were without functional school clinics that could provide basic health need of both students and staff and also many secondary schools did not have enough space which could facilitate good ventilation and flowering for beautification of the schools premises.

In conclusion, analysis of items 6-10 shows that of 16,050 responses, only 4,281 (26.7%) agreed with the statement, a minor 843 (5.3%) were undecided, while majority of the respondents 10,926 (68.0%) were of the view that welfare and health facilities are not adequately provided in the public and private secondary schools in the North Central Zone, Nigeria.

Items 11-15 seek to answer whether there is provision of games and recreational facilities in secondary schools in North Central Zone of the country. Result of items 11, 12, 13, and 14 shows that a large proportion 2,173 (67.7%), 1,948 (60.7%), 1,879 (58.5%), and 1,986 (61.9%) of the respondents disagreed that game and recreation facilities were provided in schools. Only a relatively smaller proportion 848 (26.4%), 1,066 (33.2%), 1,099 (34.2%), 951(26.4%) of the respondents agreed that games and sports facilities like soccer pitches, athletic tracks, lawn-tennis court, table tennis, basketball courts and volleyball courts were adequately provided in these states, while a little fraction 189 (5.9%), 196 (6.1%), 232(7.2%), 273(8.5%) were undecided. This data showed that absent of these facilities suggests that the psychomotor aspect of learning of the students in the North Central Zone, Nigeria is not properly developed.

Upon analysis, item 15 shows that the majority of the respondents like teachers, PTA, MOE, PRINCIPAL, QA, TESCOM, 1,881(58.6), disagreed with the statement of provision of recreational activities (hobbies) such as reading ,playing or listening to music, watching movies or TV gardening, hunting, sports, studies, and travel; in secondary schools in North Central Zone, Nigeria. Only 1,029(32.1%) agreed with the statement, while 300(9.3%) were undecided.

Analysis of items 11-15 shows that vast majority 9,867(61.5%), disagreed, while a much lesser (minority) 4,993(31.1%) agreed and a little minority 1,190(7.4%) were undecided. This shows that the games/ recreational facilities are not adequately provided in both public and private secondary schools of North Central Zone, Nigeria.

A review of item 16 shows that a majority 2,516(78.4%) of the respondent disagreed that infrastructural facilities like building of classrooms, staffrooms, school hall, library block and updated materials were available in secondary schools, while a small minority 569(17.7%) agreed with the statement. Minority 125(3.9%) of the respondents were undecided. The in-conducive atmosphere for learning is enough to induce staff to moon-lightening. That is, a good number of them take to other jobs like trading, business centres and pools betting etc.

A cross- examination of items 17 and 19 reveals that toilets facilities, school fence and furniture are not adequately provided in most of the secondary schools. 1,892(58.9%) and 2,584(80.5 %) confirmed that toilet, school fence and furniture were rarely available in schools, while only 1,034(32.2%) and 528(16.4%) agree with the statement. 284(8.8%) 98(3.1%) were undecided. This implies poor hygienic condition, insecurity of life and poor working condition of students and staff in most of the secondary schools in North Centre Zone of the Country.

However, analysis of item 18 shows that a remarkable majority of the 2,039(63.5%) respondents agree that computer rooms/ICT center were available in the schools, only a minority 1,069(33.3%) of the respondents disagreed, while 102(3.2%) were undecided. The data shows that some schools have computer rooms, and others have ICT centres. This finding indicated inadequate provision of ICTs in schools. Ayeni & Ogunbameru (2013) concluded in their study that concluded that there was shortage of ICT facilities and low capacity of teachers, irregular power supply, inadequate technical support, poor funding and maintenance. It was observed that the availability of these facilities will make the knowledge of the computer system and supply of adequate information on science and technology through the use of ICT is a bit encouraging in the secondary school in the North central zone, Nigeria.

Analysis of item 20 shows that 1,956(60.9%) of the respondents disagreed that sport equipment facilities like school bus and open space for sport were available in their schools. 1,114(34.7%) agreed with the statement, while 140(4.4%) of the respondents were undecided.

A cross examination of items 16-20 shows that majority of the respondents disagreed 10,017(62.4%) adequate infrastructural facilities were provided in the secondary schools in the North Central Zone, Nigeria. The analysis shows only a minority of the respondents agree 5,284(32.9%) with the statement, while a little minority 749(4.7%) were undecided. The implication of this result is that, where the infrastructural facilities are not adequately provided, the realization of educational objectives and achievement of effective teaching and learning will be jeopardized in such environment.

Conclusively, of 64,200 responses from Teacher, PTA, MOE, Principal, QA and TESCOM, only 18,992 (29.6%) agreed that instructional, welfare/health, games/recreational and infrastructural facilities were available in schools. As much as 41,448 (64.8%) of the responses were of the opinions that these facilities were inadequately provided in secondary schools, while 3,760 (5.9%) were undecided. This result implies that public and private secondary schools in the North Central Zone, Nigeria are not adequately provided with instructional, welfare/health game/recreational as well as infrastructural facilities. This finding correlated with Olelewe, et. al. (2014) that the importance of educational resources cannot be over emphasized. Functional literacy will continue to elude us without some level of relevant resources available. Hence, it will be extremely difficult for Nigeria to achieve the universal primary education component of

Millennium Development Goals (MDGs) no2 by the year 2015, without the provision of adequate resources.

In all, the results shows a greater number of respondents confirmed inadequate provision of school facilities like instructional facilities, welfare/health, games/recreational and infrastructural facilities in secondary schools in North Central Zone, Nigeria. This finding correlated with Okyere-Kwakye (2013) that facilities like furniture for pupil, urinal and toilet facilities and classroom blocks, were available but not adequate.

A situation prompted some schools, especially in rural areas where PTAs assist schools with provision of some facilities. Principals and teachers impoverished teaching aids, to make teaching and learning easy for teachers and interesting for students. They also make donations to provide first aids box, buying drugs for school clinic, undertaking rehabilitation of classrooms, building of school toilets and donation of sporting equipment during inter-house sporting competitions.

The principals, teachers, and MOE Officials, Quality Assurance and TESCOM officials perceived that since enough facilities were not provided in secondary schools as showed from the responses of the education stakeholders as high as 66.3% indicated poor provision of instructional facilities, in secondary schools in North Central Zone, Nigeria. This result is supported by Olelewe, Nzeadibe and Nzeadibe (2014) that gross inadequacy of material resources which is bound to affect the quality of education given to pupils of these areas.

Availability of educational resources such as information gadgets, money, materials and human capacity makes a school environment conducive to teaching and learning. The availability of educational resources is very important because of its role in the attainment of educational objectives and goal. We are in technological age, where teachers require to be provided with instructional facilities like audio, visual, computers, ICT/Web communication, laboratory apparatus, magnetic board etc were not only needed to make teaching easy for teachers but also help in making learning interesting and fascinating to students.

In the same vein, health is wealth so to say, however, looking at the table revealed that, most principals, teachers, ministry of education officials, quality assurance, PTA, and TESCOM officials disagreed with the provision of welfare/health in schools. Welfare and health of students and staff in the school environment is very important if effective teaching and learning is to take place, mentally sound teachers have mastery of the subject matter and use appropriate methods of instruction to impact knowledge into the learners. Healthy students learn fast.

Research Question 2: What are the stakeholders' opinions on the utilization of instructional, welfare/health, games/recreational and infrastructural facilities in secondary schools in North Central Zone, Nigeria?

4.3.2 Opinion of Stakeholders' on utilization of instructional, welfare/health, games/recreational and infrastructural facilities in public and private secondary schools in North Central Zone, Nigeria.

Table 10: Stakeholders' perception on utilization of instructional, welfare/health, games/recreational and infrastructural facilities in public and private secondary schools in North Central Zone, Nigeria.

S/N0	Item	ESH	A	%	UN	%	D	%
1	There is proper utilization of instructional facilities such items as machines, Audio, visual, Audio/visual materials, chalk boards, stools and workshop equipment in my school.	Teacher	467	27.6	110	6.5	1113	65.9
		PTA	294	29.0	31	3.1	689	67.9
		MOE	16	28.6	2	3.6	38	67.9
		Principal	173	51.2	9	2.7	156	46.2
		QA	13	23.2	5	8.9	38	67.9
		TESCOM	17	30.4	2	3.6	37	66.1
		TOTAL	**980**	30.5	**159**	5.0	**2071**	64.5
2	The available relevant text books in my school are well utilized.	Teacher	325	19.2	291	17.2	1074	63.6
		PTA	301	29.7	14	1.4	699	68.9
		MOE	12	21.4	8	14.3	36	64.3
		Principal	137	40.5	11	3.3	190	56.2
		QA	17	30.4	1	1.8	38	67.9
		TESCOM	15	26.8	6	10.7	35	62.5
		TOTAL	**807**	25.1	**331**	10.3	**2072**	64.5
3	Computers sets like: scanners photocopy machines, printers etc provided in my school are frequently used.	Teacher	225	13.3	121	7.2	1344	79.5
		PTA	268	26.4	17	1.7	729	71.9
		MOE	10	17.9	4	7.1	42	75.0
		Principal	174	51.5	21	6.2	143	42.3
		QA	9	16.1	6	10.7	41	73.2
		TESCOM	15	26.8	5	8.9	36	64.3
		TOTAL	**701**	21.8	**174**	5.4	**2335**	72.7
4	Laboratory apparatus e.g. cylinders, burners, flannel board, magnetic board are fully utilized in my school.	Teacher	507	30.0	36	2.1	1147	67.9
		PTA	415	40.9	14	1.4	585	57.7
		MOE	15	26.8	3	5.4	38	67.9
		Principal	171	50.6	5	1.5	162	47.9
		QA	18	32.1	1	1.8	37	66.1
		TESCOM	12	21.4	3	5.4	41	73.2
		TOTAL	**1138**	**35.5**	**62**	**1.9**	**2010**	**62.6**
5	The ICT/Web communications like internet facilities in my school are utilized to the maximum.	Teacher	147	8.7	219	13.0	1324	78.3

		PTA	351	34.6	21	2.1	642	63.3
		MOE	13	23.2	5	8.9	38	67.9
		Principal	116	34.3	6	1.8	216	63.9
		QA	17	30.4	2	3.6	37	66.1
		TESCOM	15	26.8	2	3.6	39	69.6
		TOTAL	**659**	20.5	**255**	7.9	**2296**	71.5
		TOT 1-5	**4285**	26.7	**981**	6.1	**10784**	67.2
6	There is proper utilization of school health facilities like: clinic, ambulance, drugs in my school.	Teacher	369	21.8	253	15.0	1068	63.2
		PTA	407	40.1	21	2.1	586	57.8
		MOE	16	28.6	2	3.6	38	67.9
		Principal	126	37.3	14	4.1	198	58.6
		QA	15	26.8	2	3.6	39	69.6
		TESCOM	12	21.4	4	7.1	40	71.4
		TOTAL	**945**	29.4	**296**	9.2	**1969**	61.3
7	Financial and material resources for implementing school health service programme are fully utilized in my school.	Teacher	294	17.4	73	4.3	1323	78.3
		PTA	503	49.6	47	4.6	464	45.8
		MOE	15	26.8	1	1.8	40	71.4
		Principal	147	43.5	31	9.2	160	47.3
		QA	16	28.6	2	3.6	38	67.9
		TESCOM	15	26.8	5	8.9	36	64.3
		TOTAL	**990**	30.8	**159**	5.0	**2061**	64.2
8	There is proper utilization of school welfare programmes such as: safety measures, proper nutrition, exercises, rest, sleep and medical care in my school.	Teacher	579	34.3	118	7.0	993	58.8
		PTA	397	39.2	41	4.0	576	56.8
		MOE	14	25.0	5	8.9	37	66.1
		Principal	135	39.9	15	4.4	188	55.6
		QA	8	14.3	4	7.1	44	78.6
		TESCOM	18	32.1	4	7.1	34	60.7
		TOTAL	**1151**	35.9	**187**	5.8	**1872**	58.3
9	Good ventilation which removes and dilutes warm, humid air and provides air movement which gives a sense of freshness without causing a draught is adequately utilized.	Teacher	545	32.2	76	4.5	1069	63.3
		PTA	392	38.7	61	6.0	561	55.3
		MOE	15	26.8	4	7.1	37	66.1
		Principal	194	57.4	33	9.8	111	32.8
		QA	14	25.0	5	8.9	37	66.1
		TESCOM	13	23.2	2	3.6	41	73.2

		TOTAL	**1173**	36.5	**181**	5.6	**1856**	57.8
10	Basic health and safety requirements such as good and clean environments, first aid facilities are adequately utilized in my school.	Teacher	320	18.9	252	14.9	1118	66.2
		PTA	401	39.5	21	2.1	592	58.4
		MOE	14	25.0	2	3.6	40	71.4
		Principal	201	59.5	30	8.9	107	31.7
		QA	16	28.6	1	1.8	39	69.6
		TESCOM	13	23.2	2	3.6	41	73.2
		TOTAL	**965**	30.1	**308**	9.6	**1937**	60.3
		TOT 6-10	**5224**	**32.6**	**1131**	**7.0**	**9695**	**60.4**
11	There is proper utilization of game facilities and equipment like Soccer pitches, Athletic track in my school.	Teacher	419	24.8	61	3.6	1210	71.6
		PTA	257	25.3	98	9.7	659	65.0
		MOE	14	25.0	6	10.7	36	64.3
		Principal	129	38.2	20	5.9	189	55.9
		QA	13	23.2	4	7.1	39	69.6
		TESCOM	14	25.0	2	3.6	40	71.4
		TOTAL	**846**	26.4	**191**	6.0	**2173**	67.7
12	Recreational facilities such as relaxation rooms for students' enjoyment, amusement, or pleasure and are adequately utilized in my schools.	Teacher	501	29.6	76	4.5	1113	65.9
		PTA	289	28.5	20	2.0	705	69.5
		MOE	13	23.2	3	5.4	40	71.4
		Principal	214	63.3	15	4.4	109	32.2
		QA	14	25.0	2	3.6	40	71.4
		TESCOM	12	21.4	4	7.1	40	71.4
		TOTAL	**1043**	32.5	**120**	3.7	**2047**	63.8
13	Lawn tennis and table tennis courts are utilized in the school.	Teacher	433	25.6	62	3.7	1195	70.7
		PTA	315	31.1	49	4.8	650	64.1
		MOE	10	17.9	5	8.9	41	73.2
		Principal	109	32.2	53	15.7	176	52.1
		QA	14	25.0	1	1.8	41	73.2
		TESCOM	13	23.2	2	3.6	41	73.2
		TOTAL	**894**	27.9	**172**	5.4	**2144**	66.8
14	There is utilization of basketball and Volley ball courts in my school.	Teacher	563	33.3	35	2.1	1092	64.6
		PTA	371	36.6	39	3.8	604	59.6
		MOE	10	17.9	5	8.9	41	73.2

		Principal	281	83.1	41	12.1	16	4.7
		QA	14	25.0	2	3.6	40	71.4
		TESCOM	13	23.2	1	1.8	42	75.0
		TOTAL	**1252**	39.0	**123**	3.8	**1835**	57.2
15	Recreational activities designated as hobbies are done on regular basis in my school. Facilities for reading, playing or listening to music, watching movies or TV, gardening, hunting, sports, studies, and travel are fully utilized in my school.	Teacher	698	41.3	74	4.4	918	54.3
		PTA	527	52.0	53	5.2	434	42.8
		MOE	10	17.9	6	10.7	40	71.4
		Principal	221	65.4	82	24.3	35	10.4
		QA	9	16.1	5	8.9	42	75.0
		TESCOM	11	19.6	5	8.9	40	71.4
		TOTAL	**1476**	**46.0**	**225**	**7.0**	**1509**	**47.0**
		TOT 11-15	**5511**	34.3	**831**	5.2	**9708**	60.5
16	Infrastructural facilities like building of Classrooms and staff rooms and School Halls, Library block with updated materials are utilized in my school.	Teacher	514	30.4	64	3.8	1112	65.8
		PTA	321	31.7	70	6.9	623	61.4
		MOE	8	14.3	5	8.9	43	76.8
		Principal	210	62.1	55	16.3	73	21.6
		QA	9	16.1	3	5.4	44	78.6
		TESCOM	10	17.9	2	3.6	44	78.6
		TOTAL	**1072**	33.4	**199**	6.2	**1939**	60.4
17	Students and Teachers' Toilets and School Fence are properly utilized in my school.	Teacher	493	29.2	82	4.9	1115	66.0
		PTA	412	40.6	15	1.5	587	57.9
		MOE	9	16.1	3	5.4	44	78.6
		Principal	158	46.7	43	12.7	137	40.5
		QA	10	17.9	4	7.1	42	75.0
		TESCOM	12	21.4	3	5.4	41	73.2
		TOTAL	**1094**	34.1	**150**	4.7	**1966**	61.2
18	Computer Room/ICT centre are properly utilized.	Teacher	725	42.9	82	4.9	883	52.2
		PTA	492	48.5	38	3.7	484	47.7
		MOE	8	14.3	5	8.9	43	76.8
		Principal	94	27.8	21	6.2	223	66.0
		QA	12	21.4	3	5.4	41	73.2
		TESCOM	10	17.9	4	7.1	42	75.0
		TOTAL	**1341**	41.8	**153**	4.8	**1716**	53.5
19	There is proper utilization of furniture (chairs and tables), wall brackets for hanging educative pictures in my school.	Teacher	572	33.8	219	13.0	899	53.2
		PTA	102	10.1	21	2.1	891	87.9

		MOE	8	14.3	5	8.9	43	76.8
		Principal	105	31.1	10	3.0	223	66.0
		QA	10	17.9	6	10.7	40	71.4
		TESCOM	11	19.6	3	5.4	42	75.0
		TOTAL	**808**	25.2	**264**	8.2	**2138**	66.6
20	Sport and equipment facilities (open space for sport), school bus, are well utilized in my school.	Teacher	597	35.3	180	10.7	913	54.0
		PTA	86	8.5	37	3.6	891	87.9
		MOE	8	14.3	5	8.9	43	76.8
		Principal	109	32.2	6	1.8	223	66.0
		QA	12	21.4	3	5.4	41	73.2
		TESCOM	11	19.6	2	3.6	43	76.8
		TOTAL	**823**	25.6	**233**	7.3	**2154**	67.1
		TOT 16-20	**5138**	**32.0**	**999**	**6.2**	**9913**	**61.8**
	TOTAL		**20,158**		**3,942**		**40,100**	
			(31.4%)		**(6.1%)**		**(62.5%)**	

Source: Field Study (2016)

Table 10 shows the responses to items 1-20 which seek answers to whether instructional, welfare/health, games/recreational and infrastructural facilities were properly utilized in public and private secondary schools in North Central Zone of the country.

Details of the response to item 1 revealed that, of 3,210 respondents 2,071 (64.5%) of the respondents disagreed that instructional facilities such as machines audio, visual, audio-visual materials, chalkboards, stools, and workshop equipment were effectively utilized, while 930 (30.5%) agreed with the statement and 159 (5.0%) undecided. It is probable that many principals do not disburse these instructional facilities to the teachers for proper utilization, even when it is rightly available in schools.

Analysis of item 2 shows that the teachers and students of the secondary schools in the North Central Zone of Nigeria do not effectively utilize textbooks. 2,072 (64.5%) of the respondents confirmed this statement as regard the utilization of textbooks in schools, while only 807 (25.1%) agreed and a little fraction 331 (10.3%) remained undecided. Since textbooks are a vital source of information for learning in schools, where in this case, they are not being effectively utilized, implies that there would poor mastering of subject matter for the teachers and poor understanding of certain subjects topics which require the use of textbooks. In the absence of proper utilization of relevant books, students will resorts to pleasuring takes place in the secondary schools of North Central Zone, Nigeria.

A disproportionate majority 2,335(72.7%) and 2,010(62.6%) of the response to items 3 and 4 showed their disapproval of effective utilization of computer sets such as scanners, photocopy machines, printers, laboratory apparatus like cylinders, burners, flannel board, magnetic board etc. Only a minority 701(21.8%) and 1,138(35.5%) of the respondents agreed with the proper use of computer sets and laboratory apparatus respectively. While a lesser minority 174(5.4%) and 62(1.9%) were undecided. These data showed that the necessary teaching aids for the computer education in terms of learning of science, technology and computer, are not put to use in most of the secondary school in the North Central Zone, Nigeria. If we want to be technologically self reliant and up to date technologically, this situation should be address in the affected parts of the country with earnest and vigor.

Response to item 5 reveals poor utilization of ICT/web communication like internet facilities in these schools. 2,296 (71.5%) of the respondents were of the opinions that ICT/web communication were poorly utilized, while only 659 (20.5%) agreed with the statement. A staggering minority 255 (7.9%) were undecided. The poor utilization of these facilities may be as a result of absent of modern internet access and connectivity. Therefore, there is urgent need for quick intervention by concerned stakeholders.

The analysis of items 1-5 above shows that, of 16,050 responses, 4,285 (26.7%) agreed that adequate utilization of instructional facilities in the public and private secondary schools in North Central Zone, Nigeria. A vast majority of the respondents opined that these facilities were not properly utilized 10,784 (67.2%), while only 981 (6.1%) of the respondents were undecided. It can be inferred that principals of secondary schools need to be orientated and instructed through seminars or workshops, on the need and how to monitor make good usage of instructional materials in secondary schools in the North Central Zone, Nigeria.

Analysis of item 6 as revealed in table 10 indicated that the majority of the public and private secondary schools in the North Central Zone, Nigeria do not make adequate use of few available schools health facilities like clinic, ambulance and drugs for the benefits of students and staff. 1,969 (61.3%) disagree with the statement that there is proper utilization of school health facilities like clinic, ambulance and drugs while 945 (29.4%) agree and 296 (9.2%) undecided. This result into dilapidation of school clinic buildings and worsening the critical case of health services that supposed to offer for students and staff. Government through states ministries of education should rehabilitates buildings meant for school clinic and also equipped same with modern health care facilities and qualified health workers for the purpose of health and welfare needs of both students and staff that were the users of school clinics, as well as proper use of drugs to cure ailments, diseases and sicknesses. On the part of school principals, the students and staff, all available health and welfare facilities such as ambulance, school clinic and drugs should be put to maximum utilization to improve students' mental health.

Item 7 responses show that financial and material resources for implementation of the school health programme are not fully utilized in the secondary schools in North Central Zone, Nigeria. Whereas, 2,061 (64.2%) of the view that fund generated by schools were not been used for school health programme, only 990 (30.8%) of the respondents agreed, while 159 (5.0%) of them were undecided. This result was confirmation of happenings in most of the secondary schools, when funds which should have been used to buy first aids drugs, and health materials needed in the school clinic for urgent medical attention were not properly utilized. The school Principals of these schools ought to wake up to their duties and responsibility of maximum use of health and welfare needs of both students and staff.

Analysis of items 8, 9, 10 also confirmed that, most of the secondary schools in North Central Zone, Nigeria showed poor utilization of school welfare programmers like safety measures, proper nutrition, exercise, rest sleep and medical care, basic health and safety requirement such as good and clean environment, first aid facilities; and good ventilation were not properly use. Specifically, 1,872 (58.3%), 1,856 (57.8%), 1,937 (60.3%) of the respondents in items 8, 9, 10 affirmed this, while only 1,115 (35.9%), 1,173(36.5%), 965 (30.1%) of them agreed that health facilities are properly utilized, while 187 (5.8%), 181 (5.6%) and 308 (9.6%) undecided.

In summary, items 6-10 above shows under-utilization of health and welfare facilities in the public and private secondary schools in North Central Zone, Nigeria. Of 16,050 responses, only 5,224 (32.6%) agreed with the statement of proper utilization of health and welfare facilities 9,695 (60.4%) disagreed with the statement while 1,131 (7.0%) were undecided. Even where health and welfare facilities are available if not put the use, the overall health need of such schools becomes very poor. The students, staff and the principal are not carrying healthy body to school. The performances of such students and staff (including the principal) will be far from optimum.

Analysis of items 11, 13, 14 reveals that students do not make adequate utilization of game facilities and equipment like soccer pitches, athletic tracks, lawn tennis and table tennis courts, basketball and volley ball courts. Result from the table indicated that 2,173 (67.7%), 2,144 (66.8%), 1,835 (57.2%) of the respondents said that these facilities were not fully utilized, while only 846 (26.%), 894 (27.9%), 1,252 (39%) agree that the facilities are well utilized and 191 (6%), 174 (5.4%) and 123 (3.8%) remain undecided. In schools where students do not adequately observe siesta, leisure time, light out, play games and use instructional facilities including libraries, one wonder what they engage their time in doing. In schools where these facilities were under-utilized, it is very likely that their students and teachers engage in sporting activities in which help in both physical fitness and mental alertness of students and teachers.

Result from items 12 and 15 indicated that recreational facilities such as relaxation rooms and recreational activities (hobbies) like music, reading, watching films on TV, gardening, hunting, sports, studies and travel are not fully used in secondary schools in North Central Zone, Nigeria. This position was affirmed by the response of about 2,047 (63.8%), 1,509 (47%) of the respondents in items 12 and 15 who disagree. Only a minority 1,043 (32.5%), 1,476 (46%) of the respondents agreed, while about 120 (3.7%) and 225 (7%) are undecided.

In summary, analysis of items 11-15 shows under-utilization of games/recreational facilities in the some public and private secondary schools in North Central Zone, Nigeria. Of 16,050 responses, 9,708 (60.5%) belief games/recreational facilities were not been used effectively, while 5,511 (34.3%) agreed and 831 (5.2%) were undecided. With this, result, it could be inferred that games and recreational facilities in most of the secondary schools were poorly used. This could pose a serious threat to cognitive, affective and psychomotor domain of students which functional educational system aimed to develop in learners.

Analysis of items 16 and 17 shows poor use of infrastructural facilities such as classrooms, staffrooms, halls, library block, student and teacher's tables and school fence in secondary schools. Facilities like classrooms and staffrooms could be due to indiscipline resulting from non-satisfactory of the concerned teachers with their jobs due to late salaries, non-payment of salaries and allowances and poor pay packages. These often turns a good number of teachers unto the market and farms for survival, thereby leaving teaching job unattended to. The issue of absenteeism follows on the part of day-students who do not enjoy lessons delivered as a result of non utilization of staff rooms and offices which make them ineffective by teachers. 199 (6.2%) and 159 (4.7%) of the respondents confirmed this statement, while 1,072 (33.4%) and 1,094 (34.1%) agree with the statement. Only 199 (6.2%) and 150 (4.7%) of the respondents remained undecided.

Analysis of items 18, 19 and 20 shows that more than 1,716 (53.5%) of the respondents expressed their disapproval of full utilization of computer room/ICT centre, furniture, wall brackets, sport and equipment facilities, schools bus and open space for sports in their schools. 1,341 (41.8%), 808 (25.5%), 823 (25.6%) agreed with the statement while 153(4.8%) and 264 (8.2%) were undecided.

Items 16-20 shows that infrastructural facilities were not utilized adequately in public and private secondary schools in North Central Zone, Nigeria. Of a total of 16,050 responses, 9,913 (61.8%) disapproved the notion of adequate utilization of these infrastructural facilities, while only 5,138 (32.0%) agreed, while 999(6.2%) were undecided.

Out of 64,200 responses in items 1-20, only 20,158 (31.40%) agreed that there is adequate use of instructional, welfare/health, game/recreational facilities and infrastructural facilities in the public and private secondary schools in North Central Zone, Nigeria. As much as 40,100 (62.5%) disagree with the statement while just 3,942 (6.1%) were undecided. This implies that the majority of the public and private secondary school in north central zone, Nigeria do not adequate utilizes their instructionally, welfare/health, game/recreational as well as infrastructural facilities. This amounts to wastage and low performance of the students, staff and principals of the secondary schools in north central zone, Nigeria. This result is in confirmation of Ifeanyichukwu (2013) that of all the physical education teaching facilities only soccer fields are available in all the schools. However more than half of the schools have volleyball courts, basket ball courts and athletic tracks and fields. Ayeni & Ogunbameru (2013) study also found that the relationship between teachers and students on the utilization of ICT facilities was low.

Research Question 3: What are the stakeholders' opinions on the maintenance of instructional, welfare/health, games/recreational and infrastructural facilities in secondary schools in North Central Zone, Nigeria?

4.3.3 Opinion of Stakeholders' on maintenance of instructional, welfare/health, games/recreational and infrastructural facilities in public and private secondary schools in North Central Zone, Nigeria.

Table 11: Stakeholders' perception on maintenance of instructional, welfare/health, games/recreational and infrastructural facilities in public and private secondary schools in North Central Zone, Nigeria.

S/N0	Item	ESH	A	%	UN	%	SD	%
1	There is proper maintenance of instructional facilities such items as machines, Audio, visual , Audio/visual materials, chalk boards, stools and workshop equipment in my school.	Teacher	287	17.0	73	4.3	1330	78.7
		PTA	307	30.3	25	2.5	682	67.3
		MOE	12	21.4	2	3.6	42	75.0
		Principal	157	46.4	13	3.8	168	49.7
		QA	18	32.1	1	1.8	37	66.1
		TESCOM	14	25.0	3	5.4	39	69.6
		TOTAL	**795**	24.8	**117**	3.6	**2298**	71.6
2	The available relevant text books in my school are well maintained.	Teacher	445	26.3	21	1.2	1224	72.4
		PTA	411	40.5	57	5.6	546	53.8
		MOE	16	28.6	2	3.6	38	67.9
		Principal	114	33.7	31	9.2	193	57.1
		QA	14	25.0	4	7.1	38	67.9
		TESCOM	8	14.3	2	3.6	46	82.1
		TOTAL	**1008**	31.4	**117**	3.6	**2085**	65.0
3	Computers sets like: scanners photocopy machines, printers etc are adequately maintained in my school.	Teacher	230	13.6	166	9.8	1294	76.6
		PTA	506	49.9	29	2.9	479	47.2
		MOE	17	30.4	5	8.9	34	60.7
		Principal	161	47.6	10	3.0	167	49.4
		QA	13	23.2	3	5.4	40	71.4
		TESCOM	15	26.8	5	8.9	36	64.3
		TOTAL	**942**	29.3	**218**	6.8	**2050**	63.9
4	Laboratory apparatus e.g. cylinders, burners, flannel board, magnetic board are fully maintained in my school.	Teacher	427	25.3	180	10.7	1083	64.1
		PTA	391	38.6	37	3.6	586	57.8
		MOE	15	26.8	5	8.9	36	64.3
		Principal	141	41.7	21	6.2	176	52.1
		QA	14	25.0	7	12.5	35	62.5
		TESCOM	17	30.4	6	10.7	33	58.9
		TOTAL	**1005**	31.3	**256**	8.0	**1949**	60.7
5	The ICT/Web communications like internet facilities in my school are regularly maintained.	Teacher	419	24.8	61	3.6	1210	71.6
		PTA	315	31.1	23	2.3	676	66.7

		MOE	16	28.6	2	3.6	38	67.9
		Principal	151	44.7	17	5.0	170	50.3
		QA	18	32.1	4	7.1	34	60.7
		TESCOM	14	25.0	5	8.9	37	66.1
		TOTAL	**933**	29.1	**112**	3.5	**2165**	67.4
		TOT 1-5	**4683**	29.2	**820**	5.1	**10547**	65.7
6	There is adequate maintenance of school health facilities like: clinic, ambulance, drugs in my school.	Teacher	545	32.2	76	4.5	1069	63.3
		PTA	261	25.7	52	5.1	701	69.1
		MOE	13	23.2	5	8.9	38	67.9
		Principal	141	41.7	42	12.4	155	45.9
		QA	15	26.8	2	3.6	39	69.6
		TESCOM	12	21.4	3	5.4	41	73.2
		TOTAL	**987**	30.7	**180**	5.6	**2043**	63.6
7	Financial and material resources for implementing school health service programme are properly maintained in my school.	Teacher	445	26.3	211	12.5	1034	61.2
		PTA	341	33.6	35	3.5	638	62.9
		MOE	13	23.2	5	8.9	38	67.9
		Principal	182	53.8	36	10.7	120	35.5
		QA	14	25.0	1	1.8	41	73.2
		TESCOM	12	21.4	2	3.6	42	75.0
		TOTAL	**1007**	31.4	**290**	9.0	**1913**	59.6
8	School welfare programmes such as: safety measures, proper nutrition, exercises, rest, sleep and medical care are adequately maintained.	Teacher	497	29.4	83	4.9	1110	65.7
		PTA	353	34.8	45	4.4	616	60.7
		MOE	15	26.8	4	7.1	37	66.1
		Principal	275	81.4	35	10.4	28	8.3
		QA	14	25.0	5	8.9	37	66.1
		TESCOM	13	23.2	2	3.6	41	73.2
		TOTAL	**1167**	36.4	**174**	5.4	**1869**	58.2
9	Good ventilation which removes and dilutes warm, humid air and provides air movement which gives a sense of freshness without causing a draught is maintained adequately.	Teacher	501	29.6	52	3.1	1137	67.3
		PTA	491	48.4	39	3.8	484	47.7
		MOE	15	26.8	2	3.6	39	69.6
		Principal	242	71.6	24	7.1	72	21.3
		QA	14	25.0	5	8.9	37	66.1
		TESCOM	15	26.8	5	8.9	36	64.3
		TOTAL	**1278**	39.8	**127**	4.0	**1805**	56.2
10	Basic health and safety requirements such as good and clean environments, first aid facilities are properly maintained.	Teacher	409	24.2	59	3.5	1222	72.3

		PTA	218	21.5	43	4.2	753	74.3
		MOE	12	21.4	3	5.4	41	73.2
		Principal	152	45.0	31	9.2	155	45.9
		QA	11	19.6	5	8.9	40	71.4
		TESCOM	13	23.2	4	7.1	39	69.6
		TOTAL	**815**	25.4	**145**	4.5	**2250**	70.1
		TOT 6-10	**5254**	32.7	**916**	5.7	**9880**	61.6
11	Game facilities and equipment like Soccer pitches, Athletic track are adequately maintained in my school.	Teacher	729	43.1	19	1.1	942	55.7
		PTA	245	24.2	62	6.1	707	69.7
		MOE	8	14.3	2	3.6	46	82.1
		Principal	42	12.4	78	23.1	218	64.5
		QA	7	12.5	3	5.4	46	82.1
		TESCOM	15	26.8	3	5.4	38	67.9
		TOTAL	**1046**		**167**		**1997**	
12	Recreational facilities such as relaxation rooms for students' enjoyment, amusement, or pleasure and are well maintained in my schools.	Teacher	814	48.2	73	4.3	803	47.5
		PTA	196	19.3	33	3.3	785	77.4
		MOE	8	14.3	2	3.6	46	82.1
		Principal	201	59.5	33	9.8	104	30.8
		QA	12	21.4	2	3.6	42	75.0
		TESCOM	10	17.9	6	10.7	40	71.4
		TOTAL	**1241**		**149**		**1820**	
13	Lawn tennis court and table tennis courts are regularly maintained in my school.	Teacher	703	41.6	65	3.8	922	54.6
		PTA	183	18.0	45	4.4	786	77.5
		MOE	8	14.3	5	8.9	43	76.8
		Principal	139	41.1	51	15.1	148	43.8
		QA	13	23.2	4	7.1	39	69.6
		TESCOM	15	26.8	3	5.4	38	67.9
		TOTAL	**1061**		**173**		**1976**	
14	There is adequate maintenance of basket ball court, Volley ball courts in my school.	Teacher	405	24.0	81	4.8	1204	71.2
		PTA	126	12.4	31	3.1	857	84.5
		MOE	14	25.0	2	3.6	40	71.4
		Principal	59	17.5	42	12.4	237	70.1
		QA	12	21.4	4	7.1	40	71.4

		TESCOM	11	19.6	2	3.6	43	76.8
		TOTAL	**627**		**162**		**2421**	
15	There is proper maintenance of recreational facilities designated for hobbies on a regular basis. Facilities for reading, playing or listening to music, watching movies or TV, gardening, hunting, sports, studies, and travel are properly maintained in my school.	Teacher	674	39.9	71	4.2	945	55.9
		PTA	471	46.4	31	3.1	512	50.4
		MOE	15	26.8	3	5.4	38	67.9
		Principal	119	35.2	12	3.6	207	61.2
		QA	10	17.9	5	8.9	41	73.2
		TESCOM	12	21.4	3	5.4	41	73.2
		TOTAL	**1301**	40.5	**125**	3.9	**1784**	55.6
		TOT 11-15	**5276**	32.9	**776**	4.8	**9998**	62.3
16	There is adequate maintenance of infrastructural facilities like building of Classrooms and staff rooms and School Halls, Library block with updated materials in my school.	Teacher	582	34.4	110	6.5	998	59.1
		PTA	109	10.7	14	1.4	891	87.9
		MOE	11	19.6	2	3.6	43	76.8
		Principal	106	31.4	9	2.7	223	66.0
		QA	9	16.1	5	8.9	42	75.0
		TESCOM	11	19.6	2	3.6	43	76.8
		TOTAL	**828**	25.8	**142**	4.4	**2240**	69.8
17	Students and Teachers' Toilets and School Fence are properly maintained in my school.	Teacher	582	34.4	211	12.5	897	53.1
		PTA	104	10.3	23	2.3	887	87.5
		MOE	9	16.1	4	7.1	43	76.8
		Principal	82	24.3	41	12.1	215	63.6
		QA	9	16.1	3	5.4	44	78.6
		TESCOM	13	23.2	6	10.7	37	66.1
		TOTAL	**799**	24.9	**288**	9.0	**2123**	66.1
18	There is proper maintenance of computer room/ICT centre in my school.	Teacher	511	30.2	291	17.2	888	52.2
		PTA	94	9.3	31	3.1	889	87.7
		MOE	7	12.5	7	12.5	42	75.0
		Principal	99	29.3	19	5.6	220	65.1
		QA	7	12.5	3	5.4	46	82.1
		TESCOM	13	23.2	5	8.9	38	67.9
		TOTAL	**731**	22.8	**356**	11.1	**2123**	66.1
19	Furniture (chairs and tables), wall brackets for hanging educative pictures in my school are regularly maintained.	Teacher	603	35.7	121	7.2	966	57.2
		PTA	100	9.9	17	1.7	897	88.5
		MOE	7	12.5	5	8.9	44	78.6

		Principal	101	29.9	21	6.2	216	63.9
		QA	9	16.1	4	7.1	43	76.8
		TESCOM	9	16.1	6	10.7	41	73.2
		TOTAL	**829**	25.8	**174**	5.4	**2207**	68.8
20	Funds are provided for proper and adequate maintenance of sport and equipment facilities (open space for sport), school bus, in my school.	Teacher	593	35.1	258	15.3	839	49.6
		PTA	94	9.3	21	2.1	899	88.7
		MOE	9	16.1	2	3.6	45	80.4
		Principal	84	24.9	14	4.1	240	71.0
		QA	7	12.5	2	3.6	47	83.9
		TESCOM	12	21.4	4	7.1	40	71.4
		TOTAL	**799**	24.9	**301**	9.4	**2110**	65.7
		TOT-16-20	**3986**	24.8	**1261**	7.9	**10803**	67.3
	TOTAL		**19,349 (30.1%)**		**3,936 (6.1%)**		**40,915 (63.7)**	

Source: Field Study (2016)

Table 11 shows the responses to items 1 to 20 which seek answers to whether there is maintenance of instructional, welfare/heath, games/recreational and instructional facilities in public and private secondary schools in North Central Zone of the country.

Details of responses to items 1 and 2 show out of 3,210 respondents, 2,298 (71.6%) and 2,085(65.0%) disagreed with the statement of proper maintenance of instructional facilities such as machines, audio, visual, audio-visual materials, chalk boards stools and workshop equipment and relevant textbooks. Only 795 (24.8%) and 1008 (31.4%) agreed with the statement while 117 (3.6%) and 117 (3.6%) remained undecided respectively. This shows that the maintenance culture of the students and staff of secondary schools in North Central Zone Nigeria. As regards instructional facilities is poor. Analysis of items 3,4, 5 also show poor maintenance of computer sets like, scanner, photocopy machines, printers, laboratory apparatus like cylinders, burners, flannel board, magnetic boards and ICT/web communications like internet facilities. Science, technology and computer/internet facilities are expensive. Where these are not properly maintained a lot of money will be invested in the repair/replacement of such facilities. This investment could be put into better use procurement of other equipment and facilities, both instructional, health/game as well as infrastructural facilities. 2,050(63.9%), 1,949(60.7%) and 2,165(67.4%) respectively disagreed with the statement of proper maintenance of computer sets, laboratory apparatus and ICT web communication facilities. A minority agreed 942 (29.3%), 1,005

(31.3%) and 933 (29.1%) with the statement while an infinite estimably small minority remained undecided 218 (6.8%), 256 (8.0%) and 112 (3.5%).

Detail analysis of items 6 and 7 shows that the majority of respondents disagreed with the statement 2,043 (63.6%) and 1,913 (59.6%) of adequate maintenance of school health facilities like clinics, ambulance, drugs, and financial and material resources for implementing school health service programme. 987 (30.7%) and 1007 (31.4%) agreed with the statement which a small fraction remained undecided 180 (5.6%) and 290 (9.0%).

Analysis of items 8,9,10 reveals that over 1,869 (58.2%) of the respondents disagreed with the statement of adequate maintenance of school welfare programme such as safety measures, proper nutrition, exercises, rest sleep and medical care, and adequate maintenance of good ventilation and basic wealth and safety requirement such as good and clean environment and first aid facilities. About 1,167 (36.4%) agreed with the statement while just about 174(5.4%) renamed undecided.

Where health facilities like school clinic and school ambulance are not adequately maintained, the investment in these becomes jeopardized leading to degradation and waste of money. The investment has to be repeated more often than would have been needed. Where students do not maintain good sleep, insomnia (sleeplessness) and diseases like sleeping sickness, diarrhea and malaria can result from inadequate maintenance of good and clean environment.

Analysis of items 6-10 reveals that the majority of our secondary schools in the north central zone, Nigeria. Do not adequately maintain their games/recreational facilities. Where for instance soccer pitches are not well maintained (e.g grasses are eroded), football players can easily get injured. Again accurate measurement cannot be made where there are no tracks well defined, no basket-ball nets etc. this complicates referrals work.

Analysis of items 16,17,18,19,20 shows that 10, 803 (67.3%) of the respondents disapprove of the statement of adequate maintenance of infrastructural facilities like classrooms, staffrooms, school halls, laboratory, student toilet, staff toilet, school fence, computer room/ICT centre, furniture, school bus etc. only 3,986 (24.8%) agreed with the statement while 1, 261 (7.9%) were undecided.

These data for items 16, 17, 18, 19, 20 show that most of the public and private secondary schools in north central zone, Nigeria. Do not adequately maintain their infrastructural facilities.

Out of a total of 64, 200 only 19, 349 (30.1%) in items agree that the public and private secondary schools in north central zone, Nigeria adequately maintain their instructional, welfare/health, games/recreational and infrastructural facilities 40,915 (63.7%) disagree with the statement while 396(6.1%) were undecided. These data show that majority of the public and private secondary schools in the north central zone, Nigeria. Do not adequately maintain their instructional facilities. This poor maintenance culture spells unnecessary financial and material input on the part of school and government, as a result of replacement or purchase of new items that would not have been called for at the point of time. This findings confirmed early results of Asiyai (2012) that the maintenance carried out on school facilities were inadequate for majority of the facilities.

Table 12: Summary of Responses to Research Questions 1-3

S/N0	`Research questions	A	%	UN	%	D	%	REMARKS
1	What are the Stakeholders' opinions on the provision of instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities in secondary schools North Central Zone, Nigeria?	18,992	29.6	3,760	5.9	41,448	64.5	Inadequate provision
2	What are the Stakeholders' opinions on the utilization of instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities in secondary schools North Central, Zone, Nigeria?	20,158	31.4	3,942	6.1	40,100	62.5	Over-utilization
3	What are the Stakeholders' opinions on the maintenance of instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities in secondary schools North Central, Zone, Nigeria?	19,349	30.1	3,936	6.1	40,915	63.7	Poor Maintenance

Table shows 12 summary of response to research questions one to sixty showed inadequate provision of school facilities, overutilization and poor maintenance culture of instructional facilities, games/recreational facilities, welfare/health facilities and infrastructural facilities in secondary schools in North Central Zone, Nigeria.

4.4 Hypotheses Testing

Hypothesis 1: There is no significant difference in the opinions of Ministry of Education officials, principals, teachers and Parent Teacher Association (PTA) officials (Stakeholders) on the provision of instructional facilities, welfare/health, games/recreational and infrastructural facilities in secondary schools North Central Zone, Nigeria.

Table 13: Analysis of Variance (ANOVA) Summary of the opinions of Stakeholders' on the Provision of Instructional, Welfare/health, Games/recreational and Infrastructural Facilities in Secondary Schools in North Central Zone, Nigeria

Source of Variation	Sum of Squares	df	Mean Square	F –Value	P-Value	F- Critical
Between Groups	37563275.989	5	7512655.198	73.772	.000	2.31
Within Groups	36050013.967	354	101836.198			
Total	**73613289.956**	**359**				

Significant at p<0.05

Table 13 showed calculated F-Value of F= 73.772 is greater than the critical value of 2.31, while the P-Value P= 0.000 is less than the significant value of 0.05 which indicated that there is significant difference in the opinions of the stakeholders. Therefore, the null hypothesis 1 which stated that there is no significant difference in the opinions of Stakeholders' on the provision of instructional facilities, welfare/health, games/recreational and infrastructural facilities in secondary schools in North Central Zone, Nigeria is hereby rejected**.** After rejection of the hypothesis, Scheffe test was conducted to find out the area of significant difference. Details of Scheffe test can be seen in table 14.

Table 14: The Scheffe Post Hoc Comparison statistics on Differences in Opinions of Stakeholders' on the Provision of Instructional, Welfare/health, Games/recreational and Infrastructural Facilities in Secondary Schools in North Central Zone, Nigeria.

Status	N	Mean	Std. Error
Principal	338	650.367	58.263
MOE	56	837.883	58.263
Teachers	1690	-837.883	58.263
PTA Officials	1014	-549.100	58.263
Quality Assurance officials	56	838.683	58.263
TESCOM Officials	56	838.050	58.263
Total	**3210**	**4551.996**	**349.578**

Table 14 shows the mean opinions of the respondents on provision of instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities in secondary schools North Central Zone, Nigeria. The Scheffe Post Hoc comparison statistics confirmed that there was mean score of teachers -837.883 was found to be closer to that of PTA Officials -549.100, implying that the difference between the two respondents was not significant because they both share opinions of inadequate of these facilities. While others respondents such as 650.367 of principal, 837.883 of MOE, 838.683 of quality assurance, and 838.050 of TESCOM share positive mean opinions. This implies that teachers/PTA officials differ significantly from other stakeholders in their opinions regarding the provision of school facilities in secondary schools in north central zone, Nigeria.

Hypothesis 2: There is no significant difference in the opinions of the Stakeholders' on the utilization of instructional facilities, welfare/health, games/recreational and infrastructural facilities in secondary schools North Central Zone, Nigeria.

Table 15: Analysis of Variance (ANOVA) Summary of the Opinions of Stakeholders' on the Utilization of Instructional, Welfare/health, Games/recreational and Infrastructural Facilities in Secondary Schools in North Central Zone, Nigeria.

Source of Variation	Sum of Squares	df	Mean Square	F –Value	P-Value	F- Critical
Between Groups	40965863	5	8193172.711	87.048	.000	2.31
Within Groups	33319327.767	354	94122.395			
Total	**74285191.322**	**359**				

Significant at $p<0.05$

The calculated F-Value of F= 87.048 is greater than the critical value of 2.31, while the P-Value P= 0.000 is less than the significant value of 0.05 which indicated that there is significant difference in the opinions of education stakeholders. Therefore, the null hypothesis 2 which stated that there is no significant difference in the opinions Stakeholders' on the utilization of instructional facilities, welfare/health, games/recreational and infrastructural facilities in secondary schools in North Central Zone, Nigeria is hereby rejected**.** After rejection of the hypothesis, Scheffe test was conducted to find out the area of significant difference. Details of Scheffe test can be seen in table 16.

Table 16: The Scheffe Post Hoc Comparison statistics on Differences in Opinions of Stakeholders' on the Utilization of Instructional, Welfare/health, Games/recreational and Infrastructural Facilities in Secondary Schools in North Central Zone, Nigeria.

Status	N	Mean	Std. Error
Principal	338	686.350	56.013
MOE	56	886.500	56.013
Teachers	1690	-334.333	56.013
PTA Officials	1014	-552.167	56.013
Quality Assurance officials	56	886.133	56.013
TESCOM Officials	56	886.050	56.013
Total	**3210**	**4231.533**	**349.578**

Table 16 shows the mean opinions of the respondents on utilization of instructional facilities, welfare/health, games/recreational and infrastructural facilities in secondary schools North Central Zone, Nigeria. The Scheffe Post Hoc comparison statistics in table 18 revealed that there was negative mean score of teachers -334.333 was found to be closer to that of PTA Officials -552.167, implying that the difference between the two respondents was not significant because they both share the view that school facilities were not properly use. While other respondents such as 686.350 of principal, 886.500 of MOE, 886.133 of Quality Assurance officials, and 886.050 of TESCOM share positive mean opinions which indicated that facilities were fully utilized. This implies that teachers and PTA officials differ significantly from other stakeholders in their opinions regarding the utilization of instructional facilities in secondary schools North Central Zone, Nigeria.

Hypothesis 3: There is no significant difference in the opinions of the Stakeholders' on the maintenance of instructional facilities, welfare/health, games/recreational and infrastructural facilities in secondary schools North Central Zone, Nigeria.

Table 17: Analysis of Variance (ANOVA) Summary of the Opinions of Stakeholders', on the Maintenance of Instructional, Welfare/health, Games/recreational and Infrastructural Facilities in Secondary Schools in North Central Zone, Nigeria.

Source of Variation	Sum of Squares	df	Mean Square	F –Value	P-Value	F- Critical
Between Groups	42035839.889	5	8407167.978			
				85.531	.000	2.31
thin Groups	34795939.833	354	98293.615			
Total	**17922221.86**	**359**				

Significant at p<0.05

The calculated F-Value of F= 85.531 is greater than the critical value of 2.31, while the P-Value P= 0.000 is less than the significant value of 0.05 which indicated that there is significant difference in the opinions of education stakeholders. The null hypothesis 3 which stated that there is no significant different in the opinions of the stakeholders' on the maintenance of instructional facilities, welfare/health, games/recreational and infrastructural facilities in secondary schools in North Central Zone, Nigeria is hereby rejected**.** After rejection of the hypothesis, Scheffe test was conducted to find out the area of significant difference. Details of Scheffe test can be seen in table 18.

Table 18: The Scheffe Post Hoc Comparison Statistics on Differences in Opinions of Stakeholders' on the Maintenance of Instructional, Welfare/health, Games/recreational and Infrastructural Facilities in Secondary Schools in North Central Zone, Nigeria.

Status	N	Mean	Std. Error
Principal	338	586.400	56.013
MOE	56	780.600	56.013
Teachers	1690	-259.267	56.013
PTA Officials	1014	-521.333	56.013
Quality Assurance officials	56	780.933	56.013
TESCOM Officials	56	782.000	56.013
Total		**4393.67**	**349.578**

Table 18 shows the mean opinions of the respondents on maintenance of instructional facilities, welfare/health, games/recreational and infrastructural facilities in secondary schools North Central Zone, Nigeria. The Scheffe Post Hoc comparison statistics revealed that there was negative mean score of teachers -259.267 was found to be closer to that of PTA Officials -521.333, implying that the difference between the two respondents was not significant because the both share negative mean opinions. While other respondents such as 586.400 of principal, 780.600 of MOE, 780.933 of Quality Assurance officials, and 782.000 of TESCOM share positive mean opinions. This implies that teachers and PTA officials differ significantly from other stakeholders in their opinions regarding the maintenance of instructional facilities in secondary schools in North Central Zone, Nigeria.

4.5 Summary of Hypotheses Testing

The table 19 presents the outcome of the hypotheses tested which shows F-Value, P-Value,F-Critical and the decisions arrived at.

Table 19: Summary of Hypotheses Testing

		Statistical	**Level**	**Results outcome**			
S/N0	**Hypotheses Statements**	**Tool**	**of Sig.**	**F-Value**	**P-Value**	**F-Critical**	**Decision**
1	There is no significant difference in the opinions of Stakeholders' on provision of instructional, welfare/health, games/recreational and infrastructural facilities in Secondary Schools in North Central Zone, Nigeria.	ANOVA	0.05	73.772	0.000	2.10	Rejected
2	There is no significant difference in the opinions of Stakeholders' on utilization of instructional, welfare/health, games/recreational and infrastructural facilities in Secondary Schools in North Central Zone, Nigeria.	ANOVA	0.05	87.048	0.000	2.10	Rejected
3	There is no significant difference in the opinions of Stakeholders' on the maintenance instructional, welfare/health, games/recreational and infrastructural facilities in secondary schools in North Central Zone.	ANOVA	0.05	85.531	0.000	2.10	Rejected

4.6. Summary of Major Findings

The summary of the findings revealed that:

1. there was inadequate provision of instructional facilities like textbooks, workshops equipments etc, welfare/health facilities such school clinics, drugs among others, games/recreational facilities like sports wears, relaxation rooms and so on, and infrastructural facilities such as classrooms, staff quarters, staff rooms etc. in North Central Zone, Nigeria;
2. there was ineffective utilization of instructional facilities, welfare/health facilities, game facilities and equipment like soccer pitches, athletic track, and infrastructural facilities like building of classrooms and staff rooms and school halls, library block in public and private secondary schools in North Central Zone, Nigeria; and
3. there was poor maintenance of instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities like building of classrooms and staff rooms and school halls, library block with updated materials in secondary schools in North Central Zone of Nigeria.

4.7 Discussions of the Findings

The study showed significant difference in the opinions of education stakeholders on the provision of instructional facilities, welfare/health facilities such school clinics, drugs among others, games/recreational facilities like sports wears, relaxation rooms, and infrastructural facilities in public and private secondary schools in North Central Zone, Nigeria.

The inadequate provision of school facilities like staff rooms, classrooms, school facilities such as audio and visual teaching aids, internet facilities, school clinic, drugs, soccer field in the secondary schools reduces the comfort of the teachers and their morals as well as the students interest and performance level in school system. Again, some of the available facilities are one which has become outdated due to the fact that they have over stayed and become obsolete. To make matter worse, teachers' poor innovative knowledge and creative skills to improvise some of non-available instructional facilities and maintained some of these facilities foiled potential solution to correct the problems of inadequacy. In nutshell, school without adequate provision of school facilities is like body without head. Muhammad, Muhammad, Khalid, Javed and Muhammad (2015) concluded that there are inadequate supplies of the various physical resources that can be used in the teaching and learning in secondary schools within the area of study.

This result implies that most of the teachers and PTA officials confirmed the inadequate provision of these facilities in secondary schools especially; instructional facilities, welfare/health facilities and games/recreational facilities were grossly inadequately. However, school principals, ministries of education officials, TESCOM and QA officials insist that these facilities were provided in the schools as revealed in scheffe test in appendix L. This suggests that there is difference in the perceptions of education stakeholders as regards the provision of instructional facilities in public and private secondary schools.

It can be seen from Appendix L that education stakeholders have divergence opinion on the provision of school facilities in secondary schools, most especially, those with the mean difference below 0.05 level of significance (mean difference is significance at 0.05). From the table, all portions of the education stakeholders that have the asteric (*) indicate significant difference in the opinion of stakeholders like teachers, PTA officials, principals, MOE (QA, TESCOM, MOE) on the provision of instructional facilities in secondary schools. Significant difference was also noticed between opinions of Teachers, PTA officials and Principal, MOE (QA, TESCOM). Teacher and PTA officials were of opinion on inadequate provision of instructional facilities laboratory apparatus e.g. cylinders, burners, flannel board, magnetic board, chemical e.g reagents, ICT/ Web communication like internet facilities, machines, audio, visual, audio/visual materials, chalk boards, stools and workshop equipment in secondary schools as shown in Scheffe test in appendix L (no significant difference) which may be as result of their closeness to the students, teachers are the ones to use instructional materials and PTA officials are always relating with teachers, and the schools. Therefore, they are in better position to know whether instructional materials are provided in the schools or not.

However, there is no significant difference in the opinions of principals, MOE (QA, TESCOM, MOE) as regards the provision of welfare/health facilities in schools. Sharing the same opinions that welfare/health facilities were provided in schools may be because of their management status. This result implies that the later stakeholders believed that infrastructural facilities like classrooms, staffrooms, hostels etc were adequately provided while others see the provision of infrastructural facilities such as building of classrooms and staff rooms and school halls, library block with updated materials, students and teachers' toilets and school fence, computer rooms/ICT center, furniture (chairs and tables), wall brackets for hanging educative pictures, and sport and equipment facilities (open space for sport), school bus in secondary schools in the study areas as inadequate. This suggests that there is difference in the perceptions of education stakeholders as regards the provision of infrastructural facilities in public and private secondary schools.

Summary of response to research question 1 showed that majority of the respondents indicate were of the view that these facilities were inadequate with 41,448(64.5%), on the contrary, school principals, ministries of education officials and quality assurance personnel believed that school facilities were provided in the schools with 18,992(29.6%). Consequently, opinions of teachers and PTA officials were confirmed by Scheffe test shown in table 14 and since they were the direct users of these facilities, this may be the major factor that allows them to know that there is inadequate provision of these facilities such as machines, audio, visual, audio/visual materials, chalk boards, stools and workshop equipments, relevant textbooks, computers sets like scanners photocopy machines, printers, ICT/ Web communication like internet facilities, laboratory apparatus e.g. cylinders, burners, flannel board, magnetic board, chemical e.g reagents, classrooms, computers, toilets, laboratory equipments, chemicals, football field, balls, table tennis, relaxation rooms, functional school bus among others facilities were not adequately available in secondary schools as shown by stakeholders' response to the questionnaire related to provision of school facilities. This is in support of Tadesse & Maeregu (2014) that school facilities and instructional materials were unavailable, less in quantity and quality and that created a great challenge on teaching and learning activities that in turn had a negative impact on the improvement of the quality of education. They believe that instructional facilities like chalk boards, textbooks, stools were machines, audio, visual, audio/visual materials, workshop equipment, films, radio, and television, observations, laboratory manuals, and apparatus e.g. cylinders, burners, flannel board, magnetic boards, manuals for production training, and programmed textbooks, opaque projectors, slides, specimens, chemicals like regents, photocopy machines, printers etc. Information and Communication Technology (ICT) /Internet facilities (IT) were inadequately provided. However, the opinions of the school principals, MOE officials, QA, TESCOM were that these facilities were available in schools. Therefore, one can say their opinions are similar because they are all management staff that may believe that those school facilities are always in place which may not necessarily be the case. This set of stakeholders may be responsible for the little positive perception shown in this research work. While teachers and PTA official belief the facilities were inadequately provided.

On the utilization of school facilities, the result of this study shows ineffective utilization of instructional facilities, welfare/health facilities, game facilities and equipment in public and private secondary schools in North Central Zone, Nigeria. There is no significant difference in the opinions of Teachers and PTA officials on the utilization of instructional materials as revealed in Scheffe test in appendix M. Teachers and PTA official share the same opinions on the utilization of instructional facilities in secondary schools. They opined that instructional facilities such as chalk, textbooks, chairs, tables were not adequately utilized. The reasons for similarity in the opinions of Teachers and PTA officials can easily be summarized that teachers were the end users of these facilities, though the principals were the custodian of school facilities in the schools while the parents can easily see the results from the experience gained by their wards or children.

Evidence from summary of response to research question two showed that majority of the respondents indicate negative perception 40,100(62.8%) while 30,158(31.4%) indicate positive perception, therefore, Teachers, and PTA officials are of negative perception as revealed by Scheffe test on table 16 and since teachers are the users of these materials, this may be the major factor that allow them to know the level of utilization of school facilities such as chalk boards, stools, text books, computers sets like scanners photocopy machines, printers, ICT/ Web communication like internet facilities were not adequately utilized in secondary schools in the questionnaire related to utilization of instructional materials. While principals, MOE officials, QA, and TESCOM have similar opinion as shown in Scheffe test on table 16 that soccer pitches, athletic track, and infrastructural facilities like building of classrooms and staff rooms and school halls, library block, castings, globes, and experimental models, charts, pictures, photographs, maps, diagrams, and drawings, films, radio, and television, textbooks, books of problems and exercises, books for recording scientific observations, laboratory manuals, and apparatus e.g. cylinders, burners, flannel board, magnetic boards, manuals for production training, and programmed textbooks, opaque projectors, slides, specimens, chemical like: .regents, photocopy machines, printers etc. Information and Communication Technology (ICT) /Internet facilities (IT) were under-utilized by teachers in schools.

Therefore, one can say their opinions are similar because they are in charge of monitoring and supervision of teachers, principals as well as teaching aids used by teachers in the schools, therefore they may believe that those instructional materials are put to use as expected and which may not. This set of stakeholders may be responsible for the positive perception shown in this research question two. Available and existing classrooms and staff rooms and school halls, library block with updated materials, students and teachers' toilets, school fence, computer rooms/ICT center, furniture (chairs and tables), wall brackets for hanging educative pictures, and sport and equipment facilities, open space for sport and school buses in the schools are not maximally utilized by teachers.

The study found significant difference in the opinions of education stakeholders on the maintenance of school facilities in public and private secondary schools in North Central Zone, Nigeria. This result implies that education stakeholders expressed their divergent views on the way school facilities like instructional facilities, welfare/health facilities, games/recreational facilities and infrastructural facilities are being maintained in public and private secondary schools. This indicates that some of the education stakeholders were of the divergent opinions regarding the maintenance of these facilities in secondary schools.

Teachers' and PTA officials opinion is different from other stakeholders' views on the maintenance of school facilities in secondary schools that school facilities such as castings, globes, and experimental models, charts, pictures, photographs, maps, diagrams, and drawings, films, radio, and television, textbooks, books of problems and exercises, books for recording scientific observations, laboratory manuals, and apparatus e.g. cylinders, burners, flannel board, magnetic boards, manuals for production training, and programmed textbooks, opaque projectors, slides, specimens, chemical like: .regents, photocopy machines, printers etc. Information and Communication Technology (ICT) /Internet facilities (IT) were poorly maintained by school management.

Similarly, there is no significant difference in the opinion of principals, MOE (QA, TESCOM). which implies that they share the same opinions on the maintenance of facilities which indicate positive perceptions as revealed by Scheffe test on table 18. The similarity noticed between teachers and PTA opinions may be as result of their closeness to the students and the schools. However, Principals, MOE (QA, TESCOM) have no significant difference in their opinion as revealed in Appendix N, that is, they were of opinions that facilities are well maintained which may not . This set of stakeholders may be responsible for the little posituve perception shown in research question 3.

Evidence from summary of response to research question three shows that majority of the respondents indicate negative perception 40,915(63.7%) while 19,349(30.1%) indicate positive perception, therefore, teachers, and PTA officials are of negative perception and since they are closer to these facilities in schools and students who use them, this may be the major factor that allow them to know that there is no proper maintenance of game/recreational facilities, welfare/health facilities and infrastructural facilities such as clinic, ambulance, drugs, financial classrooms, staff rooms, toilets, soccer field, basketball courts, field tracks, and material resources for implementing school health service programme, safety measures, proper nutrition, exercises, rest, sleep and medical care, the welfare of students in terms of ventilation which removes and dilutes warm and humid air thereby giving a sense of freshness without causing a draught.

Similarly, Principals, MOE officials, QA, TESCOM opinions showed no significant difference in their opinion as revealed in Scheffe test 18 therefore, one can say their opinions are similar because they are all management staff and they may believe that those facilities were well maintained. It hard to believed that facilities such as soccer pitches, athletic track, basket ball court, volley ball courts, relaxation rooms for students' enjoyment, amusement, or pleasure, lawn tennis court and table tennis courts, facilities for reading, playing or listening to music, watching movies or TV, gardening, hunting, sports, studies, and travel were adequately provided not to talk of proper maintenance. This set of stakeholders may be responsible for the positive perception showed in this research three. This finding agree with Ayeni and Ogunbameru (2013) that the stakeholders in education sector should collaborate to strengthen the institutional capacity in the provision of ICT facilities, and building teachers' and students' capacities for effective utilization and maintenance of ICT facilities to achieve better learning outcome in secondary schools. Uchendu, Ekanem and Jonah (2013) stated that maintenance culture in both public and private secondary schools were poor; the school physical resources are regularly maintained. They say the facilities and equipment available in a school for the conduct of sports and games programme determine to a considerable extent the type of sports programme that can be offered. Alexander (2015) observed that sport facilities and equipment therefore need proper management for effective use and long lasting.

Therefore, inadequate supply of school facilities like castings, globes, and experimental models, charts, pictures, photographs, maps, diagrams, and drawings, films, radio, and television, books of problems and exercises, books for recording scientific observations, laboratory manuals, and apparatus e.g. cylinders, burners, flannel board, magnetic boards, manuals for production training, and opaque projectors, slides, specimens, chemical like: .regents, photocopy machines, printers etc. Information and Communication Technology (ICT) /Internet facilities (IT), music instruments, motion pictures, maps, film clips, filmstrips, slide sequences, microphones, diapositives, transparencies, records and tape recordings, scanners, photocopy machines, printers, sport equipment like: jersey, shocks, shoes, whistle, baton for marathon race, javelin, basketball, basketball net, volley ball, table tennis, dictionaries, stationary materials, teaching machines include language-laboratory machine, drawing instruments and materials e.g. drawing board, Tee square, Z-square, $60^{0-}30^{0}$ and 45^{0}, drawing paper, clips or tape, protractor, scale ruler, French curves, eraser etc. appliances used in workbench like bench-vice, hand vice, machine vice, G-Clamp, F-Clamp, saw, rip-saw, cross cut-saw, panel saw, etc. hand cutting tools e.g. chisels, flat chisels, half chisel, cross cut chisel etc. files e.g. hand files, flat file, round file, square file, three square in triangular file, half round file, Hack saw like small hack saw, big hack saw, scrapper etc. Hammer e.g. ball pen head hammer, straight pen head hammer, block head hammer, cross head hammer, soft hammer, punches, center punch, pin punch etc. Screwdriver such as: flat screwdriver, star screw driver etc. workshop equipments were not provided in secondary schools. The ineffective utilization of the few available facilities and poor maintenance culture among the school management as revealed from the general responses have effects on teaching and learning process. This has adverse impact on secondary education in north central zone of Nigeria.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This study has focused on stakeholders' perceptions on the provision, utilization and maintenance of school plant in secondary schools in North Central Zone, Nigeria. This chapter was discussed under the following headings:

5.2 Summary of the Study;

5.3 Conclusions; and

5.4 Recommendations

5.2 Summary

The purpose of this study was to investigate the stakeholders' perceptions on the provision, utilization and maintenance of school facilities in secondary schools in North Central Zone, Nigeria. For this to be achieved, three objectives which were to examine perceptions of ministry of education officials, principals, teachers and parent teacher association, PTA officials (stakeholders) on the provision of school facilities in secondary schools in North Central Zone, Nigeria; three research questions include what are the perceptions of education stakeholders on the utilization of school facilities in secondary schools in North Central Zone, Nigeria and three hypotheses include: there is no significant difference in the mean perceptions of education stakeholders on the maintenance of school facilities in secondary schools in North Central Zone of Nigeria among others were posited and tested.

Chapter two was concerned with review of related literature to the study under sub-headings: conceptual framework like: perception, provision, utilization, maintenance, school facilities, school administrator, management. Theoretical framework such as: Resource dependence theory, facilities management theory, scientific management theory, human relation theory and environmental learning theory were discussed. The chapter also discussed provision which was explained under the following headings: Provision of instructional facilities, welfare/health facilities, games/recreational facilities, and infrastructural facilities. Utilization was explained under the following headings: utilization of instructional materials, utilization of welfare/health facilities, utilization of games/recreational facilities, and utilization of infrastructural facilities. Maintenance was explained under the following headings: maintenance of instructional materials, maintenance of welfare/health facilities, maintenance of games/recreational facilities, and maintenance of infrastructural facilities. Review of literature, empirical studies, and summary were highlighted in this chapter.

Chapter three presented the research design adopted for this study which is descriptive survey research design, the population of this study, the sample and sampling techniques, the instrument used was a questionnaire which was duly validated and its reliability determined. The procedure for data collection and Data analysis was also presented in this chapter. Statistical tools were used to analyze the data collected and the result presented in chapter four of this study.

Chapter four deals with presentation of results and data analysis with the use of descriptive statistics of frequency, simple percentages to presents the demographic data of the respondents, and used in answering the research questions 1-3, while null hypotheses (I-3) were tested using One-Way ANOVA statistics to test significant difference in the perceptions of educational stakeholders in public and private secondary schools in North Geo-political Zone of Nigeria at 0.05 level of significance. The study findings showed:

1. inadequate provision of school facilities, such as textbook, computers, machines, audio, visual, audio/visual materials, chalk boards, stools and workshop equipments, classrooms, staff quarters, staff room, soccer pitch, volleyball court, basketball court, school clinic, school bus, computer sets, internet connection, among other facilities in public and private secondary schools in North Central Zone, Nigeria;
2. ineffective utilization of school facilities like; classrooms, staff quarters, staff room, soccer pitch, volleyball court, basketball court, school clinic, school bus, computer sets, internet connection, machines, Audio, visual,

audio/visual materials, chalk boards, stools and workshop equipment in both public and private secondary schools;

3. poor maintenance of school facilities like: classrooms, windows, floor, staff quarters, staff room, soccer pitch, volleyball court, basketball court, school clinic, school bus, computer sets, internet connection c, ambulance, drugs, safety measures, proper nutrition and exercises, athletic track, relaxation rooms for students' enjoyment, amusement, and pleasure. Chapter five was on the summary, conclusion, recommendations and suggestion for further studies.

5.3 Conclusions

On the bases of the research findings, it is hereby concluded that:

School facilities such as classrooms, staff rooms, staff quarters, student hostels, machines, audio, visual, audio/visual materials, chalk boards, stools and workshop equipments, relevant text books, computers sets like scanners photocopy machines, printers, ICT/ Web communication like internet facilities, laboratory apparatus e.g. cylinders, burners, flannel board, magnetic board, chemical e.g reagents, like ambulance, financial and material resources for implementing school health service programme, safety measures, proper nutrition, exercises, rest, sleep and medical care, the welfare of students in terms of ventilation which removes and dilutes warm and humid air thereby giving a sense of freshness without causing a draught, good and clean environments, are not adequately provided in secondary schools.

Chalk boards, stools and workshop equipments, ICT/ Web communication like internet facilities, laboratory apparatus e.g. cylinders, burners, flannel board, magnetic board, chemical e.g reagents, basket ball court, volley ball courts, relaxation rooms for students' enjoyment, amusement, or pleasure, lawn tennis court and table tennis courts, facilities for reading, playing or listening to music, watching movies or TV, gardening, hunting, sports, studies, academic travel, soccer pitches, athletic track, basket ball court, volley ball courts, relaxation rooms for students' enjoyment, amusement, or pleasure, lawn tennis court, are not maximally utilized in secondary schools.

There is poor maintenance of available facilities like: soccer pitches, athletic track, basket ball court, volley ball courts, relaxation rooms for students' enjoyment, amusement, or pleasure, lawn tennis court, chalk boards, stools and workshop equipments, ICT/ Web communication like internet facilities, laboratory apparatus e.g. cylinders, burners, flannel board, magnetic board, chemical e.g reagents, classrooms and staff rooms and school halls, library block with updated materials, students and teachers' toilets and school fence, computer rooms/ICT center, furniture (chairs and tables), wall brackets for hanging educative pictures, and sport and equipment facilities, open space for sport in secondary schools.

5.4 Recommendations

On the bases of findings and conclusions, it is hereby recommended that:

State governments through ministries of education, TESCOM, should provide adequate school facilities such as classrooms and staff rooms and school halls, library block with updated materials, students and teachers' toilets and school fence, computer rooms/ICT center, furniture (chairs and tables), wall brackets for hanging educative pictures, and sport and equipment facilities, open space for sport and school buses, machines, audio, visual, audio/visual materials, chalk boards, stools and workshop equipments, relevant text books, computers sets like scanners photocopy machines, printers, ICT/ Web communication like internet facilities, laboratory apparatus e.g. cylinders, burners, flannel board, magnetic board, chemical e.g reagents. This would make teaching and learning more interesting, and easy to comprehend for students. On the other hands, it would make teaching effective and efficient and facilitate the mastery of the subject matter for teachers.

Ministries of education, and TESCOM, should re-awaken the monitoring and supervision units to intensify their efforts at giving a close monitoring and supervision to teachers and principals to strengthen their effort in management and utilization of machines, audio, visual, audio/visual materials, chalk boards, stools and workshop equipments, ICT/ Web communication like internet facilities, laboratory apparatus e.g. cylinders, burners, flannel board, magnetic board, chemical e.g reagents that are available in secondary schools.

Ministries of education authorities should partner with professional in area like engineering, science and technology and medicine to organise seminar and workshop to train health officials posted to schools and some selected science teachers on modern methods and techniques of maintenance of school facilities. States government through ministries of education, Quality Assurance officials, and TESCOM should appropriate enough fund for the repair and maintenance works on schools building of classrooms and staff rooms and school halls, library block with updated materials, students and teachers' toilets, school fence, computer rooms/ICT center, furniture (chairs and tables), wall brackets for hanging educative pictures, and sport and equipment facilities, open space for sport and school buses.

5.5 Suggestions for Further Studies

As a result of scope and some limitations encountered in the cause of this study, it is suggested that further researches should:

1. include other Zones of the country to broaden its scope.
2. incorporate the basic schools or lower schools for the sake of comparison.
3. focus on public facilities such as banks, post office, stadium, hospitals and libraries to expand the relevance of the study.
4. pair with other areas of school programmes such as human and materials/capital resources to see whether one influences another.

5. extend to higher institutions of learning for an increased benefit.
6. compare Southern region of the country to the Northern region to determine comparative advantage and gap that exists between the two regions.

5.6 Contribution to Knowledge

1. Adequate provision, utilization and maintenance of instructional facilities such as textbooks, computers, machines, audio, visual, audio/visual materials, chalk boards, stools and workshop enhanced effective teaching and learning in secondary schools.

2. Adequate provision, utilization and maintenance of welfare/health facilities such as: safety measures, proper nutrition, exercises, rest, sleep and medical care for students and staff guaranteed their sound and mental health needed for effective teaching and learning in secondary schools in North Central Zone, Nigeria.

3. Adequate provision utilization and maintenance of game facilities and recreational facilities like soccer pitches, athletic track, relaxation rooms for students' enjoyment, amusement, and pleasure will improve students physical and health fitness in secondary schools in North Central Zone of Nigeria.

4. Adequate provision, utilization and proper maintenance of infrastructural facilities like building of classrooms and staff rooms and school halls, library block with updated materials provided not only conducive environment for effective teaching and learning but it will also

improve students' academic performance in public and private secondary schools in North Central Zone of Nigeria;

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APPENDIX ‘A’

AHMADU BELLO UNIVERSITY, ZARIA

FACULTY OF EDUCATION

DEPARTMENT OF EDUCATIONAL FOUNDATION AND CURRICULUM

QUESTIONNAIRE ON STAKEHOLDERS’ PERCEPTIONS ON PROVISION, UTILIZATION AND MAINTENANCE OF SCHOOL FACILITIES IN SECONDARY SCHOOLS IN NORTH CENTRAL ZONE OF NIGERIA.

I APE TAJUDEEN SULEMAN is a Postgraduate student in the Department of Educational Foundations and Curriculum, Faculty of Education in ABU Zaria. I am conducting a research work on ‘‘Stakeholders’ Perceptions on Provision, Utilization and Maintenance of School Facilities in Secondary Schools in North Central Zone of Nigeria’’.

I will appreciate your kind support in answering the questionnaires on the research topic. It is for academic research purpose only. All information supplied shall be treated confidentially and for academic purposes.

Thanks.

APPENDIX 'B'

Letter of Introduction

APPENDIX C

AHMADU BELLO UNIVERSITY, ZARIA

FACULTY OF EDUCATION

DEPARTMENT OF EDUCATIONAL FOUNDATION AND CURRICULUM

QUESTIONNAIRE ON STAKEHOLDERS' PERCEPTIONS ON PROVISION, UTILIZATION AND MAINTENANCE OF SCHOOL FACILITIES IN SECONDARY SCHOOLS IN NORTH CENTRAL ZONE OF NIGERIA.

Dear Respondent,

This questionnaire is designed to obtain information on provision, utilization and maintenance of school facilities in secondary schools in North–Central Zone of Nigeria. You are therefore, required to complete or fill appropriately. Please, be rest assured that your responses will be used confidentially and for research purpose only.

Thank for your response.   Your Name________________________________

SECTION A; BIODATA

1. State (a).Kwara ( )   (b). Kogi ( ) (c). Niger ( ) (d).Benue ( ) (e).Nasarawa ( )

   (f). Plateau ( ) (g). FCT. Abuja ( )

2. Type of school: Public (   ) Private (   )

3. Status: Principal (   ) Teacher (   ) Ministry of Education Official ( ) Teaching Service Commission Official ( ) Quality Assurance officials ( ) SUBEB Official ( ) Local Government Official (Education) ( ) Local Government Inspectorate Division ( ) PTA Official ( )

4. Work experience: 1 – 5 yrs ( ) 6 – 10 yrs (   ) 11 – 15 yrs   ( ) 16 – 20 yrs (   ) 21 yrs and above ( )

Instruction: Please, indicate your response in the appropriate column.

Section B: Provision of Instructional, Welfare/Health, Games/Recreational and Infrastructural Facilities in Secondary Schools in North Central Zone Nigeria.

	Item statement	Strongly Agreed	Agreed	Undecided	Disagreed	Strongly Disagreed
1.	Instructional facilities such as machines, Audio, visual, Audio/visual materials, chalk boards, stools and workshop equipment are provided in my school.					
2.	There is provision of relevant text books in my school.					
3.	Computers sets like scanners photocopy machines, printers etc are					

	adequately provided in my school.					
4.	Laboratory apparatus e.g. cylinders, burners, flannel board, magnetic board, chemical e.g reagents are provided in my school.					
5.	There is provision for ICT/ Web communication like internet facilities in my school.					
6.	School health facilities like: clinic, ambulance, drugs are provided in my school.					
7.	Financial and material resources for implementing school health service programme are provided in my school.					
8.	School welfare programmes such as: safety measures, proper nutrition, exercises, rest, sleep and medical care are adequately provided.					
9.	The welfare of students in terms of ventilation which removes and dilutes warm and humid air thereby giving a sense of freshness without causing a draught is provided adequately.					
10	Basic health and safety requirements such as good and clean environments, first aid facilities are provided in my school.					
11.	There is provision of game facilities and equipment like Soccer pitches, Athletic track, are in my school.					
12.	Recreational facilities such as relaxation rooms for students' enjoyment, amusement, or pleasure and are provided in my schools.					
13.	Lawn tennis court and table tennis courts are provided in my school.					
14.	There is provision of basket ball court, Volley ball courts in my school.					
15.	There is provision for recreational activities designated as hobbies. Facilities for reading, playing or listening to music, watching movies or TV, gardening, hunting, sports, studies, and travel are provided in					

	my school.					
16	Infrastructural facilities like building of Classrooms and staff rooms and School Halls, Library block with updated materials are provided in my school.					
17	Students and Teachers' Toilets and School Fence are provided in my school.					
18	Computer rooms/ICT center are provided in my school.					
19	There is adequate provision of furniture (chairs and tables), wall brackets for hanging educative pictures.					
20	Sport and equipment facilities (open space for sport), school bus, are well provided in my school.					

Section C: Utilization of Instructional, Welfare/Health, Games/Recreational and Infrastructural Facilities in Secondary Schools in North Central Zone Nigeria.

	Item statement	Strongly Agreed	Agreed	Undecided	Disagreed	Strongly Disagreed
21.	There is proper utilization of instructional facilities such items as machines, Audio, visual, Audio/visual materials, chalk boards, stools and workshop equipment in my school.					
22.	The available relevant text books in my school are well utilized.					
23.	Computers sets like: scanners photocopy machines, printers etc provided in my school are frequently used.					
24.	Laboratory apparatus e.g. cylinders, burners, flannel board, magnetic board are fully utilized in my school.					
25.	The ICT/Web communications like internet facilities in my school are utilized to the maximum.					
26.	There is proper utilization of school health facilities like: clinic, ambulance, drugs in my school.					

27.	Financial and material resources for implementing school health service programme are fully utilized in my school.					
28.	There is proper utilization of school welfare programmes such as: safety measures, proper nutrition, exercises, rest, sleep and medical care in my school.					
29.	Good ventilation which removes and dilutes warm, humid air and provides air movement which gives a sense of freshness without causing a draught is adequately utilized.					
30.	Basic health and safety requirements such as good and clean environments, first aid facilities are adequately utilized in my school.					
31.	There is proper utilization of game facilities and equipment like Soccer pitches, Athletic track in my school.					
32.	Recreational facilities such as relaxation rooms for students' enjoyment, amusement, or pleasure and are adequately utilized in my schools.					
33.	Lawn tennis and table tennis courts are utilized in the school.					
34.	There is utilization of basketball and Volley ball courts in my school.					
35.	Recreational activities designated as hobbies are done on regular basis in my school. Facilities for reading, playing or listening to music, watching movies or TV, gardening, hunting, sports, studies, and travel are fully utilized in my school.					
36	Infrastructural facilities like building of Classrooms and staff rooms and School Halls, Library block with updated materials are utilized in my school.					
37	Students and Teachers' Toilets and School Fence are properly utilized in my school.					
38	Computer Room/ICT centre are properly utilized.					
39	There is proper utilization of furniture (chairs and tables), wall brackets for hanging educative					

	pictures in my school.					
40	Sport and equipment facilities (open space for sport), school bus, are well utilized in my school.					

Section D: Maintenance of Instructional, Welfare/Health, Games/Recreational and Infrastructural Facilities in Secondary Schools in North Central Zone Nigeria.

	Item statement	Strongly Agreed	Agreed	Undecided	Disagreed	Strongly Disagreed
41.	There is proper maintenance of instructional facilities such items as machines, Audio, visual , Audio/visual materials, chalk boards, stools and workshop equipment in my school.					
42.	The available relevant text books in my school are well maintained.					
43.	Computers sets like: scanners photocopy machines, printers etc are adequately maintained in my school.					
34.	Laboratory apparatus e.g. cylinders, burners, flannel board, magnetic board are fully maintained in my school.					
45.	The ICT/Web communications like internet facilities in my school are regularly maintained.					
46.	There is adequate maintenance of school health facilities like: clinic, ambulance, drugs in my school.					
47.	Financial and material resources for implementing school health service programme are properly maintained in my school.					
48.	School welfare programmes such as: safety measures, proper nutrition, exercises, rest, sleep and medical care are adequately maintained.					
49.	Good ventilation which removes and dilutes warm, humid air and provides air movement which gives a sense of freshness without causing a draught is maintained adequately.					
50.	Basic health and safety requirements such as good and clean environments, first aid facilities are properly maintained.					
51.	Game facilities and equipment like Soccer pitches, Athletic track are					

	adequately maintained in my school.					
52.	Recreational facilities such as relaxation rooms for students' enjoyment, amusement, or pleasure and are well maintained in my schools.					
53.	Lawn tennis court and table tennis courts are regularly maintained in my school.					
54.	There is adequate maintenance of basket ball court, Volley ball courts in my school.					
55.	There is proper maintenance of recreational facilities designated for hobbies on a regular basis. Facilities for reading, playing or listening to music, watching movies or TV, gardening, hunting, sports, studies, and travel are properly maintained in my school.					
56	There is adequate maintenance of infrastructural facilities like building of Classrooms and staff rooms and School Halls, Library block with updated materials in my school.					
57	Students and Teachers' Toilets and School Fence are properly maintained in my school.					
58	There is proper maintenance of computer room/ICT centre in my school.					
59	Furniture (chairs and tables), wall brackets for hanging educative pictures in my school are regularly maintained.					
60	Funds are provided for proper and adequate maintenance of sport and equipment facilities (open space for sport), school bus, in my school.					

Self-constructed (2016).

Name: APE TAJUDEEN SULEMAN

Registration Number: P13EDFC9001

APPENDIX D

Reliability Result

RELIABILITY TEST RESULT

Scale: Ape Tajudeen Pilot Testing Reliability result of 50 respondents

Case Processing Summary

		N	%
Cases	Valid	50	100.0
	Excluded[a]	0	.0
	Total	50	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Part 1	Value	1.000
		N of Items	60[a]
	Part 2	Value	1.000
		N of Items	60[b]
	Total N of Items		2
Correlation Between Forms			.943
Spearman-Brown Coefficient	Equal Length		.971
	Unequal Length		.971
Guttman Split-Half Coefficient			**.968**

a. The items are: Administration 1

b. The items are: administration 2

Item Statistics

	Mean	Std. Deviation	N
Administration1	44.4000	3.13050	50
administration2	45.2000	2.16795	50

Intra-class Correlation Coefficient

	Intra-class Correlation[b]	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.883[a]	.251	.987	16.059	4	4	.010
Average Measures	.968[c]	.402	.994	16.059	4	4	.010

Two-way mixed effects model where people effects are random and measures effects are fixed.

a. The estimator is the same, whether the interaction effect is present or not.

b. Type C intraclass correlation coefficients using a consistency definition-the between-measure variance is excluded from the denominator variance.

c. This estimate is computed assuming the interaction effect is absent, because it is not estimable otherwise.

NB: Respondents from 5 Schools used for Pilot Testing

1. Principal 5
2. PTA officials 5

3. Ministry of education officials 15

4. Teachers (5 from each school) 25

Total Respondents

APPENDIX E

Sampled Schools (Public and Private) Total Sampled of Principals, Teachers, Ministry of Education Official, TESCOM,QA,PTA.

	List of Sampled Sec. Schools			

S/N0	(Public)	MOE.	TSC	QA, PRIN,TEACH. PTA		
	ABUJA	**8**	**8**	**8**		
1.	Government secondary school,maitama			**1**	**5**	**3**
2.	Government secondary school,maitam			,,	,,	,,
3.	Government secondary school karshi			,,	,,	,,
4.	Community secondary school,araba salifu			,,	,,	,,
5.	Government secondary school,Bwari			,,	,,	,,
6.	Community secondary school,asokoro			,,	,,	,,
7.	D.M.S.S secondary school,asokoro			,,	,,	,,
8.	Government secondary school, Karu			,,	,,	,,
	List of sampled schools (Private schools)			,,	,,	,,
9.	Holy Rosary International School,wuse Zone			,,	,,	,,
10.	New Dimension Group of Schools,Kubwa			,,	,,	,,
11.	Fine Trust Comprehensive College,Jikowyi			,,	,,	,,
12.	Dunamis International School Limited,Karu			,,	,,	,,
13.	City Royal Secondary School,Nyanya			,,	,,	,,
14.	Cedar International Secondary School,Kubwa			,,	,,	,,
15.	Calvary Group of school,zuba			,,	,,	,,
16.	Whiteplains British school,Jabi			,,	,,	,,
17.	Top hill secondary school, woseZone			,,	,,	,,
18.	Titsall Global school,wose2			,,	,,	,,
19.	Regina pacis college, garki			,,	,,	,,
20.	The hillside school, Gwarimpa			,,	,,	,,
21.	Napo Private school, Maitama District			,,	,,	,,
22.	Light of Day schools, kubwa			,,	,,	,,
23.	Kings ville college Jahi			,,	,,	,,
24.	Divine Mercy Secondary school Asokoro			,,	,,	,,

25.	Star rite International school,gudu District,	,,	,,	,,
	Total sampled = 25 8, 8, 8, 25,125,75 = 249			

S/N0	List of Sampled Sec. Schools (Public)	MOE.	TSC	QA, PRIN,TEACH.PTA
	BENUE	**8**	**8**	**8**

1.	Government Comp. secondary school,Amaatu	**1**	**5**	**3**
2.	Government Day secondary school,Abako	,,	,,	,,
3.	Divine love Cath Gov't secondary school,K/ Ala	,,	,,	,,
4.	Government Comp. secondary school,korinya	,,	,,	,,
5.	Government secondary school Koti	,,	,,	,,
6.	Government Comp. secondary school Ugba	,,	,,	,,
7.	Government secondary school, Afia	,,	,,	,,
8.	St Antony's Secondary school,Biam	,,	,,	,,
9.	Government secondary school Tsar Mba Duku	,,	,,	,,
10.	Government secondary school Ahu	,,	,,	,,
11.	Gyegwe grammer school koti	,,	,,	,,
12.	Government day secondary school, Gboko	,,	,,	,,
13.	Government secondary school Ikpambatiereu	,,	,,	,,
14.	Gboko high school, Gboko	,,	,,	,,
15.	Government Comp. secondary school Naka	,,	,,	,,
16.	Government secondary school Annune	,,	,,	,,
17.	Government College Makurdi	,,	,,	,,
18.	Government Girls College Makurdi	,,	,,	,,
19.	Government day secondary school Taraku	,,	,,	,,
20.	Government secondary school Obagaji	,,	,,	,,
21.	Muslim community College, Ogwule	,,	,,	,,
22.	Ikobi community secondary school, Ikobi	,,	,,	,,
23.	Government secondary school Okpoga	,,	,,	,,
24.	Government secondary school Orokam	,,	,,	,,
25.	Government secondary school Ito	,,	,,	,,
26.	Otukpo community secondary school Upu	,,	,,	,,
27.	Government secondary school Oju	,,	,,	,,
	List of sampled schools (Private SEC. Schools)			

28.	Aifc High school Ikpawyonjo	,,	,,	,,
29.	Vaatia college Makurdi	,,	,,	,,
30.	Community secondary school Ikpawyonjo	,,	,,	,,
31.	Ibrahim Memoria Imyoji secondary school onyajede	,,	,,	,,
32	Apa Demonstration College Ugbokpo	,,	,,	,,
33.	Community secondary school Abo	,,	,,	,,
34.	Community secondary school Owukpa	,,	,,	,,
35.	St. Anne’s secondary school Oturkpo	,,	,,	,,
36.	Maunt Lasalle college Nake Makurdi	,,	,,	,,
37.	Prince Adeja Akanjime Gboko	,,	,,	,,
38.	Icon Adamu school Gboko	,,	,,	,,
39.	Turan community secondary school Tato Aka	,,	,,	,,
40.	Methodist High school Ogwule kaduna Agatu	,,	,,	,,
41.	Okala College Okpopo dium Oju	,,	,,	,,
42.	Yapende community secondary school Anger Uyough	,,	,,	,,
43.	Abanshi community secondary school	,,	,,	,,
44.	St. Johnsis college Amoke	,,	,,	,,
45.	Demonstration international special Arts & science secondary school Makurdi.	,,	,,	,,
46.	Goodnews S. Grammer school Makurdi	,,	,,	,,
47.	C.D.M. Accadmy international Mkar Gboko	,,	,,	,,
48.	Community secondary school Ojigo	,,	,,	,,
49.	Okala college okpopodium OJu	,,	,,	,,
50.	Jato Anchaver memorial secondary school Mase – Igbor	,,	,,	,,
51.	St. John’s college Amoke	,,	,,	,,
	Total sampled = 51 8,8,8,51,255,153 =483			
S/N0	**List of Sampled Sec. Schools (Public)**	**MOE.**	**TSC**	**QA, PRIN,TEACH.PTA**
	NIGER	**8**	**8**	**8**
1.	Governemnt Secondary School, Zago	**1**	**5**	**3**
2.	Government Girls Secondary School,Agarie	,,	,,	,,
3.	Government Secondary School, Gallah	,,	,,	,,
4.	Governemnt Secondary School,Mago	,,	,,	,,
5.	Government Technical and Science College, Assankio	,,	,,	,,
6.	Government Model School, Bida	,,	,,	,,
7.	Government Girls Secondary School, Bida	,,	,,	,,
8.	Government Secondary School,Dogon Gari,New Bussa	,,	,,	,,

9.	Government Day Secondary School, Mawa.	,,	,,	,,
10.	Army Day Secondary School,Birgu	,,	,,	,,
11.	Government Secondary School, Manbe	,,	,,	,,
12.	Government Secondary School, Kpada	,,	,,	,,
13.	Government Boys Secondary School, Lapai	,,	,,	,,
14.	Government Modal School, Kontagora	,,	,,	,,
15.	Nagwamatse college of Arts and Islamic	,,	,,	,,
16.	Government Secondary School,Kakakpangi	,,	,,	,,
17.	Government Day Secondary School, Badegi	,,	,,	,,
18.	Governement Girls Arabic School, Diko	,,	,,	,,
19.	DSS Batako	,,	,,	,,
20.	DSS Gbanabin	,,	,,	,,
21.	Day Secondary School Katamba Bologi	,,	,,	,,
22.	College of Arts and Islamic Studies,Enagi	,,	,,	,,
23.	Ahmadu Bahago Secondary School Minna	,,	,,	,,
24.	Government Day Secondary School Minna	,,	,,	,,
25.	College of Arts and Islamic Studies, Tundun Fulani Minna	,,	,,	,,
	List of sampled schools (Private SEC. Schools)			
26.	Tsadokobo Islamic Academy	,,	,,	,,
27.	Yeboji Int.school Bida	,,	,,	,,
28.	Adama Memorial International Bida	,,	,,	,,
29.	Main stream energy solution school Jebba	,,	,,	,,
30.	New-Era Group of Schools Mokwa	,,	,,	,,
31.	PHCN Secondary school jebba norta	,,	,,	,,

32.	Olivet International school	,,	,,	,,
33.	2nd E.C.W.A Schools,Minna	,,	,,	,,
34.	Challenge International School	,,	,,	,,
35.	Niger Baptism School	,,	,,	,,
36.	Kingdom Heritage Model School,Minna	,,	,,	,,
37.	Ever Green Model School FM Mattumbi	,,	,,	,,
38.	Sheikh Ibrahim Inyas School Gidanmagoro	,,	,,	,,
39.	Starlight Progressive Academy Chanchaga	,,	,,	,,
40.	Bright Star Academy,Minna	,,	,,	,,
41.	Baomas AL-Bulalalya Int Academy Ganu	,,	,,	,,
42.	Gifted Prime School,Lambata	,,	,,	,,
43.	Resurection Academy Korokpa	,,	,,	,,
44.	Divine Messeingers Academy Suleja	,,	,,	,,
	Total sampled schools=44 8,8,8,44,220,132=420			
S/N0	**List of Sampled Sec. Schools (Public)**	**MOE.**	**TSC**	**QA, PRIN,TEACH.PTA**
	KOGI	**8**	**8**	**8**
1.	Government Girls Secondary Schools, Sarkline Nome	**1**	**5**	**3**
2.	Muslim Community Secondary School, Lokoja	,,	,,	,,
3.	United Evangelical Church Secondary School, Lokoja	,,	,,	,,
4.	Effective Comprehensive College, Lokoja	,,	,,	,,
5.	Government Secondary Schoopl Abbaje	,,	,,	,,
6.	Ogah Memorial Grammar School	,,	,,	,,
7.	Islamiya Model Secondary School, Idah	,,	,,	,,
8.	Community Secondary School, Alfa	,,	,,	,,
9.	Ibaji Community Comprehensive Secondary School Enwelli	,,	,,	,,
10.	Government Science Secondary School, Onyedege	,,	,,	,,

11.	Local Government Secondary School, Ejiba	,,	,,	,,
12.	Government Secondary School, Egbe	,,	,,	,,
13.	Demonstration Secondary School, ANKPA, Kogi State	,,	,,	,,
14.	Unity Comprehensive Secondary School, ANKPA	,,	,,	,,
15.	Community Grammar School, OCHI-ADAGO	,,	,,	,,
16.	Government Secondary School , Ebeko	,,	,,	,,
17.	Ebira Muslim College,Ikuchi-Ihima	,,	,,	,,
18.	Government Girls Unity Secondary, School, oboroke.	,,	,,	,,
19.	Government Special Science Secondary School Eebeda-Egga	,,	,,	,,
20.	Muslim Community College, Ayetoro-Gede	,,	,,	,,
21.	Basse- NGE Muslim Community Secondary School Gboloko	,,	,,	,,
22.	Government Science Secondary School, Oguma	,,	,,	,,
23.	Community Secondary School, Akpagidigbo	,,	,,	,,
24.	Government Secondary School, Itoba	,,	,,	,,
25.	Local Government Secondary School, Upogoro	,,	,,	,,
26.	Government Girls Science Secondary School, Otutu-Oken	,,	,,	,,
	List of Sampled schools (Private SEC. Schools)			
27.	Css Gerega	,,	,,	,,
28.	Css Aunugo	,,	,,	,,
29.	Css Odo-Ape	,,	,,	,,
30.	Css Adeh	,,	,,	,,
31.	Clcc Awo	,,	,,	,,
32.	Css Ofebo	,,	,,	,,
33.	Css Koja	,,	,,	,,
34.	Css Obagu	,,	,,	,,
35.	Css Offa	,,	,,	,,
36.	Css Uboro	,,	,,	,,
37.	Cchs Ogori	,,	,,	,,
38.	Emc Ikuchi	,,	,,	,,
39.	Chs Ayetoro	,,	,,	,,
40.	Ols Anygba	,,	,,	,,

41.	Bnags Gboloko	,,	,,	,,
42.	Ecss Ojiminanas	,,	,,	,,
43.	Ecss Ofuga	,,	,,	,,
44.	S.P.C Egbe	,,	,,	,,
45.	SBSS Kabba	,,	,,	,,
46.	UECSS Ankpa	,,	,,	,,
47.	Emc Ikuchi	,,	,,	,,
48.	Ocss Ojigu (STEB)	,,	,,	,,
49.	I.A.I.S Lokoja	,,	,,	,,
50.	C.S.S Ajaka	,,	,,	,,
51.	SMC Kabba	,,	,,	,,
52.	SKS Isanlu	,,	,,	,,
53.	E.S.S.M Mopa	,,	,,	,,
54.	CMC Lokoja	,,	,,	,,
55.	CSS Aurugo	,,	,,	,,
56.	Holy Rossery College Idah	,,	,,	,,
57.	Showers of Blessing Sec. School	,,	,,	,,
	Total sampled schools=57 **8,8,8,57,228,171=537**			

S/N0	List of Sampled Sec. Schools (Public)	MOE.	TSC	QA, PRIN,TEACH.PTA
	KWARA	**8**	**8**	**8**

1.	Government secondary school,ajase	**1**	**5**	**3**
2.	Government secondary school,offa	,,	,,	,,
3.	Onpako senior secondary school,onipako	,,	,,	,,
4.	UBE senior secondary school,alonom oja	,,	,,	,,
5.	Government secondary school, (sss) ilesha barndo	,,	,,	,,
6.	Government secondary school, gbuanara	,,	,,	,,
7.	Local government secondary school, kosubosu	,,	,,	,,
8.	Muslim community grammer school,oro ago	,,	,,	,,
9.	Ansarul islam secondary school, (sss) oko ode	,,	,,	,,
10.	Idofian grammer school, (sss) idofian	,,	,,	,,
11.	Community secondary school, (sss) babola Ilorin	,,	,,	,,
12.	Government day secondary school,adele,Ilorin	,,	,,	,,
13.	GDSS alore	,,	,,	,,
14.	Queen elizabeth secondary school,Ilorin	,,	,,	,,
15.	Ansanl islam secondary school, omuaran	,,	,,	,,
16.	Oro grammer school oro	,,	,,	,,
17.	Government day secondary school, agbele	,,	,,	,,
18.	Arandam grammer school,arandam	,,	,,	,,
19.	Iwo comprehensive high school	,,	,,	,,
20.	Oke-onigbin secondary school	,,	,,	,,
21.	Senior secondary school, Ilesha	,,	,,	,,
22.	Muslim community secondary school,odo	,,	,,	,,
23.	Government secondary school kugiji,kaima	,,	,,	,,
24.	Senior secondary school,kaima	,,	,,	,,
25.	Local government secondary school, ewaria	,,	,,	,,

26.	Government unity secondary school, kaima	,,	,,	,,
27.	Government arabic college jebba	,,	,,	,,
28.	Local government secondary school,ejidona jari	,,	,,	,,
29.	Government secondary school, malete	,,	,,	,,
30.	Government day secondary school,shao	,,	,,	,,
31.	muslim secondary school (sss) omupo	,,	,,	,,
32.	Government girls day secondary school,Ilorin	,,	,,	,,
33.	Government day secondary school, adeta.	,,	,,	,,
	List of sampled schools (Private SEC. Schools)			
34.	Sapati International School	,,	,,	,,
35.	Aladebiyal Institute of Arabic and Islamic	,,	,,	,,
36.	Ameen College of Science and Technology Ila-Oro	,,	,,	,,
37.	Model City College Aboto Alfa	,,	,,	,,
38.	Calvary grace International senior secondary school kosubosu	,,	,,	,,
39.	Our Lady Fatima Catholic Schoool Okuta	,,	,,	,,
40.	Ecwa Secondary School,Eura	,,	,,	,,
41.	Cornerstone Secondary School Chikanda	,,	,,	,,
42.	CTKC Bauta	,,	,,	,,
43.	College of Arabic and Islamic Studies	,,	,,	,,
44.	Mahap Zumuratul N/P & Secondary school	,,	,,	,,
45.	Sherperd Senior Secondary School	,,	,,	,,
46.	ECWA Secondary School,Gammu	,,	,,	,,
47.	Ife Oluwa International College	,,	,,	,,

48.	Goodluck Model College,Idofian	,,	,,	,,
49.	Opeloyeru International High School,Ganmo	,,	,,	,,
50.	Mobolajoke Secondary School, Oloje Ilorin	,,	,,	,,
51.	Glorious Vision International College Ilorin	,,	,,	,,
52.	Fire Ways International School	,,	,,	,,
53.	Fail Comprehensive College	,,	,,	,,
54.	Adeoti College Omu Aran	,,	,,	,,
55.	Thomas Adewumi International College,Oko	,,	,,	,,
56.	Alade Groups of School Ajase-Ipo	,,	,,	,,
57.	Al Lateef Model College Kiama	,,	,,	,,
58.	Skeih Baba Comprehensive High School Bami	,,	,,	,,
59.	Omega College Shao	,,	,,	,,
60.	Convenenat Victory College Malete	,,	,,	,,
61.	Alaran Senior Secondary School,Bode-Saduu	,,	,,	,,
62.	Ola international college kaiama	,,	,,	,,
	Total Sampled = 62 **8,8,8,62,310,186 =582**			

S/N0	**List of Sampled Sec. Schools (Public)**	**MOE.**	**TSC**	**QA, PRIN,TEACH.PTA**

	PLATEAU	**8**	**8**	**8**
1.	Government secondary school, Konbunr	**1**	**5**	**3**
2.	Government secondary school, kunir	,,	,,	,,
3.	Gov't secondary school,Daika	,,	,,	,,
4.	Government secondary school,jibilikr	,,	,,	,,
5.	Government secondary school pankshin	,,	,,	,,
6.	Government Gyei bukuru	,,	,,	,,
7.	Government secondary school Bukuru	,,	,,	,,
8.	Girls high school Gindini	,,	,,	,,
9.	Tin city college jos	,,	,,	,,
10.	Government secondary school sceince college waber	,,	,,	,,
11.	Gov't secondary school waber	,,	,,	,,
12.	Government college pankshin	,,	,,	,,
13.	Government secondary school Duyis	,,	,,	,,
14.	Gov't secondary school shendam	,,	,,	,,
15.	Government college Garkawa	,,	,,	,,
16.	Royal crown accademy payhield jos	,,	,,	,,
17.	Rockland international college jos	,,	,,	,,
18.	Rantia high school jos	,,	,,	,,
19.	Plateau college sharami	,,	,,	,,
20.	NVRI staff primary and secondary school vom	,,	,,	,,
21.	plateau school for the deafbassa	,,	,,	,,
22.	Infant jesus accademy Rakabe Road jos	,,	,,	,,
23.	Hill crest christian school jos	,,	,,	,,
24.	Government secondary school Lahir	,,	,,	,,
25.	Government secondary school Kwasan	,,	,,	,,
26.	Government secondary school dokan tofa	,,	,,	,,
27.	Government secondary school Dukankwan	,,	,,	,,
28.	Government secondary school shendan	,,	,,	,,
29.	Government secondary school Dangoro	,,	,,	,,
30.	Government secondary school muyango	,,	,,	,,
	List of sampled schools (Private SEC. Schools)			
31.	St. joseph's college	,,	,,	,,
32.	St. john's college jos	,,	,,	,,
33.	Al' imam secondary school jaosi	,,	,,	,,
34.	Al' bayan secondary school	,,	,,	,,
35.	Al' bayan secondary school	,,	,,	,,
36.	Boy's secondary school gindiri	,,	,,	,,

37.	College of arabic and islamic studies pikkos	,,	,,	,,
38.	Effective internation college wase	,,	,,	,,
39.	Baptist high school ara	,,	,,	,,
40.	Messiah college nyals	,,	,,	,,
41.	Rantys high school gurutums	,,	,,	,,
42.	St. loyis college sharam	,,	,,	,,
43.	Crest christian school nyalgo	,,	,,	,,
44.	University for demostration school,nare	,,	,,	,,
45.	Tambilis junnah secondary school bulardi	,,	,,	,,
46.	St. beneclict seminary and convert panlcslim	,,	,,	,,
47.	Royal ambassador school, bukumi	,,	,,	,,
48.	St. joseph's colloge (cst) vom	,,	,,	,,
49.	Royal crown academy rayforld jos	,,	,,	,,
50.	NVRL skff primary and secondary school vom	,,	,,	,,
51.	Guntarna high school guntains	,,	,,	,,
52.	Messiah college naragits	,,	,,	,,
53.	Nakami memorial s.s panyammang.	,,	,,	,,
54.	Croria school bukuru	,,	,,	,,
55.	Betheny christian academy barikai ladi	,,	,,	,,
56.	Bethel international christian academy (BLCA)rayfield jos	,,	,,	,,
57.	Emmanuel international college rayfield jos	,,	,,	,,
58.	Canaan high school shaaka	,,	,,	,,
59.	Ahmadiyya community school endo	,,	,,	,,
60.	Aristocrcts junior versity AJV ray field jos	,,	,,	,,

61.	St. lonis college sharam	,,	,,	,,
62.	Hill crests christian school nyalgo.	,,	,,	,,
63.	St Murumba College Jos	,,	,,	,,
64.	St Benedict Seminary and Convert Pankshin	,,	,,	,,
	Total Sampled = 64 8,8,8,64,320,192=600			
S/N0	**List of Sampled Sec. Schools (Public)**	**MOE.**	**TSC**	**QA, PRIN,TEACH.PTA**
	NASARAWA	**8**	**8**	**8**
1.	Governemnt Secondary School, Agyaba	**1**	**5**	**3**
2.	Government Secondary School, Gudi	,,	,,	,,
3.	Government Secondary School, ANDAHA	,,	,,	,,
4.	Nasarawa State Sport Academy, Akwanga	,,	,,	,,
5.	Government Technical and Science College, Assankio	,,	,,	,,
6.	Government Secondary School, Akura	,,	,,	,,
7.	Government Secondary School, Adoyi	,,	,,	,,
8.	G.S.S Fadama Bauna	,,	,,	,,
9.	Government Day Secondary School, Awe	,,	,,	,,
10.	Governement Secondary School,Alara	,,	,,	,,
11.	Government Secondary School, Jangaru	,,	,,	,,
12.	Government Secondary School, Akiri	,,	,,	,,
13.	Government Secondary School, Ajuye	,,	,,	,,
14.	Government Secondary School, Ajuye	,,	,,	,,
15.	Government Secondary School, Kofan Gwari	,,	,,	,,
16.	Government Secondary School,Sabon Gida	,,	,,	,,
17.	Government Girls Science School, Garaku	,,	,,	,,
18.	Governement Secondary School, Lafia East	,,	,,	,,
19.	Government Secondary School, Nasarawa	,,	,,	,,
20.	Government Political Teacher College, Nasarawa Eggon	,,	,,	,,
	Nasarawa State List of sampled schools (Private SEC. Schools)			
21.	Rishame comprehensive college	,,	,,	,,
22.	Shepherd international college	,,	,,	,,
23.	Ercc sec. School	,,	,,	,,
24.	Egyon community sec. School	,,	,,	,,
25.	New covenant academy garala	,,	,,	,,
26.	Trust academy college garala	,,	,,	,,

27.	St. Peters college garala	,,	,,	,,
28.	Baptist high school keji	,,	,,	,,
29.	Lga ecwa high school keji	,,	,,	,,
30.	Tritun international school masala	,,	,,	,,
31.	Peace eh. Shaldie academy ants balefi	,,	,,	,,
32.	Mata mallam sec. School	,,	,,	,,
33.	Achiever Baptist sec. School	,,	,,	,,
34.	Ercc sec. School	,,	,,	,,
35.	Aunty Dela College Shingle	,,	,,	,,
	TOTAL Sampled =35 **8,8,8,35,175,105=339**			
	GRAND TOTAL- 56,56,56,338,1690,1014=3,210			

APPENDIX F

Stakeholders' perception on provision of instructional, welfare/health, games/recreational and infrastructural facilities in public and private secondary schools in North Central Zone, Nigeria.

S/N0	Item	ESH	SA	%	A	%	UN	%	D	%	SD	%
1	Instructional facilities such as machines, Audio, visual, Audio/visual materials, chalk boards, stools	Teacher	267	15.8	148	8.8	211	12.5	500	29.6	564	33.4

	and workshop equipment are provided in my school.	PTA	97	9.6	252	24.9	23	2.3	385	38.0	257	25.3
		MOE	6	10.7	8	14.3	4	7.1	17	30.4	21	37.5
		Principal	69	20.4	96	28.4	41	12.1	40	11.8	92	27.2
		QA	4	7.1	3	5.4	3	5.4	25	44.6	21	37.5
		TESCOM	7	12.5	3	5.4	6	10.7	15	26.8	25	44.6
2	There is provision of relevant text books in my school.	Teacher	80	4.7	150	8.9	166	9.8	653	38.6	641	37.9
		PTA	198	19.5	214	21.1	14	1.4	270	26.6	318	31.4
		MOE	11	19.6	4	7.1	3	5.4	23	41.1	15	26.8
		Principal	36	10.7	98	29.0	16	4.7	99	29.3	89	26.3
		QA	9	16.1	8	14.3	3	5.4	22	39.3	14	25.0
		TESCOM	8	14.3	6	10.7	1	1.8	31	55.4	10	17.9
3	Computers sets like scanners photocopy machines, printers etc are adequately provided in my school.	Teacher	192	11.4	235	13.9	180	10.7	732	43.3	351	20.8
		PTA	145	14.3	146	14.4	51	5.0	414	40.8	258	25.4
		MOE	13	23.2	9	16.1	4	7.1	14	25.0	16	28.6
		Principal	64	18.9	98	29.0	7	2.1	99	29.3	70	20.7
		QA	8	14.3	6	10.7	6	10.7	20	35.7	16	28.6
		TESCOM	6	10.7	9	16.1	6	10.7	16	28.6	19	33.9
4	Laboratory apparatus e.g. cylinders, burners, flannel board, magnetic board, chemical e.g reagents are provided in my school.	Teacher	213	12.6	206	12.2	61	3.6	256	15.1	954	56.4
		PTA	90	8.9	311	30.7	31	3.1	383	37.8	199	19.6
		MOE	3	5.4	9	16.1	7	12.5	18	32.1	19	33.9
		Principal	89	26.3	20	5.9	19	5.6	154	45.6	56	16.6
		QA	6	10.7	8	14.3	3	5.4	27	48.2	12	21.4
		TESCOM	7	12.5	9	16.1	5	8.9	25	44.6	10	17.9
5	There is provision for ICT/ Web communication like internet facilities in my school.	Teacher	141	8.3	136	8.0	70	4.1	932	55.1	411	24.3
		PTA	92	9.1	211	20.8	8	0.8	448	44.2	255	25.1
		MOE	4	7.1	9	16.1	4	7.1	25	44.6	14	25.0
		Principal	99	29.3	26	7.7	16	4.7	98	29.0	99	29.3
		QA	7	12.5	8	14.3	6	10.7	21	37.5	14	25.0
		TESCOM	10	17.9	7	12.5	3	5.4	10	17.9	26	46.4

6	School health facilities like: clinic, ambulance, drugs are provided in my school.	Teacher	125	7.4	122	7.2	70	4.1	800	47.3	573	33.9
		PTA	149	14.7	254	25.0	55	5.4	258	25.4	298	29.4
		MOE	7	12.5	9	16.1	4	7.1	21	37.5	15	26.8
		Principal	61	8.5	89	26.3	31	9.2	69	20.4	88	26.0
		QA	9	16.1	5	8.9	2	3.6	25	44.6	15	26.8
		TESCOM	7	12.5	5	8.9	3	5.4	16	28.6	25	44.6
7	Financial and material resources for implementing school health service programme are provided in my school.	Teacher	253	15.0	254	15.0	36	2.1	686	40.6	461	27.3
		PTA	218	21.5	154	15.2	52	5.1	240	23.7	350	34.5
		MOE	9	16.1	8	14.3	3	5.4	15	26.8	21	37.5
		Principal	59	8.5	101	29.9	41	12.1	69	20.4	68	20.1
		QA	9	16.1	5	8.9	5	8.9	15	26.8	22	39.3
		TESCOM	4	7.1	9	16.1	2	3.6	16	28.6	25	44.6
8	School welfare programmes such as: safety measures, proper nutrition, exercises, rest, sleep and medical care are adequately provided.	Teacher	214	12.7	123	7.3	219	13.0	573	33.9	561	33.2
		PTA	286	28.2	123	12.1	21	2.1	245	24.2	339	33.4
		MOE	4	7.1	9	16.1	5	8.9	15	26.8	23	41.1
		Principal	16	8.5	159	47.0	23	6.8	115	34.0	25	7.4
		QA	6	10.7	9	16.1	6	10.7	20	35.7	15	26.8
		TESCOM	8	14.3	5	8.9	5	8.9	15	26.8	23	41.1
9	The welfare of students in terms of ventilation which removes and dilutes warm and humid air thereby giving a sense of freshness without causing a draught is provided adequately.	Teacher	256	15.7	289	17.1	77	4.6	555	32.8	504	29.8
		PTA	123	12.1	16	1.6	33	3.3	417	41.1	425	41.9
		MOE	6	10.7	10	17.9	2	3.6	23	41.1	15	26.8
		Principal	74	8.5	58	17.2	21	6.2	99	29.3	86	25.4
		QA	7	12.5	8	14.3	4	7.1	14	25.0	23	41.1
		TESCOM		16.1	7	12.5	3	5.4	22	39.3	15	26.8
								4.4				
10	Basic health and safety requirements such as good and clean environments, first aid facilities are provided in my school.	Teacher	95	5.6	58	3.4	51	3.0	487	28.8	999	59.1
		PTA	78	7.7	101	10.0	35	3.5	500	49.3	300	29.6
		MOE	8	14.3	7	12.5	2	3.6	18	32.1	21	37.5

		Principal	68	8.5	81	24.0	25	7.4	96	28.4	68	20.1
		QA	8	14.3	6	10.7	3	5.4	19	33.9	20	35.7
		TESCOM	**4**	7.1	8	14.3	4	7.1	25	44.6	15	26.8
11	There is provision of game facilities and equipment like Soccer pitches, Athletic track, are in my school.	Teacher	155	9.2	122		70	4.1	622	36.8	721	42.7
		PTA	166	16.4	206		64	6.3	354	34.9	224	22.1
		MOE	8	14.3	6		5	8.9	21	37.5	16	28.6
		Principal	99	8.5	59		42	12.4	54	16.0	84	24.9
		QA	8	14.3	7		5	8.9	13	23.2	23	41.1
		TESCOM	4	7.1	8		3	5.4	25	44.6	16	28.6
12	Recreational facilities such as relaxation rooms for students' enjoyment, amusement, or pleasure and are provided in my schools.	Teacher	255	15.1	212		110	6.5	712	42.1	401	23.7
		PTA	217	21.4	155		45	4.4	356	35.1	241	23.8
		MOE	6	10.7	8		3	5.4	18	32.1	21	37.5
		Principal	111	8.5	72		35	10.4	99	29.3	21	6.2
		QA	8	14.3	7		2	3.6	18	32.1	21	37.5
		TESCOM	7	12.5	8		1	1.8	25	44.6	15	26.8
13	Lawn tennis court and table tennis courts are provided in my school.	Teacher	367	21.7	211		117	6.9	511	30.2	484	28.6
		PTA	159	15.7	232		63	6.2	272	26.8	288	28.4
		MOE	8	14.3	5		2	3.6	15	26.8	26	46.4
		Principal	10	8.5	78		43	12.7	45	13.3	162	47.9
		QA	6	10.7	8		3	5.4	18	32.1	21	37.5
		TESCOM	9	16.1	6		4	7.1	19	33.9	18	32.1
14	There is provision of basket ball court, Volley ball courts in my school.	Teacher	230	13.6	150		166	9.8	981	58.0	163	9.6
		PTA	211	20.8	160		71	7.0	241	23.8	331	32.6
		MOE	6	10.7	8		2	3.6	25	44.6	15	26.8
		Principal	87	8.5	71		31	9.2	99	29.3	50	14.8

		QA	7	12.5	6		2	3.6	16	28.6	25	44.6
		TESCOM	7	12.5	8		1	1.8	15	26.8	25	44.6
15	There is provision for recreational activities designated as hobbies. Facilities for reading, playing or listening to music, watching movies or TV, gardening, hunting, sports, studies, and travel are provided in my school.	Teacher	214	12.7	213		180	10.7	433	25.6	650	38.5
		PTA	200	19.7	212		81	8.0	305	30.1	216	21.3
		MOE	6	10.7	5		5	8.9	15	26.8	25	44.6
		Principal	100	8.5	50		27	8.0	98	29.0	63	18.6
		QA	6	10.7	8		3	5.4	24	42.9	15	26.8
		TESCOM	7	12.5	8		4	7.1	22	39.3	15	26.8
16	Infrastructural facilities like building of Classrooms and staff rooms and School Halls, Library block with updated materials are provided in my school.	Teacher	88	5.2	65	3.8	51	3.0	775	45.9	711	42.1
		PTA	68	6.7	111	10.9	35	3.5	300	29.6	500	49.3
		MOE	15	26.8	14	25.0	4	7.1	12	21.4	11	19.6
		Principal	61	8.5	88	26.0	25	7.4	65	19.2	99	29.3
		QA	13	23.2	15	26.8	4	7.1	16	28.6	8	14.3
		TESCOM	16	28.6	15	26.8	6	10.7	9	16.1	10	17.9
17	Students and Teachers' Toilets and School Fence are provided in my school.	Teacher	214	12.7	231	13.7	211	12.5	518	30.7	516	30.5
		PTA	125	12.3	224	22.1	23	2.3	320	31.6	322	31.8
		MOE	12	21.4	10	17.9	4	7.1	14	25.0	16	28.6
		Principal	100	8.5	65	19.2	41	12.1	77	22.8	55	16.3
		QA	11	19.6	12	21.4	4	7.1	12	21.4	17	30.4
		TESCOM	20	35.7	10	17.9	1	1.8	15	26.8	10	17.9
18	Computer rooms/ICT center are provided in my school.	Teacher	676	40.0	500	29.6	41	2.4	241	14.3	232	13.7
		PTA	300	29.6	305	30.1	39	3.8	150	14.8	220	21.7
		MOE	16	28.6	13	23.2	2	3.6	12	21.4	13	23.2
		Principal	41	8.5	147	43.5	16	4.7	71	21.0	63	18.6
		QA	15	26.8	5	8.9	2	3.6	14	25.0	20	35.7
		TESCOM	6	10.7	15	26.8	2	3.6	21	37.5	12	21.4

19	There is adequate provision of furniture (chairs and tables), wall brackets for hanging educative pictures.	Teacher	201	11.9	45	2.7	45	2.7	857	50.7	542	32.1
		PTA	43	4.2	44	4.3	31	3.1	365	36.0	531	52.4
		MOE	21	37.5	20	35.7	3	5.4	5	8.9	7	12.5
		Principal	50	8.5	34	10.1	13	3.8	130	38.5	111	32.8
		QA	14	25.0	16	28.6	1	1.8	11	19.6	14	25.0
		TESCOM	25	44.6	15	26.8	5	8.9	3	5.4	8	14.3
20	Sport and equipment facilities (open space for sport), school bus, are well provided in my school.	Teacher	150	8.9	241	14.3	51	3.0	634	37.5	614	36.3
		PTA	250	24.7	241	23.8	39	3.8	123	12.1	361	35.6
		MOE	10	17.9	16	28.6	2	3.6	16	28.6	12	21.4
		Principal	99	8.5	45	13.3	44	13.0	50	14.8	100	29.6
		QA	15	26.8	16	28.6	3	5.4	10	17.9	12	21.4
		TESCOM	16	28.6	15	26.8	1	1.8	15	26.8	9	16.1

Source: Field Study (2016)

APPENDIX G

Stakeholders' perception on utilization of instructional, welfare/health, games/recreational and infrastructural facilities in public and private secondary schools in North Central Zone, Nigeria.

S/N0	Item	ESH	SA	%	A	%	UN	%	D	%	SD	%
1	There is proper utilization of instructional facilities such items as machines, Audio, visual, Audio/visual materials, chalk boards, stools and workshop equipment in my school.	Teacher	135	8.0	332	19.6	110	6.5	952	56.3	161	9.5
		PTA	156	15.4	138	13.6	31	3.1	212	20.9	477	47.0
		MOE	9	16.1	7	12.5	2	3.6	32	57.1	6	10.7
		Principal	62	18.3	111	32.8	9	2.7	99	29.3	57	16.9
		QA	9	16.1	4	7.1	5	8.9	13	23.2	25	44.6
		TESCOM	8	14.3	9	16.1	2	3.6	21	37.5	16	28.6
2	The available relevant text books in my school are well utilized.	Teacher	152	9.0	173	10.2	291	17.2	420	24.9	654	38.7
		PTA	123	12.1	178	17.6	14	1.4	400	39.4	299	29.5
		MOE	10	17.9	2	3.6	8	14.3	17	30.4	19	33.9
		Principal	52	15.4	85	25.1	11	3.3	135	39.9	55	16.3
		QA	9	16.1	8	14.3	1	1.8	26	46.4	12	21.4
		TESCOM	8	14.3	7	12.5	6	10.7	23	41.1	12	21.4

3	Computers sets like: scanners photocopy machines, printers etc provided in my school are frequently used.	Teacher	75	4.4	150	8.9	121	7.2	777	46.0	567	33.6
		PTA	154	15.2	114	11.2	17	1.7	355	35.0	374	36.9
		MOE	6	10.7	4	7.1	4	7.1	29	51.8	13	23.2
		Principal	75	22.2	99	29.3	21	6.2	74	21.9	69	20.4
		QA	4	7.1	5	8.9	6	10.7	18	32.1	23	41.1
		TESCOM	9	16.1	6	10.7	5	8.9	21	37.5	15	26.8
4	Laboratory apparatus e.g. cylinders, burners, flannel board, magnetic board are fully utilized in my school.	Teacher	308	18.2	199	11.8	36	2.1	358	21.2	789	46.7
		PTA	202	19.9	213	21.0	14	1.4	327	32.2	258	25.4
		MOE	2	3.6	13	23.2	3	5.4	13	23.2	25	44.6
		Principal	99	29.3	72	21.3	5	1.5	63	18.6	99	29.3
		QA	11	19.6	7	12.5	1	1.8	16	28.6	21	37.5
		TESCOM	7	12.5	5	8.9	3	5.4	18	32.1	23	41.1
5	The ICT/Web communications like internet facilities in my school are utilized to the maximum.	Teacher	48	2.8	99	5.9	219	13.0	654	38.7	670	39.6
		PTA	219	21.6	132	13.0	21	2.1	423	41.7	219	21.6
		MOE	9	16.1	4	7.1	5	8.9	26	46.4	12	21.4
		Principal	20	5.9	96	28.4	6	1.8	96	28.4	120	35.5
		QA	9	16.1	8	14.3	2	3.6	23	41.1	14	25.0
		TESCOM	6	10.7	9	16.1	2	3.6	15	26.8	24	42.9
6	There is proper utilization of school health facilities like: clinic, ambulance, drugs in my school.	Teacher	153	9.1	216	12.8	253	15.0	658	38.9	410	24.3
		PTA	249	24.6	158	15.6	21	2.1	254	25.0	332	32.7
		MOE	9	16.1	7	12.5	2	3.6	13	23.2	25	44.6
		Principal	49	8.5	77	22.8	14	4.1	100	29.6	98	29.0
		QA	9	16.1	6	10.7	2	3.6	14	25.0	25	44.6
		TESCOM	4	7.1	8	14.3	4	7.1	25	44.6	15	26.8
7	Financial and material resources for implementing school health service programme are fully utilized in my school.	Teacher	150	8.9	144	8.5	73	4.3	900	53.3	423	25.0
		PTA	251	24.8	252	24.9	47	4.6	314	31.0	150	14.8
		MOE	9	16.1	6	10.7	1	1.8	15	26.8	25	44.6

		Principal	48	8.5	99	29.3	31	9.2	49	14.5	111	32.8
		QA	10	17.9	6	10.7	2	3.6	20	35.7	18	32.1
		TESCOM	7	12.5	8	14.3	5	8.9	17	30.4	19	33.9
8	There is proper utilization of school welfare programmes such as: safety measures, proper nutrition, exercises, rest, sleep and medical care in my school.	Teacher	257	15.2	322	19.1	118	7.0	185	10.9	808	47.8
		PTA	239	23.6	158	15.6	41	4.0	340	33.5	236	23.3
		MOE	8	14.3	6	10.7	5	8.9	22	39.3	15	26.8
		Principal	37	8.5	98	29.0	15	4.4	89	26.3	99	29.3
		QA	5	8.9	3	5.4	4	7.1	28	50.0	16	28.6
		TESCOM	8	14.3	10	17.9	4	7.1	21	37.5	13	23.2
9	Good ventilation which removes and dilutes warm, humid air and provides air movement which gives a sense of freshness without causing a draught is adequately utilized.	Teacher	290	17.2	255	15.1	76	4.5	888	52.5	181	10.7
		PTA	240	23.7	152	15.0	61	6.0	251	24.8	310	30.6
		MOE	7	12.5	8	14.3	4	7.1	15	26.8	22	39.3
		Principal	98	8.5	96	28.4	33	9.8	11	3.3	100	29.6
		QA	6	10.7	8	14.3	5	8.9	15	26.8	22	39.3
		TESCOM	5	8.9	8	14.3	2	3.6	19	33.9	22	39.3
10	Basic health and safety requirements such as good and clean environments, first aid facilities are adequately utilized in my school.	Teacher	170	10.1	150	8.9	252	14.9	653	38.6	465	27.5
		PTA	200	19.7	201	19.8	21	2.1	334	32.9	258	25.4
		MOE	8	14.3	6	10.7	2	3.6	15	26.8	25	44.6
		Principal	101	8.5	100	29.6	30	8.9	56	16.6	51	15.1
		QA	9	16.1	7	12.5	1	1.8	13	23.2	26	46.4
		TESCOM	6	10.7	7	12.5	2	3.6	12	21.4	29	51.8
11	There is proper utilization of game facilities and equipment like Soccer pitches, Athletic track in my school.	Teacher	214	12.7	205	12.1	61	3.6	610	36.1	600	35.5
		PTA	99	9.8	158	15.6	98	9.7	214	21.1	445	43.9
		MOE	8	14.3	6	10.7	6	10.7	21	37.5	15	26.8
		Principal	68	8.5	61	18.0	20	5.9	99	29.3	90	26.6

		QA	8	14.3	5	8.9	4	7.1	18	32.1	21	37.5
		TESCOM	6	10.7	8	14.3	2	3.6	15	26.8	25	44.6
12	Recreational facilities such as relaxation rooms for students' enjoyment, amusement, or pleasure and are adequately utilized in my schools.	Teacher	251	14.9	250	14.8	76	4.5	888	52.5	225	13.3
		PTA	139	13.7	150	14.8	20	2.0	264	26.0	441	43.5
		MOE	8	14.3	5	8.9	3	5.4	25	44.6	15	26.8
		Principal	152	8.5	62	18.3	15	4.4	49	14.5	60	17.8
		QA	5	8.9	9	16.1	2	3.6	25	44.6	15	26.8
		TESCOM	8	14.3	4	7.1	4	7.1	15	26.8	25	44.6
13	Lawn tennis and table tennis courts are utilized in the school.	Teacher	211	12.5	222	13.1	62	3.7	539	31.9	656	38.8
		PTA	165	16.3	150	14.8	49	4.8	400	39.4	250	24.7
		MOE	4	7.1	6	10.7	5	8.9	12	21.4	29	51.8
		Principal	99	8.5	10	3.0	53	15.7	89	26.3	87	25.7
		QA	6	10.7	8	14.3	1	1.8	16	28.6	25	44.6
		TESCOM	7	12.5	6	10.7	2	3.6	25	44.6	16	28.6
14	There is utilization of basketball and Volley ball courts in my school.	Teacher	250	14.8	313	18.5	35	2.1	555	32.8	537	31.8
		PTA	220	21.7	151	14.9	39	3.8	292	28.8	312	30.8
		MOE	4	7.1	6	10.7	5	8.9	23	41.1	18	32.1
		Principal	145	8.5	136	40.2	41	12.1	7	2.1	9	2.7
		QA	6	10.7	8	14.3	2	3.6	15	26.8	25	44.6
		TESCOM	8	14.3	5	8.9	1	1.8	25	44.6	17	30.4
15	Recreational activities designated as hobbies are done on regular basis in my school. Facilities for reading, playing or listening to music, watching movies or TV, gardening, hunting, sports, studies, and travel are fully utilized in my school.	Teacher	288	17.0	410	24.3	74	4.4	452	26.7	466	27.6
		PTA	264	26.0	263	25.9	53	5.2	250	24.7	184	18.1
		MOE	7	12.5	3	5.4	6	10.7	15	26.8	25	44.6
		Principal	41	8.5	180	53.3	82	24.3	18	5.3	17	5.0
		QA	5	8.9	4	7.1	5	8.9	12	21.4	30	53.6
		TESCOM	3	5.4	8	14.3	5	8.9	25	44.6	15	26.8
16	Infrastructural facilities like building of Classrooms and staff rooms and School Halls, Library block with updated	Teacher	307	18.2	207	12.2	64	3.8	631	37.3	481	28.5

	materials are utilized in my school.	PTA	111	10.9	210	20.7	70	6.9	212	20.9	411	40.5
		MOE	5	8.9	3	5.4	5	8.9	31	55.4	12	21.4
		Principal	95	8.5	115	34.0	55	16.3	32	9.5	41	12.1
		QA	5	8.9	4	7.1	3	5.4	36	64.3	8	14.3
		TESCOM	4	7.1	6	10.7	2	3.6	8	14.3	36	64.3
17	Students and Teachers' Toilets and School Fence are properly utilized in my school.	Teacher	252	14.9	241	14.3	82	4.9	631	37.3	484	28.6
		PTA	205	20.2	207	20.4	15	1.5	244	24.1	343	33.8
		MOE	5	8.9	4	7.1	3	5.4	31	55.4	13	23.2
		Principal	60	8.5	98	29.0	43	12.7	60	17.8	77	22.8
		QA	6	10.7	4	7.1	4	7.1	26	46.4	16	28.6
		TESCOM	4	7.1	8	14.3	3	5.4	20	35.7	21	37.5
18	Computer Room/ICT centre are properly utilized.	Teacher	484	28.6	241	14.3	82	4.9	252	14.9	631	37.3
		PTA	251	24.8	241	23.8	38	3.7	350	34.5	134	13.2
		MOE	5	8.9	3	5.4	5	8.9	31	55.4	12	21.4
		Principal	40	8.5	54	16.0	21	6.2	123	36.4	100	29.6
		QA	4	7.1	8	14.3	3	5.4	21	37.5	20	35.7
		TESCOM	6	10.7	4	7.1	4	7.1	26	46.4	16	28.6
19	There is proper utilization of furniture (chairs and tables), wall brackets for hanging educative pictures in my school.	Teacher	331	19.6	241	14.3	219	13.0	260	15.4	639	37.8
		PTA	54	5.3	48	4.7	21	2.1	367	36.2	524	51.7
		MOE	3	5.4	5	8.9	5	8.9	12	21.4	31	55.4
		Principal	56	8.5	49	14.5	10	3.0	123	36.4	100	29.6
		QA	4	7.1	6	10.7	6	10.7	20	35.7	20	35.7
		TESCOM	7	12.5	4	7.1	3	5.4	26	46.4	16	28.6
20	Sport and equipment facilities (open space for sport), school bus, are well utilized in my school.	Teacher	341	20.2	256	15.1	180	10.7	270	16.0	643	38.0
		PTA	41	4.0	45	4.4	37	3.6	367	36.2	524	51.7
		MOE	4	7.1	4	7.1	5	8.9	12	21.4	31	55.4
		Principal	59	8.5	50	14.8	6	1.8	123	36.4	100	29.6
		QA	5	8.9	7	12.5	3	5.4	21	37.5	20	35.7
		TESCOM	6	10.7	5	8.9	2	3.6	24	42.9	19	33.9

Source: Field Study (2016)

APPENDIX H

Stakeholders' perception on maintenance of instructional, welfare/health, games/recreational and infrastructural facilities in public and private secondary schools in North Central Zone, Nigeria.

S/N0	Item	ESH	SA	%	A	%	UN	%	D	%	SD	%
1	There is proper maintenance of instructional facilities such items as machines, Audio, visual , Audio/visual materials, chalk boards, stools and workshop equipment in my school.	Teacher	152	9.0	135	8.0	73	4.3	655	38.8	675	39.9
		PTA	169	16.7	138	13.6	25	2.5	327	32.2	355	35.0
		MOE	9	16.1	3	5.4	2	3.6	17	30.4	25	44.6
		Principal	35	10.4	122	36.1	13	3.8	95	28.1	73	21.6
		QA	8	14.3	10	17.9	1	1.8	22	39.3	15	26.8
		TESCOM	8	14.3	6	10.7	3	5.4	23	41.1	16	28.6
2	The available relevant text books in my school are well maintained.	Teacher	187	11.1	258	15.3	21	1.2	965	57.1	259	15.3
		PTA	213	21.0	198	19.5	57	5.6	213	21.0	333	32.8
		MOE	7	12.5	9	16.1	2	3.6	12	21.4	26	46.4
		Principal	99	29.3	15	4.4	31	9.2	70	20.7	123	36.4
		QA	6	10.7	8	14.3	4	7.1	22	39.3	16	28.6
		TESCOM	3	5.4	5	8.9	2	3.6	21	37.5	25	44.6
3	Computers sets like: scanners photocopy machines, printers etc are adequately maintained in my school.	Teacher	150	8.9	80	4.7	166	9.8	888	52.5	406	24.0
		PTA	249	24.6	257	25.3	29	2.9	222	21.9	257	25.3
		MOE	9	16.1	8	14.3	5	8.9	25	44.6	9	16.1
		Principal	62	18.3	99	29.3	10	3.0	98	29.0	69	20.4
		QA	4	7.1	9	16.1	3	5.4	15	26.8	25	44.6
		TESCOM	9	16.1	6	10.7	5	8.9	21	37.5	15	26.8
4	Laboratory apparatus e.g. cylinders, burners, flannel board, magnetic board are fully maintained in my school.	Teacher	212	12.5	215	12.7	180	10.7	654	38.7	429	25.4
		PTA	180	17.8	211	20.8	37	3.6	328	32.3	258	25.4
		MOE	6	10.7	9	16.1	5	8.9	21	37.5	15	26.8
		Principal	42	12.4	99	29.3	21	6.2	78	23.1	98	29.0

		QA	9	16.1	5	8.9	7	12.5	23	41.1	12	21.4
		TESCOM	8	14.3	9	16.1	6	10.7	19	33.9	14	25.0
5	The ICT/Web communications like internet facilities in my school are regularly maintained.	Teacher	216	12.8	203	12.0	61	3.6	654	38.7	556	32.9
		PTA	159	15.7	156	15.4	23	2.3	412	40.6	264	26.0
		MOE	10	17.9	6	10.7	2	3.6	23	41.1	15	26.8
		Principal	30	8.5	121	35.8	17	5.0	72	21.3	98	29.0
		QA	8	14.3	10	17.9	4	7.1	19	33.9	15	26.8
		TESCOM	9	16.1	5	8.9	5	8.9	21	37.5	16	28.6
6	There is adequate maintenance of school health facilities like: clinic, ambulance, drugs in my school.	Teacher	250	14.8	295	17.5	76	4.5	600	35.5	469	27.8
		PTA	100	9.9	161	15.9	52	5.1	199	19.6	502	49.5
		MOE	8	14.3	5	8.9	5	8.9	20	35.7	18	32.1
		Principal	99	8.5	42	12.4	42	12.4	99	29.3	56	16.6
		QA	6	10.7	9	16.1	2	3.6	18	32.1	21	37.5
		TESCOM	8	14.3	4	7.1	3	5.4	23	41.1	18	32.1
7	Financial and material resources for implementing school health service programme are properly maintained in my school.	Teacher	225	13.3	220	13.0	211	12.5	534	31.6	500	29.6
		PTA	152	15.0	189	18.6	35	3.5	251	24.8	387	38.2
		MOE	8	14.3	5	8.9	5	8.9	20	35.7	18	32.1
		Principal	113	8.5	69	20.4	36	10.7	80	23.7	40	11.8
		QA	8	14.3	6	10.7	1	1.8	23	41.1	18	32.1
		TESCOM	8	14.3	4	7.1	2	3.6	28	50.0	14	25.0
8	School welfare programmes such as: safety measures, proper nutrition, exercises, rest, sleep and medical care are adequately maintained.	Teacher	264	15.6	233	13.8	83	4.9	610	36.1	500	29.6
		PTA	132	13.0	221	21.8	45	4.4	274	27.0	342	33.7
		MOE	9	16.1	6	10.7	4	7.1	15	26.8	22	39.3
		Principal	122	8.5	153	45.3	35	10.4	16	4.7	12	3.6
		QA	8	14.3	6	10.7	5	8.9	16	28.6	21	37.5
		TESCOM	5	8.9	8	14.3	2	3.6	23	41.1	18	32.1
9	Good ventilation which removes and dilutes warm, humid air and provides air movement which gives a sense of	Teacher	300	17.8	201	11.9	52	3.1	623	36.9	514	30.4

	freshness without causing a draught is maintained adequately.	PTA	261	25.7	230	22.7	39	3.8	220	21.7	264	26.0
		MOE	6	10.7	9	16.1	2	3.6	17	30.4	22	39.3
		Principal	131	8.5	111	32.8	24	7.1	41	12.1	31	9.2
		QA	6	10.7	8	14.3	5	8.9	17	30.4	20	35.7
		TESCOM	7	12.5	8	14.3	5	8.9	19	33.9	17	30.4
10	Basic health and safety requirements such as good and clean environments, first aid facilities are properly maintained.	Teacher	205	12.1	204	12.1	59	3.5	571	33.8	651	38.5
		PTA	165	16.3	53	5.2	43	4.2	522	51.5	231	22.8
		MOE	5	8.9	7	12.5	3	5.4	9	16.1	32	57.1
		Principal	99	8.5	53	15.7	31	9.2	100	29.6	55	16.3
		QA	4	7.1	7	12.5	5	8.9	15	26.8	25	44.6
		TESCOM	6	10.7	7	12.5	4	7.1	24	42.9	15	26.8
11	Game facilities and equipment like Soccer pitches, Athletic track are adequately maintained in my school.	Teacher	355	21.0	374	22.1	19	1.1	524	31.0	418	24.7
		PTA	130	12.8	115	11.3	62	6.1	301	29.7	406	40.0
		MOE	3	5.4	5	8.9	2	3.6	25	44.6	21	37.5
		Principal	29	8.5	13	3.8	78	23.1	130	38.5	88	26.0
		QA	2	3.6	5	8.9	3	5.4	27	48.2	19	33.9
		TESCOM	8	14.3	7	12.5	3	5.4	18	32.1	20	35.7
12	Recreational facilities such as relaxation rooms for students' enjoyment, amusement, or pleasure and are well maintained in my schools.	Teacher	315	18.6	499	29.5	73	4.3	413	24.4	390	23.1
		PTA	99	9.8	97	9.6	33	3.3	345	34.0	440	43.4
		MOE	3	5.4	5	8.9	2	3.6	28	50.0	18	32.1
		Principal	101	8.5	100	29.6	33	9.8	88	26.0	16	4.7
		QA	5	8.9	7	12.5	2	3.6	20	35.7	22	39.3
		TESCOM	8	14.3	2	3.6	6	10.7	15	26.8	25	44.6
13	Lawn tennis court and table tennis courts are regularly maintained in my school.	Teacher	300	17.8	403	23.8	65	3.8	488	28.9	434	25.7
		PTA	99	9.8	84	8.3	45	4.4	321	31.7	465	45.9
		MOE	2	3.6	6	10.7	5	8.9	24	42.9	19	33.9

		Principal	88	8.5	51	15.1	51	15.1	60	17.8	88	26.0
		QA	5	8.9	8	14.3	4	7.1	21	37.5	18	32.1
		TESCOM	8	14.3	7	12.5	3	5.4	17	30.4	21	37.5
14	There is adequate maintenance of basket ball court, Volley ball courts in my school.	Teacher	203	12.0	202	12.0	81	4.8	604	35.7	600	35.5
		PTA	49	4.8	77	7.6	31	3.1	451	44.5	406	40.0
		MOE	8	14.3	6	10.7	2	3.6	25	44.6	15	26.8
		Principal	28	8.5	31	9.2	42	12.4	85	25.1	152	45.0
		QA	7	12.5	5	8.9	4	7.1	25	44.6	15	26.8
		TESCOM	3	5.4	8	14.3	2	3.6	20	35.7	23	41.1
15	There is proper maintenance of recreational facilities designated for hobbies on a regular basis. Facilities for reading, playing or listening to music, watching movies or TV, gardening, hunting, sports, studies, and travel are properly maintained in my school.	Teacher	345	20.4	329	19.5	71	4.2	369	21.8	576	34.1
		PTA	219	21.6	252	24.9	31	3.1	300	29.6	212	20.9
		MOE	8	14.3	7	12.5	3	5.4	18	32.1	20	35.7
		Principal	77	8.5	42	12.4	12	3.6	108	32.0	99	29.3
		QA	3	5.4	7	12.5	5	8.9	21	37.5	20	35.7
		TESCOM	9	16.1	3	5.4	3	5.4	20	35.7	21	37.5
16	There is adequate maintenance of infrastructural facilities like building of Classrooms and staff rooms and School Halls, Library block with updated materials in my school.	Teacher	314	18.6	268	15.9	110	6.5	297	17.6	701	41.5
		PTA	51	5.0	58	5.7	14	1.4	367	36.2	524	51.7
		MOE	6	10.7	5	8.9	2	3.6	12	21.4	31	55.4
		Principal	66	8.5	40	11.8	9	2.7	123	36.4	100	29.6
		QA	5	8.9	4	7.1	5	8.9	20	35.7	22	39.3
		TESCOM	5	8.9	6	10.7	2	3.6	24	42.9	19	33.9
17	Students and Teachers' Toilets and School Fence are properly maintained in my school.	Teacher	306	18.1	276	16.3	211	12.5	108	6.4	789	46.7
		PTA	50	4.9	54	5.3	23	2.3	371	36.6	516	50.9
		MOE	5	8.9	4	7.1	4	7.1	13	23.2	30	53.6
		Principal	45	8.5	37	10.9	41	12.1	127	37.6	88	26.0
		QA	4	7.1	5	8.9	3	5.4	21	37.5	23	41.1
		TESCOM	6	10.7	7	12.5	6	10.7	12	21.4	25	44.6

18	There is proper maintenance of computer room/ICT centre in my school.	Teacher	235	13.9	276	16.3	291	17.2	101	6.0	787	46.6
		PTA	41	4.0	53	5.2	31	3.1	372	36.7	517	51.0
		MOE	4	7.1	3	5.4	7	12.5	13	23.2	29	51.8
		Principal	54	8.5	45	13.3	19	5.6	128	37.9	92	27.2
		QA	3	5.4	4	7.1	3	5.4	22	39.3	24	42.9
		TESCOM	5	8.9	8	14.3	5	8.9	12	21.4	26	46.4
19	Furniture (chairs and tables), wall brackets for hanging educative pictures in my school are regularly maintained.	Teacher	276	16.3	327	19.3	121	7.2	168	9.9	798	47.2
		PTA	43	4.2	57	5.6	17	1.7	382	37.7	515	50.8
		MOE	5	8.9	2	3.6	5	8.9	14	25.0	30	53.6
		Principal	67	8.5	34	10.1	21	6.2	114	33.7	102	30.2
		QA	4	7.1	5	8.9	4	7.1	20	35.7	23	41.1
		TESCOM	6	10.7	3	5.4	6	10.7	13	23.2	28	50.0
20	Funds are provided for proper and adequate maintenance of sport and equipment facilities (open space for sport), school bus, in my school.	Teacher	259	15.3	334	19.8	258	15.3	168	9.9	671	39.7
		PTA	40	3.9	54	5.3	21	2.1	380	37.5	519	51.2
		MOE	6	10.7	3	5.4	2	3.6	13	23.2	32	57.1
		Principal	61	8.5	23	6.8	14	4.1	116	34.3	124	36.7
		QA	3	5.4	4	7.1	2	3.6	21	37.5	26	46.4
		TESCOM	5	8.9	7	12.5	4	7.1	28	50.0	12	21.4

Source: Field Study (2016)

APPENDIX 'I'
DATA FOR ANOVAL

Stakeholders' perception on provision of instructional, welfare/health, games/recreational and infrastructural facilities in public and private secondary schools in North Central Zone, Nigeria.

N01.		TEACHER	PTA	MOE	PRIN	QA	TESCOM
ITEM 1	A	415	349	14	165	7	10
	UN	211	23	4	41	3	6

	D	1064	642	38	132	46	40
ITEM 2	A	230	412	15	134	17	14
	UN	166	14	3	16	3	1
	D	1294	588	38	188	36	41
ITEM 3	A	427	291	22	162	14	15
	UN	180	51	4	7	6	6
	D	1083	672	30	169	36	35
ITEM 4	A	419	401	12	109	14	16
	UN	61	31	7	19	3	5
	D	1210	582	37	210	39	35
ITEM 5	A	277	303	13	125	15	17
	UN	70	8	4	16	6	3
	D	1343	703	39	197	35	36
ITEM 6	A	247	403	16	150	14	12
	UN	70	55	4	31	2	3
	D	1373	556	36	157	40	41
ITEM 7	A	507	372	17	160	14	13
	UN	36	52	3	41	5	2
	D	1147	590	36	137	37	41
ITEM 8	A	337	409	13	175	15	13
	UN	219	21	5	23	6	5
	D	1134	584	38	140	35	38
ITEM 9	A	554	139	16	132	15	16
	UN	77	33	2	21	4	3
	D	1059	842	38	185	37	37
ITEM 10	A	153	179	15	149	14	12

		51	35	2	25	3	4
	UN						
		1486	800	39	164	39	40
	D						
ITEM 11		277	372	14	158	15	12
	A						
		70	64	5	42	5	3
	UN						
		1343	578	37	138	36	41
	D						
ITEM 12		467	372	14	183	15	15
	A						
		110	45	3	35	2	1
	UN						
		1113	597	39	120	39	40
	D						
ITEM 13		578	391	13	88	14	15
	A						
		117	63	2	43	3	4
	UN						
		995	560	41	207	39	37
	D						
ITEM 14		380	371	14	158	13	15
	A						
		166	71	2	31	2	1
	UN						
		1144	572	40	149	41	40
	D						
ITEM 15		427	412	11	150	14	15
	A						
		180	81	5	27	3	4
	UN						
		1083	521	40	161	39	37
	D						
ITEM 16		153	179	29	149	28	31
	A						
		51	35	4	25	4	6
	UN						
		1486	800	23	164	24	19
	D						
ITEM 17		445	349	22	165	23	30
	A						
		211	23	4	41	4	1
	UN						
		1034	642	30	132	29	25
	D						
ITEM 18		1176	605	29	188	20	21
	A						
		41	39	2	16	2	2
	UN						
		473	370	25	134	34	33
	D						

ITEM 19	A	246	87	41	84	30	40
	UN	45	31	3	13	1	5
	D	1399	896	12	241	25	11
ITEM 20	A	391	491	26	144	31	31
	UN	51	39	2	44	3	1
	D	1248	484	28	150	22	24

N01		TEACHER-RT	PTA-RT	MOE-RT	PRIN-RT	QA-RT	TESCOM-RT
ITEM 1	A	1245	1047	42	495	21	30
	UN	422	46	8	82	6	12
	D	1064	642	38	132	46	40
ITEM 2	A	690	1236	45	402	51	42
	UN	332	28	6	32	6	2
	D	1294	588	38	188	36	41
ITEM 3	A	1281	873	66	486	42	45
	UN	360	102	8	14	12	12
	D	1083	672	30	169	36	35
ITEM 4	A	1257	1203	36	327	42	48
	UN	122	62	14	38	6	10
	D	1210	582	37	210	39	35
ITEM 5	A	831	909	39	375	45	51
	UN	140	16	8	32	12	6
	D	1343	703	39	197	35	36

ITEM 6	A	741	1209	48	450	42	36
	UN	140	110	8	62	4	6
	D	1373	556	36	157	40	41
ITEM 7	A	1521	1116	51	480	42	39
	UN	72	104	6	82	10	4
	D	1147	590	36	137	37	41
ITEM 8	A	1011	1227	39	525	45	39
	UN	438	42	10	46	12	10
	D	1134	584	38	140	35	38
ITEM 9	A	1662	417	48	396	45	48
	UN	154	66	4	42	8	6
	D	1059	842	38	185	37	37
ITEM 10	A	459	537	45	447	42	36
	UN	102	70	4	50	6	8
	D	1486	800	39	164	39	40
ITEM 11	A	831	1116	42	474	45	36
	UN	140	128	10	84	10	6
	D	1343	578	37	138	36	41
ITEM 12	A	1401	1116	42	549	45	45
	UN	220	90	6	70	4	2
	D	1113	597	39	120	39	40
ITEM 13	A	1734	1173	39	264	42	45
	UN	234	126	4	86	6	8
	D	995	560	41	207	39	37
ITEM 14	A	1140	1113	42	474	39	45
	UN	332	142	4	62	4	2

	D	1144	572	40	149	41	40
ITEM 15	A	1281	1236	33	450	42	45
	UN	360	162	10	54	6	8
	D	1083	521	40	161	39	37
ITEM 16	A	459	537	87	447	84	93
	UN	102	70	8	50	8	12
	D	1486	800	23	164	24	19
ITEM 17	A	1335	1047	66	495	69	90
	UN	422	46	8	82	8	2
	D	1034	642	30	132	29	25
ITEM 18	A	3528	1815	87	564	60	63
	UN	82	78	4	32	4	4
	D	473	370	25	134	34	33
ITEM 19	A	738	261	123	252	90	120
	UN	90	62	6	26	2	10
	D	1399	896	12	241	25	11
ITEM 20	A	1173	1473	78	432	93	93
	UN	102	78	4	88	6	2
	D	1248	484	28	150	22	24

APPENDIX ‘J’
DATA FOR ANOVAL

Stakeholders’ perception on utilization of instructional, welfare/health, games/recreational and infrastructural facilities in public and private secondary schools in North Central Zone, Nigeria.

N02		TEACHER	PTA	MOE	PRIN	QA	TESCOM
ITEM 1	A	467	294	16	173	13	17
	UN	110	31	2	9	5	2
	D	1113	689	38	156	38	37
ITEM 2	A	325	301	12	137	17	15
	UN	291	14	8	11	1	6
	D	1074	699	36	190	38	35
ITEM 3	A	225	268	10	174	9	15
	UN	121	17	4	21	6	5
	D	1344	729	42	143	41	36
ITEM 4	A	507	415	15	171	18	12
	UN	36	14	3	5	1	3
	D	1147	585	38	162	37	41
ITEM 5	A	147	351	13	116	17	15

	UN	219	21	5	6	2	2
	D	1324	642	38	216	37	39
ITEM 6	A	369	407	16	126	15	12
	UN	253	21	2	14	2	4
	D	1068	586	38	198	39	40
ITEM 7	A	294	503	15	147	16	15
	UN	73	47	1	31	2	5
	D	1323	464	40	160	38	36
ITEM 8	A	579	397	14	135	8	18
	UN	118	41	5	15	4	4
	D	993	576	37	188	44	34
ITEM 9	A	545	392	15	194	14	13
	UN	76	61	4	33	5	2
	D	1069	561	37	111	37	41
ITEM 10	A	320	401	14	201	16	13
	UN	252	21	2	30	1	2
	D	1118	592	40	107	39	41
ITEM 11	A	419	257	14	129	13	14
	UN	61	98	6	20	4	2
	D	1210	659	36	189	39	40
ITEM 12	A	501	289	13	214	14	12
	UN	76	20	3	15	2	4
	D	1113	705	40	109	40	40
ITEM 13	A	433	315	10	109	14	13
	UN	62	49	5	53	1	2
	D	1195	650	41	176	41	41

ITEM 14	A	563	371	10	281	14	13
	UN	35	39	5	41	2	1
	D	1092	604	41	16	40	42
ITEM 15	A	698	527	10	221	9	11
	UN	74	53	6	82	5	5
	D	918	434	40	35	42	40
ITEM 16	A	514	321	8	210	9	10
	UN	64	70	5	55	3	2
	D	1112	623	43	73	44	44
ITEM 17	A	493	412	9	158	10	12
	UN	82	15	3	43	4	3
	D	1115	587	44	137	42	41
ITEM 18	A	725	492	8	94	12	10
	UN	82	38	5	21	3	4
	D	883	484	43	223	41	42
ITEM 19	A	572	102	8	105	10	11
	UN	219	21	5	10	6	3
	D	899	891	43	223	40	42
ITEM 20	A	597	86	8	109	12	11
	UN	180	37	5	6	3	2
	D	913	891	43	223	41	43

N02.		TEACHER-RT	PTA-RT	MOE-RT	PRIN-RT	QA-RT	TESCOM-RT

ITEM 1	A	1401	882	48	519	39	51
	UN	220	62	4	18	10	4
	D	1113	689	38	156	38	37
ITEM 2	A	975	903	36	411	51	45
	UN	582	28	16	22	2	12
	D	1074	699	36	190	38	35
ITEM 3	A	675	804	30	522	27	45
	UN	242	34	8	42	12	10
	D	1344	729	42	143	41	36
ITEM 4	A	1521	1245	45	513	54	36
	UN	72	28	6	10	2	6
	D	1147	585	38	162	37	41
ITEM 5	A	441	1053	39	348	51	45
	UN	438	42	10	12	4	4
	D	1324	642	38	216	37	39
ITEM 6	A	1107	1221	48	378	45	36
	UN	506	42	4	28	4	8
	D	1068	586	38	198	39	40
ITEM 7	A	882	1509	45	441	48	45
	UN	146	94	2	62	4	10
	D	1323	464	40	160	38	36
ITEM 8	A	1737	1191	42	405	24	54
	UN	236	82	10	30	8	8
	D	993	576	37	188	44	34
ITEM 9	A	1635	1176	45	582	42	39
	UN	152	122	8	66	10	4

ITEM 10	D	1069	561	37	111	37	41
	A	960	1203	42	603	48	39
	UN	504	42	4	60	2	4
ITEM 11	D	1118	592	40	107	39	41
	A	1257	771	42	387	39	42
	UN	122	196	12	40	8	4
ITEM 12	D	1210	659	36	189	39	40
	A	1503	867	39	642	42	36
	UN	152	40	6	30	4	8
ITEM 13	D	1113	705	40	109	40	40
	A	1299	945	30	327	42	39
	UN	124	98	10	106	2	4
ITEM 14	D	1195	650	41	176	41	41
	A	1689	1113	30	843	42	39
	UN	70	78	10	82	4	2
ITEM 15	D	1092	604	41	16	40	42
	A	2094	1581	30	663	27	33
	UN	148	106	12	164	10	10
ITEM 16	D	918	434	40	35	42	40
	A	1542	963	24	630	27	30
	UN	128	140	10	110	6	4
ITEM 17	D	1112	623	43	73	44	44
	A	1479	1236	27	474	30	36
	UN	164	30	6	86	8	6
ITEM 18	D	1115	587	44	137	42	41
	A	2175	1476	24	282	36	30

	UN	164	76	10	42	6	8
	D	883	484	43	223	41	42
ITEM 19	A	1716	306	24	315	30	33
	UN	438	42	10	20	12	6
	D	899	891	43	223	40	42
ITEM 20	A	1791	258	24	327	36	33
	UN	360	74	10	12	6	4
	D	913	891	43	223	41	43

APPENDIX ‘K’
DATA FOR ANOVAL

Stakeholders’ perception on maintenance of instructional, welfare/health, games/recreational and infrastructural facilities in public and private secondary schools in North Central Zone, Nigeria.

N03		TEACHER	PTA	MOE	PRIN	QA	TESCOM
ITEM 1	A	287	307	12	157	18	14
	UN	73	25	2	13	1	3
	D	1330	682	42	168	37	39
ITEM 2	A	445	411	16	114	14	8
	UN	21	57	2	31	4	2
	D	1224	546	38	193	38	46
ITEM 3	A	230	506	17	161	13	15
	UN	166	29	5	10	3	5
	D	1294	479	34	167	40	36
ITEM 4	A	427	391	15	141	14	17
	UN	180	37	5	21	7	6
	D	1083	586	36	176	35	33
ITEM 5	A	419	315	16	151	18	14
	UN	61	23	2	17	4	5
	D	1210	676	38	170	34	37
ITEM 6	A	545	261	13	141	15	12
	UN	76	52	5	42	2	3
	D	1069	701	38	155	39	41
ITEM 7	A	445	341	13	182	14	12
	UN	211	35	5	36	1	2
	D	1034	638	38	120	41	42
ITEM 8	A	497	353	15	275	14	13
	UN	83	45	4	35	5	2
	D	1110	616	37	28	37	41

ITEM 9	A	501	491	15	242	14	15
	UN	52	39	2	24	5	5
	D	1137	484	39	72	37	36
ITEM 10	A	409	218	12	152	11	13
	UN	59	43	3	31	5	4
	D	1222	753	41	155	40	39
ITEM 11	A	729	245	7	42	7	15
	UN	19	62	3	78	3	3
	D	942	707	46	218	46	38
ITEM 12	A	814	196	8	201	12	10
	UN	73	33	2	33	2	6
	D	803	785	46	104	42	40
ITEM 13	A	703	183	8	139	13	15
	UN	65	45	5	51	4	3
	D	922	786	43	148	39	38
ITEM 14	A	405	126	14	59	12	11
	UN	81	31	2	42	4	2
	D	1204	857	40	237	40	43
ITEM 15	A	674	471	15	119	10	12
	UN	71	31	3	12	5	3
	D	945	512	38	207	41	41
ITEM 16	A	582	109	11	106	9	11
	UN	110	14	2	9	5	2
	D	998	891	43	223	42	43
ITEM 17	A	582	104	9	82	9	13
	UN	211	23	4	41	3	6

	D	897	887	43	215	44	37
ITEM 18	A	511	94	7	99	7	13
	UN	291	31	7	19	3	5
	D	888	889	42	220	46	38
ITEM 19	A	603	100	7	101	9	9
	UN	121	17	5	21	4	6
	D	966	897	44	216	43	41
ITEM 20	A	593	94	9	84	7	12
	UN	258	21	2	14	2	4
	D	839	899	45	240	47	40

N03		TEACHER-RT	PTA-RT	MOE-RT	PRIN-RT	QA-RT	TESCOM-RT
ITEM 1	A	861	921	36	471	54	42
	UN	146	50	4	26	2	6
	D	1330	682	42	168	37	39
ITEM 2	A	1335	1233	48	342	42	24
	UN	42	114	4	62	8	4
	D	1224	546	38	193	38	46
ITEM 3	A	690	1518	51	483	39	45
	UN	332	58	10	20	6	10
	D	1294	479	34	167	40	36
ITEM 4	A	1281	1173	45	423	42	51
	UN	360	74	10	42	14	12

ITEM 5	D	1083	586	36	176	35	33
	A	1257	945	48	453	54	42
	UN	122	46	4	34	8	10
ITEM 6	D	1210	676	38	170	34	37
	A	1635	783	39	423	45	36
	UN	152	104	10	84	4	6
ITEM 7	D	1069	701	38	155	39	41
	A	1335	1023	39	546	42	36
	UN	422	70	10	72	2	4
ITEM 8	D	1034	638	38	120	41	42
	A	1491	1059	45	825	42	39
	UN	166	90	8	70	10	4
ITEM 9	D	1110	616	37	28	37	41
	A	1503	1473	45	726	42	45
	UN	104	78	4	48	10	10
ITEM 10	D	1137	484	39	72	37	36
	A	1227	654	36	456	33	39
	UN	118	86	6	62	10	8
ITEM 11	D	1222	753	41	155	40	39
	A	2187	735	21	126	21	45
	UN	38	124	6	156	6	6
ITEM 12	D	942	707	46	218	46	38
	A	2442	588	24	603	36	30
	UN	146	66	4	66	4	12
ITEM 13	D	803	785	46	104	42	40
	A	2109	549	24	417	39	45

	UN	130	90	10	102	8	6
	D	922	786	43	148	39	38
ITEM 14	A	1215	378	42	177	36	33
	UN	162	62	4	84	8	4
	D	1204	857	40	237	40	43
ITEM 15	A	2022	1413	45	357	30	36
	UN	142	62	6	24	10	6
	D	945	512	38	207	41	41
ITEM 16	A	1746	327	33	318	27	33
	UN	220	28	4	18	10	4
	D	998	891	43	223	42	43
ITEM 17	A	1746	312	27	246	27	39
	UN	422	46	8	82	6	12
	D	897	887	43	215	44	37
ITEM 18	A	1533	282	21	297	21	39
	UN	582	62	14	38	6	10
	D	888	889	42	220	46	38
ITEM 19	A	1809	300	21	303	27	27
	UN	242	34	10	42	8	12
	D	966	897	44	216	43	41
ITEM 20	A	1779	282	27	252	21	36
	UN	516	42	4	28	4	8
	D	839	899	45	240	47	40

APPENDIX L

Scheffe Multiple Comparisons Test of Difference in Education Stakeholders' Responses in Null Hypothesis 1:

Multiple Comparisons

Dependent Variable: responses

Scheffe

(I) Respondents	(J) Respondents	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
TEACHERS	PTA Officials	288.783*	58.263	.000	93.82	483.75
	MOE Officials	837.883*	58.263	.000	642.92	1032.85
	Principals	650.367*	58.263	.000	455.40	845.33
	QAO	838.683*	58.263	.000	643.72	1033.65
	TESCOM	838.050*	58.263	.000	643.09	1033.01
PTA Officials	TEACHERS	-288.783*	58.263	.000	-483.75	-93.82
	MOE Officials	549.100*	58.263	.000	354.14	744.06
	Principals	361.583*	58.263	.000	166.62	556.55
	QAO	549.900*	58.263	.000	354.94	744.86
	TESCOM	549.267*	58.263	.000	354.30	744.23
MOE Officials	TEACHERS	-837.883*	58.263	.000	-1032.85	-642.92
	PTA Officials	-549.100*	58.263	.000	-744.06	-354.14
	Principals	-187.517	58.263	.068	-382.48	7.45
	QAO	.800	58.263	1.000	-194.16	195.76
	TESCOM	.167	58.263	1.000	-194.80	195.13
Principals	TEACHERS	-650.367*	58.263	.000	-845.33	-455.40

	PTA Officials	-361.583*	58.263	.000	-556.55	-166.62
	MOE Officials	187.517	58.263	.068	-7.45	382.48
	QAO	188.317	58.263	.066	-6.65	383.28
	TESCOM	187.683	58.263	.068	-7.28	382.65
	TEACHERS	-838.683*	58.263	.000	-1033.65	-643.72
	PTA Officials	-549.900*	58.263	.000	-744.86	-354.94
QAO	MOE Officials	-.800	58.263	1.000	-195.76	194.16
	Principals	-188.317	58.263	.066	-383.28	6.65
	TESCOM	-.633	58.263	1.000	-195.60	194.33
	TEACHERS	-838.050*	58.263	.000	-1033.01	-643.09
	PTA Officials	-549.267*	58.263	.000	-744.23	-354.30
TESCOM	MOE Officials	-.167	58.263	1.000	-195.13	194.80
	Principals	-187.683	58.263	.068	-382.65	7.28
	QAO	.633	58.263	1.000	-194.33	195.60

*. The mean difference is significant at the 0.05 level.

APPENDIX M

Scheffe Multiple Comparisons Test of Difference in Education Stakeholders' Responses in Null Hypothesis 2

Multiple Comparisons

Dependent Variable: responses

Scheffe

(I) Respondents	(J) Respondents	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
TEACHERS	PTA Officials	334.333*	56.013	.000	146.90	521.77

	MOE Officials	886.500*	56.013	.000	699.07	1073.93
	Principals	686.350*	56.013	.000	498.92	873.78
	QAO	886.133*	56.013	.000	698.70	1073.57
	TESCOM	886.050*	56.013	.000	698.62	1073.48
PTA Officials	TEACHERS	-334.333*	56.013	.000	-521.77	-146.90
	MOE Officials	552.167*	56.013	.000	364.73	739.60
	Principals	352.017*	56.013	.000	164.58	539.45
	QAO	551.800*	56.013	.000	364.37	739.23
	TESCOM	551.717*	56.013	.000	364.28	739.15
MOE Officials	TEACHERS	-886.500*	56.013	.000	-1073.93	-699.07
	PTA Officials	-552.167*	56.013	.000	-739.60	-364.73
	Principals	-200.150*	56.013	.027	-387.58	-12.72
	QAO	-.367	56.013	1.000	-187.80	187.07
	TESCOM	-.450	56.013	1.000	-187.88	186.98
Principals	TEACHERS	-686.350*	56.013	.000	-873.78	-498.92
	PTA Officials	-352.017*	56.013	.000	-539.45	-164.58
	MOE Officials	200.150*	56.013	.027	12.72	387.58
	QAO	199.783*	56.013	.028	12.35	387.22
	TESCOM	199.700*	56.013	.028	12.27	387.13
QAO	TEACHERS	-886.133*	56.013	.000	-1073.57	-698.70
	PTA Officials	-551.800*	56.013	.000	-739.23	-364.37
	MOE Officials	.367	56.013	1.000	-187.07	187.80
	Principals	-199.783*	56.013	.028	-387.22	-12.35
	TESCOM	-.083	56.013	1.000	-187.52	187.35

	TEACHERS	-886.050*	56.013	.000	-1073.48	-698.62
	PTA Officials	-551.717*	56.013	.000	-739.15	-364.28
TESCOM	MOE Officials	.450	56.013	1.000	-186.98	187.88
	Principals	-199.700*	56.013	.028	-387.13	-12.27
	QAO	.083	56.013	1.000	-187.35	187.52

*. The mean difference is significant at the 0.05 level.

APPENDIX N

Scheffe Multiple Comparisons Test of Difference in Education Stakeholders' Responses in Null Hypothesis 3

Multiple Comparisons

Dependent Variable: responses

Scheffe

(I) Respondents	(J) Respondents	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
	PTA Officials	421.317*	57.240	.000	229.78	612.86
	MOE Officials	920.267*	57.240	.000	728.73	1111.81
TEACHERS	Principals	734.133*	57.240	.000	542.59	925.67
	QAO	920.200*	57.240	.000	728.66	1111.74
	TESCOM	919.650*	57.240	.000	728.11	1111.19
	TEACHERS	-421.317*	57.240	.000	-612.86	-229.78
	MOE Officials	498.950*	57.240	.000	307.41	690.49
PTA Officials	Principals	312.817*	57.240	.000	121.28	504.36
	QAO	498.883*	57.240	.000	307.34	690.42
	TESCOM	498.333*	57.240	.000	306.79	689.87
MOE Officials	TEACHERS	-920.267*	57.240	.000	-1111.81	-728.73

	PTA Officials	-498.950*	57.240	.000	-690.49	-307.41
	Principals	-186.133	57.240	.063	-377.67	5.41
	QAO	-.067	57.240	1.000	-191.61	191.47
	TESCOM	-.617	57.240	1.000	-192.16	190.92
	TEACHERS	-734.133*	57.240	.000	-925.67	-542.59
	PTA Officials	-312.817*	57.240	.000	-504.36	-121.28
Principals	MOE Officials	186.133	57.240	.063	-5.41	377.67
	QAO	186.067	57.240	.063	-5.47	377.61
	TESCOM	185.517	57.240	.065	-6.02	377.06
	TEACHERS	-920.200*	57.240	.000	-1111.74	-728.66
	PTA Officials	-498.883*	57.240	.000	-690.42	-307.34
QAO	MOE Officials	.067	57.240	1.000	-191.47	191.61
	Principals	-186.067	57.240	.063	-377.61	5.47
	TESCOM	-.550	57.240	1.000	-192.09	190.99
	TEACHERS	-919.650*	57.240	.000	-1111.19	-728.11
	PTA Officials	-498.333*	57.240	.000	-689.87	-306.79
TESCOM	MOE Officials	.617	57.240	1.000	-190.92	192.16
	Principals	-185.517	57.240	.065	-377.06	6.02
	QAO	.550	57.240	1.000	-190.99	192.09

*. The mean difference is significant at the 0.05 level