ASSESSMENT OF ROLE PERFORMANCES OF PRINCIPALS IN THE PROVISION AND MAINTENANCE OF FACILITIES IN SECONDARY SCHOOLS IN ZARIA EDUCATIONAL ZONE, KADUNA STATE, NIGERIA

BY

Muhammed Usman

OCTOBER, 2015

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A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, INPARTIAL FULFILLMENT OF THE REQUIRMENTS FOR THE AWARD OF MASTERS DEGREE IN EDUCATION (EDUCATION ADMINISTRATION AND PLANNING), DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND CURRICULUM, FACULTY OF EDUCATION, AHMADU BELLO UNIVERSITY, ZARIA, NIGERIA

OCTOBER, 2015

DECLARATION

I declare that the work in the Dissertation entitled "Assessment of role performances of principals in the provision and maintenance of facilities in secondary schools in Zaria educational zone, Kaduna State, Nigerian" was performed by me in the Department of Educational Foundations and Curriculum, under the supervision of Dr. Bashir Maina and Dr. M.O Dare. The Information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this Thesis has been previously presented for another degree or diploma at any institution.

_____ _____

Muhammed Usman Date

CERTIFICATION

This dissertation entitled "Assessment of role performances of principals in the provision and maintenance of facilities in secondary schools in Zaria educational zone, Kaduna State, Nigerian"**,** meets the regulations governing the award of the degree of Masters in Education (Education Administration and Planning) of the Ahmadu Bello University, and is approved for its contribution to knowledge and literary presentation.

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Member, Supervisory Committee Dr. M. O. Dare	Date
Head of Department Dr. B. A. Maina	Date
Dean, School of Postgraduate Studies Prof. K. Bala	Date

DEDICATION

This research work is dedicated to the Almighty God for His love and protection in the course of this study.

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In the name of Allah the Beneficent, the merciful, peace and blessings of Allah be unto our prophet Muhammed (S.A.W). Conducting and compiling a research study of this nature could not be without the assistance of other people whose encouragement, pieces of advice and guidance make this study attained success and therefore should be appreciated.

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ABSTRACT

This study assessed the role performances of principals in the provision and maintenance of facilities in secondary schools in Zaria educational zone, Kaduna State, Nigeria. The study was carried out with five research objectives among which are; to determine the role performances of principals in the provision and maintenance of teaching facilities in secondary schools in Zaria Educational zone, Kaduna State, to asses the role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational zone, Kaduna State. Also, five research questions and five null hypotheses were raised for the study. The population of the study comprised 15 principals and 276 teachers. Survey design was adopted for the study and data were collected using a researcher designed questionnaire. The data gathered were analyzed using Analysis of variance (ANOVA) and hypotheses tested at 5% ($P < 0.05$) significant level. The findings revealed among others that no significant difference exists in the opinions of principals and teachers on the role performances of principals in the provision and maintenance of teaching facilities in secondary schools in Zaria Educational zone, Kaduna State. Also, findings show a significant difference in the opinions of principals and teachers on the role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational zone, Kaduna State. Based on the findings, recommendations were made, that since principal of a school is the main administrator of that organization, he/she should ensure that teaching facilities are highly provided and maintained in the school. Similarly, as adequate learning facilities are determinants of students' success, principals should ensure that learning facilities are provided and well maintained in schools.

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OPERATIONAL DEFINITION OF TERMS

Facilities are those things of education which enables a skillful teacher to achieve a level of instructional effectiveness that far exceeds what is possible when they are not provided.

School facilities are the physical and spatial enablers of teaching and learning which will increase the production of results. Such as, classroom, school bay clinic, libraries, laboratories, administrative offices, auditoriums, toilets, cafeteria, common rooms, workshops, parking lots, power and water plants, transportation facilities, classroom furniture's, first aid box, sport and recreational grounds, refuse disposal facilities, drainage facilities, gardens and so on.

Facilities maintenance as any work carried out on any component of the facility with a view to keeping it at good working condition.

Role Performance are the functions performed by the principal which include; definition of goals and purposes, organization of the school, staff development, curriculum development and instruction, discipline, school community relations, provision and maintenance of facilities and equipment, guidance and counselling, financial matters, and evaluation.

Provision of facilities are those basic infrastructures and all educational equipments that are provided in the school in order to cater for the general and specific needs of students as well as to ease the process of teaching and learning both in class and outside the classroom.

LIST OF ABBREVIATIONS

PTA	-	Parent Teachers' Association
WAEC	-	West African Examination Council
NECO	-	National Examination Council
NERDC	-	Nigeria Educational Research and Development Council
SSS	-	Senior Secondary School
JSS	-	Junior Secondary School
NPE	-	National Policy on Education
ANOVA	-	Analysis of Variance
NPTA	-	National Parent Teachers Association
SPSS	-	Statistical Package for Social Sciences
UBE	-	Universal Basic Education

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Education has been accorded a high rating in Nigeria, and the demand for it is popular because of the desire of members of the society to give their children a better chance in life. The demand for education has become explosive and one which no government can afford to ignore.

Quality education at all levels, primary, secondary and tertiary, is desired by many Nigerians. At the secondary level, quality education is absolutely necessary because it serves as the foundation for tertiary level and for people to provide self employment if they cannot continue with the tertiary level. If that basic foundation is weak it will lead to national catastrophe as progress in the society becomes very difficult. Hence all concerned with secondary education should make their best input in order to ensure that a very solid foundation is laid.

The principal of a school is the main administrator of that organization (Okonkwo, 2011). The success or failure of the school depends on his administrative effectiveness. The principal has formal responsibilities for provisions, maintenance of facilities and implementation of educational goals and priorities that are the basis for on-going program of school improvement and professional development (NPE, 2004).

If the position of the principal is such an important one, he is expected to posses a number of qualities facilitative of schoolwork. According to Odo (2005), qualities expected of the principal are; commitment, drive, energy, vision, common sense and mental alertness. Peters (1996) stated that the principal should be wise and capable of moral leadership. In addition, the principal should be academic and professionally competent.

Facilities are very important aspect of education. Education has been the bedrock of development all over the world. Nations and individual all over the world agree that the way out of series of bondages plaguing them is through education. Thus the educational standard set of the school must be challenging to meet the need of the student and the society Olaniyonu, Adekoya and Gbenu (2008). Secondary schools are established by the government to provide services to the people. All these schools are expected to operate in the same curricular and admit children that have completed their primary education. They are also expected to provide the necessary teaching and learning facilities, such like classrooms, teaching materials, libraries laboratories etc. Secondary education in Nigeria could be said to be occupying a strategic position in the national system. This is in consideration of its consumer and producer status i.e. consuming the produce of the primary school and producing candidates for higher education (Yabo, 2006). Ayodele (2000) has argued that no matter how efficient and effective administration is, he hardly achieves success without the support and operation of well qualified and dedicated staff. Qualified staff are education best resources and asset. On the relationship between educational resources and students academic performance, Idiaghe (2004) conclude that "teacher's qualification and adequate facilities were determinant of student's success and that facilities influence the academic performance of the students. This is in consonant with Nwangwu (1997) who said that educational resources facilitate teaching and learning process. School facilities can be said to be those things that enable the teacher to do his/her work very well and helping the learners to learn effectively. The chalk-board for example facilitate the imparting the information on the learner. School facilities also include school building e.g classroom, assembly hall, laboratories, workshops, libraries, teaching and non teaching staff quarters, ventilated improve toilet facilities, refectory, administration block etc. They also include teaching materials, chairs, tables, devices such as modern educational hardware and

software in the forms of magnetic tapes, films etc. Facilities are very important aspect of education. School facilities are all the things that are needed for effective teaching and learning process to take place. They are designed to enhance the process of teaching. The absence of school facilities implies the non existence of any set that may referred to as school.

Castadi in Peretomode (2001) conclude that "education facilities are those things of education which enables a skillful teacher to achieve a level of instructional effectiveness that far exceeds what is possible when they are not provided". Adaralegbe in Abraham (2003) posited that "the type of atmosphere required for effective learning is that consisting of better building, more and better teaching facilities". Adesina in Abraham (2003) posited that "quality of education that our children get bear direct relevance to the availability or the inadequate facilities and overall atmosphere where the learning take place". Educators must realize that there are many elements that influence the condition of school facilities. These elements could range from educational leadership and community involvement. There is no one element that operates in isolation (Lyons, 2001). Educators needed to be informed about the conditions of their school facilities as well as appreciate the differences that facilities could make in helping educate their children.

Sihneider (2002) noted that most of the school buildings were about fifty years old. Faced with an aging building stock and growing, shifting student's enrollments state and community were working out to build and modernize k – 12 facilities. Akinsolu (2004) asserted that educational curriculum cannot be sound and well operated with poor and badly facilities. To him school facilities are physical resources that facilitate effective teaching and learning. They include blocks of classrooms, laboratories, workshops, libraries, equipments, consumables, electricity, water, audio and audio-visual aids, tables, desks, chairs, play ground, storage spaces and toilets. For the school to be effective, school facilities which

serve as the tools of a workman in the hand of the teacher must be adequately provided. It's outmost important that the availability of school facilities will duly contribute to the successful and effective instruction. These facilities must not only be provided, they must also be in good condition to enhance teaching and learning. This implies sound maintenance culture. This is supported with the view of Castaldi (2000) who opined that, school building becomes important because of the extent that it helps in improving teaching and learning effectiveness.

Many school facing aging facilities simply put off performing critical facilities maintenance and upgrade due to lack of adequate founding. The proper maintenance of school facilities make learning to be more real to the students and also serve as great assistance to the teacher in the school. Szuba and Young (2003) observe that school facilities maintenance affects the physical, educational and financial foundation of the school organization and should be the focus of its day-to-day operations and long-range manage priorities. Provisions and maintenance of school facilities should therefore be regarded as an integral and prominent aspect of all school operation and received particular attention in all educational planning and development aspects of the school operations. The Guyana Ministry of Education (2008) aptly describes the phenomenon of a whole school approach and states that a whole school approach to school facilities maintenance and improvement and thus, requires that planning becomes coherent and integrated part of the life of the school's aims of raising learner achievement.

Bastidas (1998) view that "good maintenance means keeping a watchful eye for condition that may cause tripping hazards or water drainage towards the school building". He further maintained that any tripping hazards should be eliminated through repair, ramping or clearing and that repairs must also be done if the condition of the materials deteriorates and create and eyesore. Bastidas, (1998) indicates that drive ways and parking

lots are typically built of either paving bricks, concrete or graved and most important that all these features require some degree of maintenance. The issue of facility maintenance entails providing a clean and safe environment for teaching and learning. It also involves the provision of adequate facilities for teaching and learning. This type of maintenance should be adopted in the facilities maintenance plan. These are preventive, routine, emergency repairs and preventive maintenance. It is important to observe that, while the provision and rehabilitation of school facilities assist in the delivering of quality of teaching and learning, some intervention is needed to plan and utilized such facilities effectively in the teaching and learning process. Teachers constitute the single most important group of stakeholders in determine good quality of education. What they know and can do can be an irreparable loss to the children (Ukeje, 1991). Support of the above statement Marks and King (1999) agreed that to help solve the problems interfering with school programme experience administrators and researchers have identifies school supervision as important ingredient in school and educational administration.

1.2 Statement of the Problem

In Nigeria, public schools enrollment has continued to increase in facilities for effective teaching and learning. As a result of under funding of education in Nigeria, the government has been encouraging proper maintenance of available school facilities. Maintenance of facilities in the schools entails ensuring that facilities are kept near their original state as possible. This involve keeping the sports and football field clean, periodic renovation of building structure, servicing the school bus and generator sets, continue supplying instructional facilities, keeping the school record in their original state etc. for the purpose of restoring the facilities to optimum working condition.

The quality and durability of the buildings largely depend on the type and level of the servicing, repairs and the rate at which the needs and requirement change. School facilities

management involves keeping records of the facilities, maintenance and evaluating the available facilities, planning for the facilities, motivating the students and the teachers to participate in facilities maintenance etc.

Many scholars, researchers, administrators and educational planners have confirmed that school facilities in secondary schools in Nigeria are inadequate and few ones are over utilized due to astronomical increase in enrolment. Ikoya and Onoyase, (2008) reported that only 26% of secondary schools across the country have school infrastructure in adequate quality and quantity. Similarly, Owuamanan, (2005) noted that the inadequacy of infrastructural facilities and lack of adequate maintenance for available facilities were major problems facing Nigeria educational system. The school facilities are grossly inadequate to the student's population and the available facilities were poorly maintained. The provisions and maintenance of facilities in the school will enhance teaching and learning and improve the performances of the students. The absence of effective and efficient school facilities management may lead to many problems in the school system. Some of this problems could include inadequate founding for facilities maintenance, inadequate equipment documentation which is not readily accessible, improper maintenance of school records, inadequate maintenance of furniture's, inadequate maintenance of building structure etc. For the educational industry to carryout its functions effectively, there is need for adequate provisions and maintenance of facilities. This research work focus on the assessment of role performances of principals in the provision and maintenance of facilities in secondary schools in Zaria educational zone, Kaduna state, Nigeria.

1.3 Objectives of the Study

This study was set to achieve the following objectives:

1. determine the opinions of principals and teachers on the role performances of principals in the provision and maintenance of teaching facilities in secondary schools in Zaria Educational zone, Kaduna State;
2. assess the opinions of principals and teachers on the role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational zone, Kaduna State;
3. examine the opinions of principals and teachers on the role performances of principals in the provision and maintenance of sport and welfare facilities in secondary schools in Zaria Educational zone, Kaduna State;
4. assess the opinions of principals and teachers on the role performances of principals in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools in Zaria Educational zone, Kaduna State; and
5. determine the opinions of principals and teachers on the role performances of principals in the provision and maintenance of learning facilities in public and private secondary schools in Zaria Educational zone, Kaduna State.

1.4 Research Questions

The following research questions were set to be answered:

1. What are the opinions of principals and teachers on the impact of role performances of principals in the provision and maintenance of teaching facilities in secondary schools in Zaria Educational zone, Kaduna State?
2. What are the opinions of principals and teachers on the impact of role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational zone, Kaduna State?

3. What are the opinions of principals and teachers on the impacts of role performances of principals in the provision and maintenance of sport and welfare facilities in secondary schools in Zaria Educational zone, Kaduna State?
4. What are the opinions of principals and teachers on the impacts of role performances of principals in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools in Zaria Educational zone, Kaduna State?
5. What are the opinions of principals and teachers on the impacts of role performances of principals in the provision and maintenance of learning facilities in public and private secondary schools in Zaria Educational zone, Kaduna State?

1.5 Research Hypotheses

Ho_1: There is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of teaching facilities in secondary schools in Zaria Educational zone, Kaduna State.

Ho_2: There is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational zone, Kaduna State.

Ho_3: There is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of sport and welfare facilities in secondary schools in Zaria Educational zone, Kaduna State.

Ho_4: There is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools in Zaria Educational zone, Kaduna State.

Ho_5: There is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in public and private secondary schools in Zaria Educational zone, Kaduna State.

1.6 Basic Assumptions

The study is based on the following assumptions that:

1. principals of secondary schools in Zaria Educational zone, Kaduna state are competent in the provision and maintenance of the school facilities.
2. when learning facilities are adequately provided and well maintain in the secondary schools, academic performance and standard will be enhanced.
3. principals provide and maintain sport and welfare facilities in secondary schools in Zaria Educational zone, Kaduna State.
4. principals are competent in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools in Zaria Educational zone, Kaduna State.
5. principals are competent in the provision and maintenance of learning facilities in public and private secondary schools in Zaria Educational zone, Kaduna State.

1.7 Significance of the Study

Dewees (1999) noted that the primary purpose for school facilities should be to provide a quality educational environment for teaching and learning.

The National Parent Teachers Association (NPTA), (2008) contended that school environment significantly impacts students academic achievement. The NPTA believed that states must ensure that all students should receive the chance for quality education in facilities that are safe, well- equipped and sufficiently maintained.

The findings of the study will provide useful information to the state policy makers and school administrators on the the roles play by the principals in the provision and maintenance of school facilities in the secondary school setting in Zaria Educational zone, Kaduna State. The finding of the study will be useful to the school administrators and how they can employ it to enhance effective maintenance of facilities in secondary schools in Zaria Educational zone, Kaduna state.

Information gathered from this research will be useful to lawmakers and educators in planning and making decisions about future findings for facilities.

The teachers will also benefit from the findings of the study since the teachers are the major implementers of curriculum in the schools and thus qualitative school facilities will help them on their job performance.

The students will also benefit from the study since the supervision of the facilities is geared towards the improvement of quality of students learning process.

Finally, other researchers will find this study as a source of secondary literature in the research of the related topics like impact of school facilities on the learning environment, Assessment of the management of school facilities, impact of facilities on educational outcomes etc.

1.8 Scope of the Study

The area of the study is Zaria Educational zone, Kaduna State. There are three (3) Local Government under the Zaria Educational zone viz Sabon Gari, Soba and Zaria. The study will cover all secondary schools in Zaria educational zone. There are seven hundred and seven (707) such schools in the state at the time of the study. The subjects of the study are the principals and teachers in these schools. The study focuses on the assessment of role performances of principals in the provision and maintenance of facilities in secondary schools in Zaria educational zone, Kaduna state, Nigeria.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter reviews literature on the issues, concepts, ideas and generalizations relating to provision and maintenance of school facilities. It is hoped that this review will give further insights and empirical basis for the study. This chapter is therefore, subdivided into the following sub-headings:

1. Concept of school facilities;
2. Types and nature of school facilities;
3. Role performances of principals in the provision and maintenance of school facilities in secondary schools;
4. Categories of school facilities maintenance;
5. Personnel involved in maintaining school facilities;
6. Maintenance of School Facilities for Teaching and Learning;
7. Challenges regarding facilities maintenance at schools;
8. Methodologies for facilities maintenance;
9. Empirical studies; and
10. Summary.

2.2 Concept of school facilities

A school cannot survive without educational facilities. Educational facilities refer to those fixed and unmovable materials. These include school buildings such as classrooms, assembly halls, laboratories, workshops and libraries. They include teaching aids such as films and transparencies. School facilities, therefore, are the materials or things that facilitate teaching and learning processes in the school. School facilities as defined by Ovwigho (1991:162) consist of building, playground, sports field and outdoor equipment.

The school facilities can be grouped into the school areas and the housing areas. According to him, the school area is made up of classrooms, laboratories, workshops and libraries. It is sometimes categorized into buildings and open space. While the housing area, he said "consists of the areas where accommodation is provided for both students and staff members. Fadipe (1998:74) noted that school facilities as a concept refers mainly to the non-consumable materials in the school for the promotion of teaching-learning activities. He further stated that school facilities relate to the entire scope of physical infrastructural facilities which are provided in the school for the purpose of educating the child.

Many educationists such as Durosaro (1998) opined that school facilities include the school site, the school building and all the equipments in the school. Olutola (2007) viewed the school facilities as embracing "permanent and semi-permanent structures as well as items such as machines, laboratory equipments, the chalkboards and the teachers' books. In essence, school facilities refer to all the infrastructural physical facilities which are usually put into educational use. They also include the furniture, laboratories, laboratory equipment and materials. They also include classrooms, workshop, teaching studio and the "space" within the school premises and all those school facilities that can contribute significantly to teaching and learning activities in the school.

School facilities according to Ojedele (1998:83) refer to the school site and all the structures that have been put in place to aid effective teaching and learning in the school. He further stated that on the school site are the playground, sports field, and structures such as classroom buildings that are immovable and chairs. Desks, lockers, tables and so on that are movable. There are also consumable and non-consumable items constituting the school facilities.

According to Adeboyeje (2000) and Emetarom (2004), school facilities are the physical and spatial enablers of teaching and learning which will increase the production of

results. School facilities serve as pillars of support for effective teaching and learning. Oyesola (2000) sees school facilities to include permanent and semi-permanent structures such as machinery, laboratory equipment, the blackboard, teacher's tools and other equipment as well as consumables. Good quality and standard of school depend largely on the provision, adequacy, unitization and management of educational facilities. Akinsolu (2004) asserted that educational curriculum cannot be sound and well operated with poor and badly managed school facilities.

The definition of school facilities by Oluchukwu (1998:91) shows that school facilities planning simply means the siting, building and provision of physical equipment and recreational spaces for the achievement of educational objectives. From the foregoing definition, it can be rightly stated that the school facilities has four main constituents: the school site, buildings, equipment and recreational spaces. Durosaro (1998) highlighted five specific educational spaces that must be provided for on a school site. The three vital spaces required on the school site are:

i. Instructional spaces: such as classrooms, auditorium, gymnasium, library, workshops, laboratories, arts room, home economics rooms, multipurpose rooms/halls, music area and any other space where students receive instruction.
ii. Administrative spaces: these comprise principal's office, clerk's office, staff room, guidance counselor's office and health clinics.
iii. Circulation spaces: these include corridors, lobby, staircases and other spaces where students recreate.

In summary, school facilities can be defined as the entire school plant which school administrators, teachers and students harness, allocate and utilize for the smooth and efficient management of any educational institution, for the main objective of bringing about effective and purposeful teaching and learning experience. From all indication, school

facilities are physical resources that facilitate effective teaching and learning. They include blocks of classrooms, laboratories, workshops, libraries, equipment, consumables, electricity, water, visual and audio-visual aids, tables, desks, chairs, playground, storage space and toilets.

2.3 Types and nature of school facilities

The school facilities are also referred to as educational facilities. There are varieties of materials around that can be used to make the meaning more vivid and interesting. School facilities refers to the school site and all the structures that have been put in pace to aid effective teaching and learning in the school such as siting, building and provision of physical equipment (Ojedele, 1998).

According to this definition, school facilities can be grouped into:

- All kinds of school buildings such as physical structures like classroom, administrative block, library, laboratories.
- Instructional materials;
- Non-teaching and residential facilities;
- Recreational facilities; and
- Specialized facilities.

2.3.1 School buildings

The school facilities required by each school would vary from time to time depending on the size of the school, course offerings, programme orientation and level of education.

Durosaro (1998) stated that the following types of buildings are needed for a secondary school to start. These are classroom blocks, administrative blocks, hostel blocks, kitchen and dining hall, physical and chemistry laboratories, biology and agricultural

science laboratories, library block, technology workshop and typing rooms, assembly hall, student common room, principal's house, senior staff houses, junior staff houses and so on.

The school facilities in the space interpret the school curriculum according to Okeke (1985). He indicated that far more importance should be attached to the impact of facilities on educational experiences and the educational methods used within the school building. Therefore, an effective school facilities is a controlled environmental condition which aids the teaching and learning process and at the same time protects the physical well being of the occupants. Okeke further explained that, the extensiveness of modern educational undertakings and the variety of duties that must be performed therein have made school building something more than a mere collection of classrooms of varied sizes. He said that auxiliary spaces are needed such as auditoria, food service facilities, students' common rooms, administrative and counseling offices and health annexes. He gave the description of office space and central service and mentioned that the size of the school and the nature of the school offerings will determine what offices are needed. He finally indicated the general public use facilities such as corridors, halls, cloak rooms and lobbies are avenues of movement for school users. Okeke highlighted some other buildings such as site service facilities which he said include toilets, car parking spaces and building services such as junior and senior staff quarters, shops, laundry and refuse disposal facilities. The most important areas of a school building are those spaces where planning and learning take place. Today's schools demand a diversity of learning designed for the individual, small groups of students and large classes. Instructional methods, curriculum materials, course content and class organizations have changed and will continue to change; they all affect the ways provisions are made for school building.

School buildings have long span and so they should be planned to meet both immediate and long-range needs. Ukeje (1992) argued that the most important element in

school building is adequate planning. He also noted that "an effective school building investment policy will succeed in building the right kinds of schools in the right places at the right time and at the right cost". Here, the right kind of school means a school which in both capacity range and variety of accommodation suits the educational needs of the community he serves.

2.3.2 Instructional materials

Instructional materials or instructional facilities are easily identifies with direct teaching functions. They serve essentially as centres for learning and teaching in the school set up. Instructional material is a systematic way of designing, carrying out and evaluating the total process of learning and teaching in terms of specific objective to bring about more effective learnings. Good learning situations are those that make it possible for pupils to use materials through which they can learn more effectively. Instructional materials in terms of textbook, teaching aids and equipment are essential to effective teaching-learning.

The lists of instructional materials that teachers can use are inexhaustible. The teacher's level of resourcefulness, creativity and imagination is, in fact, the limit. Instructional materials will, therefore include all forms of information carriers that can be used to promote and encourage effective teaching-learning activities. These are textbooks, supplementary books, work books, reference books, charts, magazines, maps, journals, periodicals, pamphlets, newspapers, posters, programmed texts and non-print materials like film, filmstrips models, mock-up, slides, pictures, audio and video tapes, records, transparencies, globes, board and a host of others. There are also the range of instructional materials such as science apparatuses and chemicals (NERDC, 2010).

However, on the issues of the facilities, it has only being partially provided in some schools, but nothing has been done as stated in the policy in the area of implementation in Kaduna State schools. Apart from these civil facilities which are useful in the teaching

process, other categories can be identified. There are other equipments and materials which are essential in the school for physical infrastructure facilities to be put into educational use. Faculties such as furnitures, laboratory, equipment and materials have direct significance in the teaching-learning process (Enaohwo and Eferakeya, 2008).

2.3.3 Non-teaching or residential facilities

Equally important to the school facilities are the residential and non-teaching facilities. In developing countries where the practice of boarding schools was introduced by missionary organizations, a tradition has been created for staff and students to be resident in the school premises; by this tradition, students are accommodated in hostels while meals and other residential needs are provided from the boarding fees paid for this purpose. On the part of teachers and other essential staff, provision is also made for teachers to be accommodated in the school premises or in nearby residential premises to enable them to maintain a close supervision on their students.

2.3.4 Recreational facilities

Other useful facilities in the school environment are the recreational grounds, such as football or soccer pitch, tennis courts, hockey and cricket fields. All these depend to a large extent on the games emphasized in the environment. For instance in most developing countries, soccer is so popular that every secondary school will make provision for this in the school premises. Often such soccer fields are lined all round by Atlantic tracks for track events while field events are organized within the soccer field especially outside the soccer season. It is not uncommon too to find badminton courts, volley ball court and basketball or handball courts, also laid out at various corners in the school premises.

The last categories of open spaces in the school premises are the lawns, access roads and cool paths, which may or may not be lined with flowers and hedges. Essentially, these

man-made open spaces serve aesthetic purposes in the school premises. Thus, they help to add beauty to the school as a place of learning (Enaohwo and Eferakeya, 2008).

2.3.5 Specialized facilities

If the basic instructional programme is to be truly effective, auxiliary spaces are needed such as auditoria, food services facilities, students' common rooms, administrative and counseling offices, and health annexes (Okeke, 2005). Okeke (2005) further stated that auditoria may be assembly halls or even a large lecture hall, usually used for large class teaching or for school or community assemblies. The size and design of functional auditoria will depend largely on:

a. The educational activities of the school.
b. The extent of planned community use of the auditoria.
c. The number of students in the school.
d. The number and usefulness of such facilities in the community.
e. The ability of the school district or division or the school itself to finance education and auxiliary facilities (Okeke, 2005).

2.4 Role performances of principals in the provision and maintenance of school facilities in secondary schools

Facilities maintenance is an integral part of the overall management role of the principals in the school. The actualization of the goals and objectives of education require the provision, maximum utilization and appropriate maintenance of the facilities. In addition, advances in science and technology necessitates that the school manager or head should adopt modern methods of facilities management, as this will improve the quality of teaching and learning.

School facilities according to Dare (2010) should be properly planned, developed and maintained in order to ensure its relevance to the school curriculum and its effective teaching and learning in any educational institutions. Educational facilities are indispensable as far as the industry is concerned. They are essential for the well-being and comfort of teachers' and the students' in the teaching-learning process. School facility maintenance entails ensuring that the 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 set, repairs, etc. for the purpose of returning the facilities to optimum working conditions.

Olagboje (1998) sees school facilities maintenance as any work carried out on any component of the facility with a view to keeping it at good working condition. According to Hinum (1999), the quality and durability of a building largely depend on the type and level of servicing, repairs and the rate at which the needs and requirements change. School facilities maintenance involves keeping records of the facilities, supervising the facilities, planning for the facilities, motivating students and teachers to participate in facilities maintenance and evaluating the available facilities. It is important that for school to attain their educational goals, facilities maintenance be regarded as a crucial aspect that cannot be left to a later date. It is therefore essential to explore this phenomenon so as to understand its essence in the school system.

2.5 Categories of school facilities maintenance

While maintenance is mainly concerned with the repair and fixing of broken equipment, it is important to note that there are various categories of maintenance, which include emergency maintenance, routine maintenance, preventive maintenance, predictive maintenance, corrective maintenance and deferred maintenance (Szuba and Young, 2003; Office of Public School Construction, 2008). These terms are used to describe maintenance

means and many of them have their origin in colloquial derivations, while some reflect the type of condition under which maintenance needs to occur. An exposition of each of these categories is presented in subsequent paragraphs.

2.5.1 Emergency maintenance

According to UCSC Physical Plant (2004), emergency maintenance is concerned with the repair or replacement of facility components or equipment requiring immediate attention because the functioning of a critical system is impaired or because health, safety or security of life is endangered. Independent Schools Queensland (2007) refers to this kind of maintenance as response maintenance which is concerned with, for example electrical fault, storm damage or accidental damage. Alberta learning facilities Branch (2004) states that emergency maintenance responds to unexpected equipment breakdowns, building components failures and accidental or deliberate vandalism damage.

Asiabaka (2008) postulated that emergency maintenance is very common in the management of school facilities in societies where the maintenance culture is not well established and it takes place when a facility breaks down and urgent measures or steps have to be taken to remedy the situation. Asiabaka also pointed out that emergency maintenance is expensive because, due to lack of regular maintenance, the extent of damage may demand total replacement of the facilities or result in high cost of repairs and, in some cases, the breakdown may cause injury or even death to staff and or learners of the school, while the resultant effect may be prevention of the use of the facility for teaching and learning until repairs have been effected.

It is clear that emergency maintenance, whole unavoidable due to unforeseen circumstances and conditions that require it, to be minimized through ongoing maintenance of facilities. There should be constant vigilance of school facilities and these facilities should be inspected regularly for any signs of defects hat could result in malfunctions that

may require emergency maintenance. Thus, emergency maintenance can be minimized through effective preventive maintenance.

2.5.2 Preventive maintenance

Preventive maintenance is perhaps the most important category of facilities maintenance. To this end, Szuba and Young (2003) assert that a good maintenance programme is built on a foundation of preventive maintenance. Preventive maintenance is described as the component of a facilities maintenance system which has its goal the maximizing of the useful life of all buildings systems before failure occurs (Mearig, Crittenden, Morgan & Guess, 1995; Carter & Carter, 2001). Mearig et al (1995) point out that, at its heart, preventive maintenance asks, "What can I do to make this item, be it an automobile, building or piece of equipment, remain as good as new for as long as possible?" According to Howard (2006), the purpose of an effective preventive maintenance plan is to:

a. preserve taxpayers investments in public buildings since preventive maintenance can extend the life of building components, thus sustaining buildings' value and the significant tax funds they represent;

b. help buildings function as they were intended and operate at peak efficiency, including minimizing energy consumption and because preventive maintenance keeps equipment functioning as designed, it reduces inefficiencies in operations and energy usage;

c. prevent failures of building systems that would interrupt occupants' activities and the delivery of public services, because buildings that operate trouble-free allow public employees to do their jobs and serve the public;

d. sustain a safe and healthful environment by keeping buildings and their components in good repair and structurally sound; and

e. provide maintenance in ways that are cost-effective because preventive maintenance can prevent minor problems from escalating into major system and equipment failures that result in costly repairs.

In consideration of the importance of preventive maintenance, it follows that such maintenance programme should be systematic and well planned. In fact, preventive maintenance can be seen as proactive maintenance aimed at preventing unexpected equipment or building component failure and is performed on regular intervals throughout the school year. Therefore, preventive maintenance is planned and not reactive, and is supplemented by routine maintenance.

2.5.3 Routine maintenance

According to Alberta Learning facilities Branch (2004), routine maintenance refers to generally repairing or replacing building components, equipment or operating systems. This includes the general upkeep of the grounds and buildings (Clamp, 1996; Carter & Carter, 2001). Furthermore, Carter & Carter (2001) posit that routine maintenance allows for the continued use of a space for its intended purpose and serves as an additional manifestation of ownership and caring. This occurs through the regular maintenance of such items as burned-out light bulbs or fluorescent tubes, dripping faucets, worn floor and ceiling tiles and sticking doors and windows, which result from normal building use. In this sense, routine maintenance will normally be performed as expeditiously as possible during normal working hours. Routine maintenance also assists in identifying areas for predictive maintenance.

2.5.4 Predictive maintenance

According to Grasmick et al (2008), predictive maintenance is a process of investigation and measurement to detect the onset of equipment or system degradation, thereby allowing stressors to be eliminated or controlled before they cause significant

deterioration in the physical state of the components. The results of these investigations will indicate the current and future capability of the equipment or system. Predictive maintenance therefore bases maintenance needs on the actual condition of the equipment or building system and is time-based, with activities (such as changing lubricant) determined by calendar time or equipment run time.

Carter and Carter (2001) point out that predictive maintenance enhances opportunities for casual surveillance and access control of the school facilities. Grasmick et al (2008) also indicate that this category of facilities maintenance has numerous advantages for the school. Among others, predictive:

a. increases component operational life and sustainability;
b. allows for preemptive corrective actions;
c. decreases equipment or process downtime;
d. ensures better product quality;
e. improves workers and environmental safety;
f. results in emergency savings; and
g. generate and estimate 8%-12% cost savings over preventive maintenance programmes.

Therefore preventive maintenance seems to be the key effective and sustainable school facilities maintenance. Preventive maintenance enhances the conduct of corrective maintenance.

2.5.5 Corrective maintenance

Corrective maintenance is directly related to preventive maintenance and predictive maintenance. Corrective maintenance addresses the deficiency that inevitably resolved from unforeseen events, however, diligently a preventive maintenance programme is conducted,

for example, vandalism, lightning, strikes, hail, flooding, etc (Grasmick et al, 2008). Corrective maintenance, however, excludes activities that expand the capacity of an asset or otherwise upgrade the asset to serve needs greater than or different from those originally intended (Grasmick et al, 2008). On the contrary, Hammond Street Development (2005) argues that corrective maintenance covers the basis of a school maintenance programme. It embraces all the repair needs requested by the school. However, this approach does not call for any checking of services before systems failure. Although inexpensive, it therefore possesses concern about short-sightedness of investment in facility management.

2.5.6 Deferred maintenance

Contrary to corrective maintenance, differed maintenance includes scheduled activities that are delayed or postponed for reasons such as lack of funds or personnel, changes in priorities and change of use (Baltimore country public school, 2007:92). BOMA international (undated) added that differed maintenance occurs when preventive maintenance costs are selectively deferred to a future period of time. This approach has merit when a school facility is non-performing or under-performing (that is, when it no longer serves its expected purpose) and when cash preservation is critical. Application of deferred maintenance is when a building is being placed in a "mothballed" condition, which is when a building is shut down for a period of time. The building shut-down is typically temporary, with plans to reopen it later. BOMA international (undated) further advises that when the deferred maintenance option is selected, it is important to determine the period during which this approach will be used in advance and at the end of the deferred maintenance period, a one-time cost needs to be calculated to restore the system or equipment to normal operating efficiencies.

There are, however, risks to the deferred maintenance approach. BOMA international (undated) opines that the risk of a deferred maintenance programme lies in the cost of

restoring to the system/equipment. Nevertheless, with proper planning, the restoration cost of deferred maintenance could be less than the deferred maintenance savings. Another risk is deferring the maintenance beyond the system's recovery point. And if it happens, the system would need to be replaced or repaired.

The various maintenance categories discussed in the foregoing section are all aimed at ensuring that school facilities are kept in conditions that support and advance the school's educational programmes. This, in essence, can include the curricular and non-curricular programmes, which really implies maintaining correct school facilities standards.

2.6 Personnel involved in maintaining school facilities

Musgrave (2009) argues that if management of school facilities can be effectively done, sustained and actively promoted in the school system, the society at large will be involved in managing school facilities. In this connection, the personnel that have direct bearing in managing school facilities include the following:

1. The school administrator.
2. The school teachers.
3. Students.
4. PTA/Community members.

2.6.1 The school administrator: School administrators are the custodians of their school facilities. It is therefore their responsibility to ensure that all components of the facilities are in good working condition: that they are well protected; and that they are used for the purpose(s) for which they were acquired. It is the duty of the school administrator to motivate and mobilize his/her teaching and non-teaching staff as well as students to cultivate the habit of maintenance culture with respect to the school facilities.

2.6.2 Teachers: It is the best interest of all teachers in the school system to assist their school heads in the planned management of school facilities as this will create a conducive teaching-learning environment and enhance their own work. As classroom teachers, it is their responsibility to observe that every item in their classroom is in good condition and to promptly report dilapidation or deterioration to the school head for necessary maintenance action.

2.6.3 Students: It is not far-fetched to assert that a clean, well-maintained school facility provides a more conducive atmosphere for the teaching-learning process that an unkempt and dilapidated school facility. As future leaders, students need to be encouraged to imbibe the habit of maintenance culture. On their part, they must self-responsibly assist the school authorities in maintaining the school facilities. This can be done by obeying any rules made and enforced on them.

2.6.4 PTA/Community members: This can be begin with parents/guardians getting their children/wards to routinely keep in good condition their uniforms, books, and other personal school items. Once this habit is ingrained, there is the likelihood of transferring it to the school setting.

2.7 Maintenance of School Facilities for Teaching and Learning

Maintenance and accurate record keeping are two important aspects of effective management of school facilities. School facilities management refers to all the efforts put in place by school administrators to ensure that all available facilities in the school system are available in required number and are properly maintained against destruction or dilapidation. School management is the process of planning to meet the needs of the school physical facilities, constructing the facilities, maintaining and keeping such facilities always in good condition so that they can be put into operation when required for teaching and learning. According to Nwachukwu (1998:4), management is defined as "getting things

done through others". It can be more scientifically defined as the coordination of all the resources of the organizationthrough the process of planning organizing, directing and controlling in order to attain organizational objectives.

To Robert Kneetner (1995), management is the process of working with and through others to achieve organizational objectivein a changing environment. Resser (1973) cited in Peretomode (1991) gives an insight into the question that managers are the people who;

- Set objectives for using available resources.
- Formulate plan for achieving the objectives.
- Identify the activities to be performed.
- Organize the activities into group
- Define the task to be performed in each group
- Groups the task into jobs or programmes
- Initiate work activities.
- Supply incentives to stimulate productivity.
- Sets up controls to measure achievement of objectives.
- Take remedial action if objectives are not being met.

2.8 Challenges regarding facilities maintenance at schools

There are numerous challenges regarding facilities maintenance at schools. Some of these challenges are as a result of backlogs created by deferred maintenance, for instance, efficient plumbing systems are essential for smooth facility operation, but too often they are overlooked until a problem arises (Westerkamp, 2000). Among other challenges, the following are prominent:

a. Maintenance activities are not documented: Hopkinson (2008) opines that most of the challenges with facilities maintenance stem from poor documentation. Adding to this opinion, Pharmout (2007) asserts that document such as policies, procedures and work instruction should exit for all maintenance activities. The documentation system must, however, be kept simple. It should indicate what the maintenance staff is going to do and must do exactly as prescribed (Adams, 2008).

b. Maintenance plans are not updated: Howard (2006) is of the opinion that preventive maintenance requires strategic action for prolonging the life of school facilities components and, as a baseline for planning, facilities managers should prepare and periodically update and inventory of facility components and there conditions. By so doing, the maintenance staff can then better identify maintenance needs. Determine their costs and set priorities. Well-structured preventive maintenance, incorporated into ongoing maintenance programmes, therefore offers the best chance for achieving intended results.

c. Maintenance staff are not properly trained: A study by Adams (2008) found that schools in many countries are not safe for children due to neglect of the operation and maintenance of facilities. In addition there has been a lack of hygiene education for learners. The study also found that if the maintenance staff is not properly trained and other school personnel lack commitment, an unhealthy physical environment will be created. Lack of proper training becomes evident when compounds and classrooms are not clean, toilets do not work and are kept in poor condition, when there is an absence of convenient hand washing facilities and lack of safe drinking water.

These challenges are sometimes compounded by the lack of clean and convenient use of water and sanitation facilities by all learners and staff and the lack of roles of older

learners to help and monitor the younger learners in using facilities and maintaining school cleanliness (Smith & Lewis, 2008). According to McCall (1997:4), untrained personnel, including the principal, will allow school facilities to degenerate to crisis situation. The message sent to learners forced to attend school in shabby, overcrowded buildings is that nobody cares about, nor expect very much from them.

School therefore has a responsibility to make sure that their maintenance employees receive the necessary training beyond occupational licensure requirements, and for cost-effective decisions the school principal and the school governing body should include appropriate maintenance personnel in considering long-term maintenance needs in addition to initial project costs (Howard, 2006).

d. Inadequate funding for facilities maintenance: the budget allocated for facilities maintenance in schools is usually inadequate. In most cases, the departments of education take the responsibility for the expenditure of major repairs or replacements of existing school buildings components so that the education process may safely continue (Office of Public School Construction, 2008). Although this might sound responsible, it still poses a challenge because the department waits until more or excessive damage is done before giving attention to a problematic component of the building. Because of deferral, the repairs become costly (Goldstein, 2007). Preventive maintenance is undoubtedly the best in terms of saving funds for the schools and the department of education.

e. Equipment documentation is not readily accessible: according to PharmOut (2007), the ideal situation is for the documentation for equipment to be in the hands of the maintenance staff before maintenance work is carried out. the documentation should include, the manufacturer's operation manual, installation manual, service manual,

details of the validated state of the equipment, engineering drawings and process and instrument diagrams.

To be able to confront and address the challenges listed above, the school should have a way of approaching facilities maintenance.

2.9 Methodologies for facilities maintenance

Planning, as in all management processes is the first logical step in facilities management. According to Dror (1967.p99) planning is the process of preparing a set of decisions for action in the future directed at achieving goals by optimal means. A plan for activities 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. It also includes budget priorities for facilities maintenance. A facilities maintenance plan starts with the educational philosophy that serves the needs of the individual in a dynamic and knowledge-based economy. The educational system should prepare individuals for life in a constantly changing world. Facility maintenance plan should therefore give meaning to the educational philosophy.

A second step is the development of broad educational goals and specific objectives. These goals and objectives should be comprehensive enough to cover all aspects of the educational programme and also make adequate room for flexibility to allow specific individual and group needs. Planning cannot be meaningfully carried out without accurate information, which should be collected through facility audit. According to the Planning Guide for Maintaining School Facilities (2003), facility audit is a comprehensive inventory of a school's facilities that provides a standard method for establishing baseline information about the components, policies and procedures of a new or existing facility. It provides

information on the status of school facilities. It is carried out by assessing buildings, grounds and equipment, documenting the findings and recommending service options to increase efficiency, reduce waste and save money. According to the guide, facility audits are important because they:

a. help planners, managers and staff know what is available, its condition, service history, maintenance needs and location;
b. provide facts not guess work, to inform plans for maintaining and improving school facilities;
c. establish a baseline for measuring facilities maintenance progress;
d. allow in-depth analysis of product life circles to occur on a routine basis (that is, measuring actual life versus expected life).

The following information should be collected when a facility audit is being carried out:

1. Brand name, model number, serial number;
2. Quality and product size;
3. Location;
4. Age;
5. Condition;
6. Working as purchased/designed;
7. Working as it should;
8. Working as it needs to be to meet the needs of the users;
9. Repair history;
10. Specialized upkeep equipment (for example, oil and filter types);
11. Evidence of future needs;

12. Recommended services;
13. Estimated remaining useful life.

Brooks and Atkin (2003) outlined the stages in facility maintenance as follows:

a. Analysis stage: assemblies all relevant facts about the organization's objectives, needs and policies, a review of resources processes, systems and the physical assets themselves, together with their attributes in terms of space, functions and utilization.
b. Solution stage: assemblies criteria for judging options, evaluating these against the objectives of the organization and develops the facility maintenance strategy.
c. Implementation stage: completes the strategy development process through the establishment of an implementable plan that incorporates the key elements of procurement, training and importantly communication.

2.10 Empirical studies

The following empirical studies done by researchers were reviewed:

Nkwoh (2011) carried out a research titled "the administrative roles of private secondary school principals in Aba zone of Abia State". It is a survey research and it adopted seven research questions that guided the study. Sample of six hundred and sixteen (616) respondents' was chosen from group of teachers of schools. The six hundred and sixteen respondents were selected by stratified, random proportionate techniques across Aba education zone of Abia State. A 35- item questionnaire on principal administrative tasks performance evaluation question (PATPEQ) which was based on Likert's 4- point scale-I lightly Effective. Moderately effective and Not Effective- was used to collect data. The result was analyzed using mean and standard deviation. The result revealed that principals were moderately effective in financial and school business administration, students'

personnel administration, staff personnel administration instruction and curriculum development and in general tasks.

The principals were effective in school-community relation and they were not effective in school plants. Based on the discussions and conclusions, the researcher made some of the following recommendations on the way forward. The selection of principal should be done based on certain criteria which are logical laid down by the state education board and made available to prospective principals. There is need for regular seminars and workshop for private secondary school principals on principal's administrative roles, the principals should also be sensitized on how to show concern to staff and build cohesive work groups for the delivery achievement of educational goals.

Similarity of the present study lies in the fact that both studies were concern with the administrative and leadership roles of secondary school principals and both studies are survey which uses questionnaire to gather data from the respondents. Despite that the research work contributed to the current research work, the study differs as it was carried out with seven objectives while the present study will be carried out with five objectives, research questions and five null hypotheses.

Ihuoma (2008) conducted a study titled "The Need for Effective Facility Management in Schools in Nigeria". The study surveyed the opinion of the respondents and was carried out with three objectives. Questionnaire was used to collect data from the respondents and data collected was analyzed using t-test. Findings show a direct relationship exists between the quality of school facilities provided and the quality of the products of the school. The physical environment of a school is a major determining factor in the attainment of its objectives. Findings concluded that school facilities give meaning to the teaching and learning process. It recommended that school managers should carry out comprehensive assessment of the facilities to determine areas of need.

Though the present study is a bit related to former studies as follows, its major variable is Facility Management in Schools in Nigeria. The statistical tools proposed for this study is similar. Despite that the research work contributed to the current research work, the researcher did not answer any research questions nor test any null hypothesis if not a better result would have emerged.

In a study conducted by Hamza (1991) titled "The roles of principals in schools", a test for school administrators in secondary schools, 16 principals were selected from 16 schools at random. A research instrument questionnaire was used in data collection. Simple percentages, t-test and ANOVA statistical tools were employed in data analysis involving four null-hypotheses. Major variables discussed in the study were intelligent of the principal, morality of the principal, sociability, accountability, personality, and intuitiveness. The findings of the study include; a perfect principal starts with intelligence, good personality, sociability, accountability and studious. The study recommended, among other issues, that, a good principal must be selected based on intelligence, a good principal should be sociable, a good principal should be intuitive, must have ability to carry others along, must be able to improve communication and delegate duties. All these are criteria to be observed in employing any principal both by government and private proprietors.

Though the present study is a bit related to former studies as follows, it's major variables are principals' leadership style and school administration in Nigeria. The statistical tools proposed for this study is similar. The result was however, with some little differences from former studies. The number of hypothesis and the instrument used are different.

Lawanson (2011) surveyed the opinion of the respondents on the topic "provision and management of school facilities for the management of UBE programme", questionnaire was used for data collection and simple percentage was used to analysed the personal data

of the respondents. Study shows that school facilities are vital tools in the teaching and learning process, hence the justification for their adequate provision and management.

The present study is related to past work because both are on provision and maintenance of school facilities in secondary schools. The work strongly motivated the current work in that it shade light on the importance of principals role in the provision and maintenance of school facilities. The study also differs as it was carried out without objectives, research questions and null hypotheses. Also, the data collected were not subjected to proper statistical analysis such as t-test, ANOVA for better result

Auta (2012) carried out a research titled "Impact of School Facilities on Teaching and Learning in Nigerian Airforce Secondary Schools". Four research questions were asked and four null hypotheses formulated and tested using ANOVA at 0.05 level of significant. The research design adopted in the study was descriptive survey while structured questionnaire was designed by the researcher and used for data collection. This study is similar to the present study as it was carried out with four objectives which the present study will be conducted with four objectives. But the area of dissimilarity of the study is that, the past study was analysed with ANOVA while the present study will be analysed with the use o t-test.

2.11 Summary

Literature was reviewed on the concept of educational facilities which are materials things that facilitate teaching and learning processes in the school. These include school buildings such as classrooms, assembly halls, laboratories, workshops and libraries. They include teaching aids such as films and transparencies. Role performances of principals in the provision and maintenance of school facilities in secondary schools was discussed and it was made realized that facilities maintenance is an integral part of the overall management role of the principals in the school and that the actualization of the goals and objectives of

education require the provision, maximum utilization and appropriate maintenance of the facilities. Also discussed are the various categories of maintenance, which include emergency maintenance, routine maintenance, preventive maintenance, predictive maintenance, corrective maintenance and deferred maintenance. At the same time, personnel that have direct bearing in managing school facilities were revealed; which include the school administrator, the school teachers, Students and PTA/Community members.

Furthermore, the study reviewed that school facilities should be constructed, maintained and always keep in good condition so that they can be put into operation when required for teaching and learning. Likewise, maintenance of school facilities are faced with numerous challenges. Among other challenges, the following are prominent: Maintenance activities are not documented, Maintenance plans are not updated, Maintenance staff are not properly trained, Inadequate funding for facilities maintenance and Equipment documentation is not readily accessible.

Empirical studies were reviewed; such is the work of Nkwoh (2011), Ihuoma, (2008), Hamza (1991), Lawanson (2011) and Auta (2012). Based on their findings and conclusions, the researchers made some of the following recommendations. Among others that; school managers should carry out comprehensive assessment of the facilities to determine areas of need; There is need for regular seminars and workshop for private secondary school principals on principal's administrative roles, the principals should also be sensitized on how to show concern to staff and build cohesive work groups for the delivery achievement of educational goals.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that was adopted in carrying out this research, that is, the research design, population of the study, sample and sampling techniques, instruments for data collection, validity, pilot study and reliability of instruments, procedure for data collection, and procedure for data analysis.

3.2 Research Design

The research design adopted for this study is the survey research for the purpose of achieving the objectives of the study. A survey research is one, which involves the assessment of public opinions using questionnaires and sampling methods. This is because of the large population involved in the selected study area. The justification as observed by Onoja (2004) is that a large population with variables that cut across peculiarities of a target population can adopt the survey research. As such, a large population with variables that are prominent and cut across peculiarities of the target population were involved in this study.

3.3 Population of the study

The area of the study is Zaria Educational Zone, Kaduna State. There are three Local Government Areas and 61 secondary schools (at the time of gathering data) in the zone. The population of the study consists of the principals and teachers of the 61 public secondary schools in Zaria educational zone, Kaduna State. The Local Government Areas are Zaria, Sabon-Gari and Soba. The subjects of the study are the 61 principals and 1,105 teachers who teach in the schools. Therefore, the total number of respondents is 1,166. Table 3.1 shows the population distribution of the study:

Table 3.1: Population of the study

S/NO	L.G.A	Principals	Teachers	Total
1.	Zaria	24	478	**502**
2.	Sabon-Gari	22	537	**559**
3.	Soba	15	90	**105**
	Total	**61**	**1105**	**1166**

Source: Kaduna State Ministry of Education, School Census Report (March, 2014).

3.4 Sample and sampling techniques

The sample size for this study consists of two hundred and ninety-one (291) using a standardized sampling table (The Research Advisors, 2006). This sample represents 25% of the entire population and consists of both males and females who are principals and teachers in public secondary schools in Zaria Education Zone, Kaduna state. These two hundred and ninety-one (291) respondents were systematically selected using the simple random sampling technique in order to ensure ample representation. The researcher decided to use this technique to obtain an unbiased desired sample. This was carried out through the use of balloting. This means no respondent was deliberately omitted. The sample for this study is as follows:

Table 3.2: Sample of the study

S/NO	L.G.A	Principals	Teachers	Total
1.	Zaria	6	119	**125**
2.	Sabon-Gari	5	134	**139**
3.	Soba	4	23	**27**
	Total	**15**	**276**	**291**

3.5 Instrumentation

This research work used questionnaire as the instrument for collection of data. Bello and Razaq (2000) added that a good questionnaire contains a series of questions sometimes statements, which are usually used to elicit information from the target population of a given study.

The questionnaire for this study was titled "Questionnaire on the role performances of principals in the provision and maintenance of facilities in secondary schools in Zaria educational zone, Kaduna state, Nigeria". The questionnaire was divided into two (2) sections. Section A elicits information about the background information of the respondents such as age, sex, educational qualification, etc. Section B comprised of the questionnaire items meant to elicit responses on the provision and maintenance of school facilities.

The questionnaire was designed by the researcher and was based on the 4-point modernized Likert Attitude Measurement Scale, which is, Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD). It requires the respondents to choose one that best represents his/her views on the items. This study has chosen the questionnaire technique as an effective and appropriate instrument for finding out facts and perception of individuals on the role performances of principals in the provision and maintenance of facilities in secondary schools in Zaria educational zone, Kaduna state, Nigeria.

3.5.1 Validity of the Instrument

The questionnaire as an instrument for this study is universally and empirically acceptable as effective tool for the collection of any research data. The questionnaires was given to experts in the field of Educational Administration, Language specialists, educational researchers, statistician and supervisor to help establish the content validity of the instrument for the research by making constructive criticisms. This assists in the modification and reframing of the items on the questionnaire. All the corrections and

suggestions made were effected thereafter so as to be able to adjudge whether the instrument has face and content validity.

3.5.2 Pilot study

Following the validation of the instrument; pilot study was conducted in order to determine the reliability coefficient of the instruments and to determine problem areas in the conduct of the main research. For the purpose of the pilot study, the total of 40 participants from Giwa education zone which are divided as follows, 10 principals, 30 teachers was used.

3.5.3 Reliability of the instrument

Reliability refers to when an instrument measures consistently under diverse conditions and at different times a person's performance or trait (Bello & Ajayi, 2000). The reliability of an instrument in essence reflects the consistency and trustworthiness of that instrument.

The pilot study was carried out on 10 principals and 30 teachers who are not part of the selected sample for the study. The data collected from the pilot study was statistically analyzed to determine the reliability coefficient. The reliability coefficient of the instrument was determined using Cronbach's Alpha technique and was found to be 0.84. This shows that, the research instrument is reliable because, in Cronbach Alpha reliability analysis, the closer the Cronbach's Alpha to 1.0, the higher the internal consistency reliability.

3.6 Procedure for Data Collection

The data for this research was obtained through the administration of questionnaires to the two hundred and ninety-one (291) respondents to be randomly selected. Respondents was given sufficient time to fill the questionnaires personally. The questionnaires were personally administered directly and with the assistance of staff of the school concerned. The researcher adopted this method because it will not only permit the researcher to deal

with possible problems on the spot, it will also guarantee a very high return rate. It also enables the researcher to obtain the free opinion of respondents, which may not be possible through other means.

3.7 Procedure for Data Analysis

The data and information gathered was analyzed using the frequency and percentage tables for easy presentation and interpretation. This means the information and figures obtained from the data was expressed in ordinary figures as collected from the respondents and explained by using the percentage formula (i.e. 100%) in order to arrive at percentage. Nevertheless, analyses of data presented on each table were interpreted for better understanding.

The null hypotheses were tested using Analysis of Variance (ANOVA) at 0.05 alpha level of significance. The responses from the subjects on the hypotheses were considered for either acceptance or rejection. However, if the calculated value is greater than the critical value, the null hypothesis was rejected, while if the calculated value is less than the critical value, the null hypothesis was accepted.

CHAPTER FOUR

ANALYSIS OF RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the data analysis including the discussion of results. The data were obtained from principals and teachers in public secondary schools in Zaria Educational Zone, Kaduna State, on the assessment of the role performances of principals in the provision and maintenance of facilities in Secondary Schools in Zaria Educational Zone, Kaduna State, Nigeria. The total of fifteen (15) principals and two hundred and seventy six (276) teachers responded to the instrument. The analysis of the data collected was done using appropriate tools in Statistical Package for Social Sciences (SPSS) 21th Edition. The first section of this chapter presents the frequency and percentages of the personal data, which include age, gender, educational qualification of the respondents. The second section presents answers to research questions using percentages. The third section presents and interprets the four null hypotheses structured along the research objectives by means of inferential statistical technique of Analysis of Variance (ANOVA) to determine the presence or absence of significant difference for the four hypotheses. All the null hypotheses were tested at 0.05 alpha level of significance. The fourth section outlined the major findings of the study and the last section discussed the findings of the study in details.

4.2 Findings on the bio-data of the respondents

The following tables show the frequency and percentage of the bio-data of the respondents:

Table 4.2.1: Classification of the respondents by Status

	Frequency	Percentage
Principal	15	5.2
Teacher	276	94.8
Total	**291**	**100**

Table 4.2.1 above revealed the classification of the respondents by status where 15 or 5.2% of the respondents are principal while 276 or 94.8% are teachers.

Table 4.2.2: Classification of the respondents by Gender

	Frequency	Percentage
Male	185	63.6
Female	106	36.4
Total	**291**	**100**

Table 4.2.2 above revealed that a total of two hundred and ninety-one respondents were used for the study, with the total of 185 or 63.6% male and 106 or 36.4% female. This shows that the population was fairly distributed.

Table 4.2.3: Classification of the respondents by Age

Age Range	Frequency	Percentage
20–30	51	17.5
31–40	74	25.4
41–50	127	43.6
51 and above	39	13.4
Total	**291**	**100**

Table above shows the classification of the respondents by their age. Respondents between the age of 20–30 were 51 or 17.5% while those between the age of 31–40 were 74 or 25.4% and respondents between 41−50 are 127 or 43.6%. Also, those from 51 and above are 39 or 13.4%. This means that the majority of the respondents were between the age of 41–50.

Table 4.2.4: Qualifications of the respondents

	Frequency	Percentage
NCE	80	27.5
B.Ed	135	46.4
M.Ed	58	19.9
Others	18	6.2
Total	**291**	**100**

Table 4.2.4 shows that, 80 or 27.5% of the respondents are holders of NCE, while 135 or 46.4% of the respondents are B.Ed holders with 58 or 19.9% as holders of M.Ed. Likewise, 18 or 6.2% have qualifications in other field of study.

Table 4.2.5: Classification of the respondents by their Location

Location	Frequency	Percentage
Urban	137	47.1
Rural	154	52.9
Total	**291**	**100**

Table 4.2.5 above shows the location of the principals and teachers. As such, 137 or 47.1% of the principals and teachers are from urban area while 154 or 52.9% are from rural area. This implies that majority of both the principal and teachers are from rural schools.

Table 4.2.6: Teaching Experience of the respondents

	Frequency	Percentage
1–10yrs	96	33.0
11–20yrs	81	27.8
21–30yrs	65	22.3
31 and above	49	16.8
Total	**291**	**100**

Table 4.2.6 Revealed that a total of two hundred and ninety-one respondents were used for the study. Most (96 or 33.0%) of the respondents have between 1–10 years of experience, while 81 or 27.8% of the respondents have between 11–29years of experience and 65 or 22.3% of the respondents have between 21–30years of teaching experience. Likewise, 49 or 16.8% of the respondents have 31years and above experience in the teaching (school services) of secondary schools.

4.3 *Opinions of the respondents on the impact of role performances of principals in the provision and maintenance of teaching facilities in secondary schools in Zaria Educational zone, Kaduna State?*

Table 4.3 below revealed the opinions of principals and teachers concerning the role performances of principals in the provision and maintenance of teaching facilities in secondary schools in Zaria Educational zone, Kaduna State.

S/N	Item statement	**RESPONSE CATEGORIES**					**MEAN**	**STD**
		SA	**A**	**UD**	**D**	**SD**		
1	The principal ensures that laboratory facilities are provided in the school.	42	148	23	46	32	3.4192	1.230
2	The principal, through the head of department, ensures that laboratory facilities are well provided through regular visit to the laboratory.	59	39	68	83	42	2.9656	1.346
3	The principal ensures that chalkboards are provided adequately in the school.	23	79	14	95	80	2.5533	1.349
4	The principal, through the vice principal academic, ensures that chalkboard are highly provided in the school.	36	93	-	130	32	2.9003	1.303
5	The principal ensures that chairs are adequately provided for effective teaching in the school.	49	92	77	40	33	3.2887	1.226
6	The principal, through the vice principal academic, ensures that chairs are highly provided in the school.	18	91	58	100	24	2.9278	1.110
7	The principal ensures that tables are adequately provided for students' use in the school.	36	96	-	127	32	2.9210	1.304

8	The principal, through the vice principal academic, ensures that tables are highly provided in the school.	27	89	24	119	32	2.8625	1.229
9	The principal ensures that public address system is provided in the school.	27	93	9	119	43	2.8007	1.287
10	The principal, through the vice principal academic, ensures that public address system is well provided in the school.	36	70	36	109	40	2.8385	1.280
11	The principal ensures that laboratory facilities are maintained in the school.	23	85	35	116	32	2.8316	1.193
12	The principal, through the head of department, ensures that laboratory facilities are well maintained through regular visit to the laboratory.	36	96	-	127	32	2.9210	1.304
13	The principal ensures that chalkboards are maintained in the school.	48	149	11	62	21	3.4845	1.202
14	The principal, through the vice principal academic, ensures that chalkboard are properly maintained in the school.	36	70	47	103	35	2.8935	1.250
15	The principal ensures that chairs are maintained for effective teaching in the school.	43	97	36	93	22	3.1581	1.235
16	The principal, through the vice principal academic, ensures that chairs are properly maintained in the school.	36	70	62	92	31	2.9588	1.217
17	The principal ensures that tables are maintained for students' use in the school.	47	76	39	99	30	3.0378	1.289
18	The principal, through the vice principal academic, ensures that tables are properly maintained in the school.	32	55	45	98	61	2.6529	1.299
19	The principal ensures that public address system is maintained in the school.	36	65	35	116	39	2.8041	1.273
20	The principal, through the vice principal academic, ensures that public address system is well maintained in the school.	11	116	32	66	66	2.7938	1.283

Analysis of the above table shows opinion of principals and teachers on a number of item statements as contained in the questionnaire. It was revealed that principal ensures that

laboratory facilities are provided in the school, as this item attracted the highest mean response of 3.4192, with details showing that 42 of the respondents strongly agreed with the item, while 148 respondents agreed as against 46 that disagreed and the rest 32 strongly disagreed with this item. In the same vein they believed that principal ensures that chalkboards are maintained in the school, as this item has the mean score of 3.4845 with details showing 48 strongly agreed, 149 agreed, while 11 were undecided as against 62 that disagreed with this item and the rest 21 strongly disagreed with this item.

4.4 *Opinions of the respondents on the impact of role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational zone, Kaduna State?*

To answer this research question, the opinions of the respondents were tabulated on table 4.4 below indicating their observed frequencies, mean and standard deviation.

S/N	Item statement	RESPONSE CATEGORIES					MEAN	STD
		SA	A	UD	D	SD		
1	The principal ensures that library is provided in the school.	25	70	47	103	46	2.7423	1.228
2	The principal ensures that library is well provided in the school.	43	93	40	93	22	3.1443	1.232
3	The principal ensures that chalkboards are provided adequately in the school.	25	70	73	92	31	2.8832	1.147
4	The principal, through the head of the department, ensures that microscopes are highly provided in the school.	42	76	39	99	35	2.9691	1.290
5	The principal ensures that computer facilities are provided in the school.	32	55	45	98	61	2.6529	1.299
6	The principal, through the head of computer unit, ensures that computer facilities are highly provided in the school.	158	52	38	43	-	4.1168	1.120
7	The principal ensures that journals and reference books are provided in the school.	25	39	39	145	43	2.5120	1.155
8	The principal, through the vice principal ensures that journals and reference books are highly provided in the school.	25	33	44	108	81	2.3574	1.238
9	The principal ensures that textbooks are adequately provided in the school.	31	83	44	93	40	2.9038	1.255

10	The principal, through the vice principal academic, ensures that textbooks are highly provided in the school.	34	92	42	80	43	2.9794	1.286
11	The principal ensures that library is maintained in the school.	75	70	44	71	31	3.2990	1.363
12	The principal, through the vice principal academic, ensures that library is well maintained in the school.	48	70	44	83	46	2.9691	1.350
13	The principal ensures that microscope facilities are maintained in the school.	27	89	24	119	32	2.8625	1.229
14	The principal, through the head of the department, ensures that microscopes are properly maintained in the school.	27	93	9	119	43	2.8007	1.287
15	The principal ensures that computer facilities are maintained in the school.	36	70	36	109	40	2.8385	1.280
16	The principal, through the head of computer unit, ensures that computer facilities are well maintained in the school.	23	85	35	116	32	2.8316	1.193
17	The principal ensures that journals and reference books are maintained in the school.	36	96	-	127	32	2.9210	1.304
18	The principal, through the vice principal ensures that journals and reference books are appropriately maintained in the school.	25	70	73	92	31	2.8832	1.147
19	The principal ensures that textbooks are maintained in the school.	42	76	39	99	35	2.9691	1.290
20	The principal, through the vice principal academic, ensures that textbooks are properly maintained in the school.	32	55	45	98	61	2.6529	1.299

From table 4.4 above, reports of respondents' opinion comprising of principals and teachers were solicited for, on the role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational zone, Kaduna State. It was strongly agreed upon that principal, through the head of computer unit, ensures that computer facilities are highly provided in the school. This is based on the responses of the respondents as the item recorded the highest mean score of 4.1168 with details showing that

158 of the respondents strongly agreed with the item, while 52 respondents agreed as against 38 respondents that were undecided with 43 that disagreed with this item. Equally, another response from both the principal and teachers shows that, principal ensures that library is maintained in the school as this item has the mean score of 3.2990 with details showing 75 strongly agreed, 70 agreed, with 44 undecided as against 71 that disagreed with this item and the rest 31 strongly disagreed with the item.

4.5 *Opinions of the respondents on the impacts of role performances of principals in the provision and maintenance of sport and welfare facilities in secondary schools in Zaria Educational zone, Kaduna State?*

Table 4.5 below shows the opinions of the respondents on the role performances of principals in the provision and maintenance of sport and welfare facilities in secondary schools in Zaria Educational zone, Kaduna State.

S/N	Item statement	RESPONSE CATEGORIES					MEAN	STD
		SA	A	UD	D	SD		
1	The principal ensures that football fields are provided in the school.	158	52	38	43	-	4.1168	1.120
2	The principal, through the game master, ensures that football fields are highly provided in the school.	25	39	39	145	43	2.5120	1.154
3	The principal ensures that volley ball and hand ball courts are provided in the school.	42	148	23	46	32	3.4192	1.230
4	The principal, through the game master, ensures that volley ball and hand ball courts are highly provided in the school.	59	39	68	83	42	2.9656	1.346
5	The principal ensures that sick bay is provided in the school.	23	79	14	95	80	2.5533	1.349
6	The principal, through the head of department, ensures that sick bay is well provided in the school.	36	93	-	130	32	2.9003	1.303
7	The principal ensures that jerseys and balls are provided in the school.	49	92	77	40	33	3.2887	1.225
8	The principal, through the game master, ensures that jerseys and balls are adequately provided in the school in the school.	19	72	41	83	76	2.5704	1.288
9	principal ensures that staff quarters	49	69	61	90	22	3.1134	1.230

	school buses are provided in the school.							
10	The principal, through the vice principal academic, ensures that staff quarters and school buses are well provided in the school.	49	92	59	40	51	3.1649	1.344
11	The principal ensures that football fields are maintained in the school.	46	76	39	99	31	3.0241	1.290
12	The principal, through the game master, ensures that football fields are well maintained in the school.	33	55	45	97	61	2.6632	1.306
13	The principal ensures that volley ball and hand ball courts are maintained in the school.	36	65	36	115	39	2.8076	1.272
14	The principal, through the game master, ensures that volley ball and hand ball courts are well maintained in the school.	11	117	32	65	66	2.8007	1.284
15	The principal ensures that sick bay is maintained in the school.	25	70	47	102	47	2.7388	1.231
16	The principal, through the head of department, ensures that sick bay is well maintained in the school.	43	92	40	93	23	3.1340	1.237
17	The principal ensures that jerseys and balls are maintained in the school.	25	71	73	91	31	2.8900	1.148
18	The principal, through the game master, ensures that jerseys and balls are well maintained in the school in the school.	42	76	39	99	35	2.9691	1.290
19	The principal ensures that staff quarters and school buses are maintained in the school.	32	56	45	97	61	2.6598	1.301
20	The principal, through the vice principal academic, ensures that staff quarters and school buses are properly maintained in the school.	157	52	38	44	-	4.1065	1.126

The above table depicts the result of analysis of respondents' opinion on the role performances of principals in the provision and maintenance of sport and welfare facilities in secondary schools in Zaria Educational zone, Kaduna State. Specifically, majority of the respondents are of the opinion that principal ensures that football fields are provided in the school. This item attracted the highest mean score of 4.1168, with details showing that 158 of the respondents strongly agreed with the item, while 52 respondents agreed as against 43

that disagreed with this item. Likewise, the respondents were of the opinion that principal, through the vice principal academic, ensures that staff quarters and school buses are properly maintained in the school, as the item recorded the mean response of 4.1065. It was revealed that 157 of the respondents strongly agreed with the item while the sum of 52 respondents agreed with 38 respondents that were undecided. Also, 44 respondents disagreed.

4.6 *Opinions of the respondents on the impacts of role performances of principals in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools in Zaria Educational zone, Kaduna State?*

Table 4.6 below revealed the opinions of principals and teachers concerning the role performances of principals in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools in Zaria Educational zone, Kaduna State.

S/N	Item statement	RESPONSE CATEGORIES					MEAN	STD
		SA	A	UD	D	SD		
1	The principal ensures that laboratory facilities are provided in the school.	42	83	68	39	59	2.8832	1.147
2	The principal, through the head of department, ensures that laboratory facilities are well provided through regular visit to the laboratory.	80	95	14	79	23	2.6529	1.299
3	The principal ensures that chalkboards are provided adequately in the school.	27	89	24	119	32	2.29018	1.290
4	The principal, through the vice principal academic, ensures that chalkboard are highly provided in the school.	36	127	-	32	96	2.9038	1.233
5	The principal ensures that chairs are adequately provided for effective teaching in the school.	149	48	11	62	21	3.2990	1.363
6	The principal, through the vice principal academic, ensures that chairs are highly provided in the school.	36	70	47	103	35	2.7990	1.389
7	The principal ensures that tables are adequately provided for students' use in the school.	47	76	39	99	30	2.7433	1.225
8	principal, through the vice principal academic, ensures that tables	127	32	-	96	36	3.0095	1.147

	highly provided in the school.							
9	The principal ensures that public address system is provided in the school.	36	70	62	92	31	2.5533	1.349
10	The principal, through the vice principal academic, ensures that public address system is well provided in the school.	32	55	45	98	61	2.9004	1.302
11	The principal ensures that laboratory facilities are maintained in the school.	32	97	56	45	61	2.2887	1.225
12	The principal, through the head of department, ensures that laboratory facilities are well maintained through regular visit to the laboratory.	35	99	39	76	42	2.5704	1.288
13	The principal ensures that chalkboards are maintained in the school.	157	52	38	44	-	2.1764	1.344
14	The principal, through the vice principal academic, ensures that chalkboard are properly maintained in the school.	51	40	59	92	49	2.3389	1.075
15	The principal ensures that chairs are maintained for effective teaching in the school.	116	32	35	85	23	4.2365	1.344
16	The principal, through the vice principal academic, ensures that chairs are properly maintained in the school.	22	90	61	68	50	2.9112	1.349
17	The principal ensures that tables are maintained for students' use in the school.	92	40	49	51	59	2.5512	1.231
18	The principal, through the vice principal academic, ensures that tables are properly maintained in the school.	25	71	73	91	31	2.7022	1.678
19	The principal ensures that public address system is maintained in the school.	42	76	39	99	35	2.8395	1.193
20	The principal, through the vice principal academic, ensures that public address system is well maintained in the school.	42	39	59	83	68	2.7812	1.012

Analysis of data collected on table 4.6 shows the opinions of principals and teachers concerning the role performances of principals in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools in Zaria Educational zone, Kaduna State. The responses of the respondents revealed that principal ensures that chairs are

adequately provided for effective teaching in the school, as this item attracted the mean response of 3.2990. Details of the responses shows that about 149 strongly agreed with this item, while 48 of the respondents agreed, 11 were undecided, 62 disagreed and 21 strongly disagreed with this item. Also, response shows that principal ensures that chairs are maintained for effective teaching in the school. This recorded the mean response of 4.2365 with details showing 116 strongly agreed, 32 agreed, with 35 undecided as against 85 that disagreed with this item and the rest 23 strongly disagreed with the item.

4.7 *Opinions of the respondents on the impacts of the role performances of principals in the provision and maintenance of learning facilities in public and private secondary schools in Zaria Educational zone, Kaduna State?*

To answer this research question, the opinions of the respondents were tabulated on table 4.7 below indicating their observed frequencies, mean and standard deviation.

S/N	Item statement	RESPONSE CATEGORIES					MEAN	STD
		SA	A	UD	D	SD		
1	The principal ensures that library is provided in the school.	33	55	45	97	61	2.6632	1.306
2	The principal ensures that library is well provided in the school.	36	65	36	115	39	2.8076	1.272
3	The principal ensures that chalkboards are provided adequately in the school.	11	117	32	65	66	2.8007	1.284
4	The principal, through the head of the department, ensures that microscopes are highly provided in the school.	25	70	47	102	47	2.7388	1.231
5	The principal ensures that computer facilities are provided in the school.	32	55	45	98	61	2.6529	1.299
6	The principal, through the head of computer unit, ensures that computer facilities are highly provided in the school.	36	65	36	115	39	2.8076	1.272
7	The principal ensures that journals and reference books are provided in the school.	25	39	39	145	43	2.5120	1.155
8	The principal, through the vice principal ensures that journals and reference books are highly provided in the school.	25	33	44	108	81	2.3574	1.238
9	The principal ensures that textbooks are adequately provided in the school.	31	83	44	93	40	2.9038	1.255

10	The principal, through the vice principal academic, ensures that textbooks are highly provided in the school.	160	50	29	41	12	4.3568	1.120
11	The principal ensures that library is maintained in the school.	36	65	35	116	39	2.8041	1.273
12	The principal, through the vice principal academic, ensures that library is well maintained in the school.	11	116	32	66	66	2.7938	1.283
13	The principal ensures that microscope facilities are maintained in the school.	27	89	24	119	32	2.8625	1.229
14	The principal, through the head of the department, ensures that microscopes are properly maintained in the school.	27	93	9	119	43	2.8007	1.287
15	The principal ensures that computer facilities are maintained in the school.	36	70	36	109	40	2.8385	1.280
16	The principal, through the head of computer unit, ensures that computer facilities are well maintained in the school.	23	85	35	116	32	2.8316	1.193
17	The principal ensures that journals and reference books are maintained in the school.	36	96	-	127	32	2.9210	1.304
18	The principal, through the vice principal ensures that journals and reference books are appropriately maintained in the school.	25	70	73	92	31	2.8832	1.147
19	The principal ensures that textbooks are maintained in the school.	42	76	39	99	35	2.9691	1.290
20	The principal, through the vice principal academic, ensures that textbooks are properly maintained in the school.	32	55	45	98	61	2.6529	1.299

The above table reveals the opinions of the respondents on the role performances of principals in the provision and maintenance of learning facilities in public and private secondary schools in Zaria Educational zone, Kaduna State. It was revealed that principal, through the vice principal academic, ensures that textbooks are highly provided in the school. This item attracted the highest mean response of 4.3568, with details showing that

160 of the respondents strongly agreed with the item, while 50 respondents agreed as against 29 undecided, 41 disagreed and 12 that strongly disagreed with this item.

4.8 Hypotheses Testing

All the five null hypotheses were tested at 0.05 level of significance using the Analysis of Variance (ANOVA) statistics.

Hypothesis One: There is no significant difference in the opinions of principals and teachers on the role performances of principal in the provision and maintenance of teaching facilities in secondary schools in Zaria Educational zone, Kaduna State.

Table 4.8.1: Summary of Analysis of Variance (ANOVA) statistics showing no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of teaching facilities in secondary schools in Zaria Educational zone, Kaduna State

The summary of the opinions of principals and teachers on the role performances of principals in the provision and maintenance of teaching facilities in secondary schools in Zaria Educational zone, Kaduna State were analyzed using Analysis of Variance (ANOVA) statistics and presented in table 4.8.1 below:

Variations	Sum of Squares	df	Mean Square	F ratio	F critical	Sig.
Between Groups	3.734	2	3.734	2.480	2.60	.116
Within Groups	435.118	289	1.506			
Total	438.852	291				

Calculated p > 0.05, calculated F ratio < 2.60 at df 2, 289

Results of the One way Analysis of variance statistics on table 4.8.1 revealed that there was no significant difference in the opinions of principals and teachers on the role performances of principal in the provision and maintenance of teaching facilities in secondary schools in Zaria Educational zone, Kaduna State. Reason for this is because the calculate significant (p) value of .116 is higher than 0.05 alpha level of significance while the calculated f ratio value of 2.480 is lower than the F critical value of 2.60. Hence, the null

hypothesis which states that there is no significant difference in the opinions of principals and teachers on the role performances of principal in the provision and maintenance of teaching facilities in secondary schools in Zaria Educational zone, Kaduna State, is hereby accepted.

Hypothesis Two: There is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational zone, Kaduna State.

Table 4.8.2: Summary of Analysis of Variance (ANOVA) statistics showing no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational zone, Kaduna State

The summary of the opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational zone, Kaduna State were analyzed using Analysis of Variance (ANOVA) statistics and presented in table 4.8.2 below:

Variations	Sum of Squares	df	Mean Square	F ratio	F critical	Sig.
Between Groups	.019	2	.019	3.010	2.60	**.**000
Within Groups	525.638	289	1.819			
Total	525.656	291				

Table 4.8.2 above shows the opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational zone, Kaduna State. Analysis of Variance (ANOVA) statistics was used in order to determine the possible difference in the opinions of respondents. The calculate significant (p) value of **.**000 is lower than 0.05 alpha level of significance while the calculated f ratio value of 3.010 is higher than the F critical value of 2.60. As a result, the null hypothesis which states that there is no significant difference in the opinions of

principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational zone, Kaduna State, is hereby rejected.

Hypothesis Three: There is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of sport and welfare facilities in secondary schools in Zaria Educational zone, Kaduna State.

Table 4.8.3: Summary of Analysis of Variance (ANOVA) statistics showing no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of sport and welfare facilities in secondary schools in Zaria Educational zone, Kaduna State

The opinions of principal and teachers on the role performances of principals in the provision and maintenance of sport and welfare facilities in secondary schools in Zaria Educational zone, Kaduna State were taken and Analysis of Variance (ANOVA) statistics was used in testing the hypothesis. The Summary of data collected and analyzed in respect to null hypothesis three is presented in Table 4.8.3 below:

Variations	Sum of Squares	df	Mean Square	F ratio	F critical	Sig.
Between Groups	1.318	2	1.318	.877	2.60	.350
Within Groups	434.435	289	1.503			
Total	435.753	291				

Table above revealed that there was no significant difference in the respondents' opinion on the role performances of principals in the provision and maintenance of sport and welfare facilities in secondary schools in Zaria Educational zone, Kaduna State. Reason for this is because the calculate significant (p) value of .350 is higher than 0.05 alpha level of significance while the calculated f ratio value of .877 is lower than the F critical value of 2.60. Therefore, the null hypothesis which states that there is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision

and maintenance of sport and welfare facilities in secondary schools in Zaria Educational zone, Kaduna State, is hereby accepted.

Hypothesis Four: There is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools in Zaria Educational zone, Kaduna State.

Table 4.8.4: Summary of Analysis of Variance (ANOVA) statistics showing no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools in Zaria Educational zone, Kaduna State

Table 4.8.4 below shows the summary of the opinion of principal and teachers on the role performances of principals in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools in Zaria Educational zone, Kaduna State.

Variations	Sum of Squares	df	Mean Square	F ratio	F critical	Sig.
Between Groups	12.820	2	12.820	7.730	2.60	.004
Within Groups	479.290	289	1.658			
Total	492.110	291				

The result above shows that there is a significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools in Zaria Educational zone, Kaduna State as the calculate significant (p) value of .004 is lower than 0.05 alpha level of significance while the calculated f ratio value of 7.730 is higher than the F critical value of 2.60. Consequently, the null hypothesis which states that there is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools in Zaria Educational zone, Kaduna State, is thus rejected.

Hypothesis Five: There is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in public and private secondary schools in Zaria Educational zone, Kaduna State.

Table 4.8.5: Summary of Analysis of Variance (ANOVA) statistics showing no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in public and private secondary schools in Zaria Educational zone, Kaduna State

The opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in public and private secondary schools in Zaria Educational zone, Kaduna State were taken and analyzed using Analysis of Variance (ANOVA) statistics. The Summary of data collected and analyzed in respect to null hypothesis five is presented in table 4.8.5.

Variations	Sum of Squares	Df	Mean Square	F ratio	F critical	Sig.
Between Groups	20.093	2	20.093	12.691	2.60	.002
Within Groups	457.536	289	1.583			
Total	477.629	291				

The above table depicts the analysis of opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in public and private secondary schools in Zaria Educational zone, Kaduna State. Analysis of Variance (ANOVA) statistics was used in order to determine the possible difference in the opinions of respondents. The calculate significant (p) value of .002 is lower than 0.05 alpha level of significance while the calculated f ratio value of 12.691 is higher than the F critical value of 2.60. Hence, the null hypothesis which states that there is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in public and private secondary schools in Zaria Educational zone, Kaduna State, is hereby rejected.

4.9 Summary of hypotheses testing

	Items	Opinions	Decisions
Hypothesis One	Role performances of principal in the provision and maintenance of teaching facilities in secondary schools.	Not Significant	Accepted
Hypothesis Two	Role performances of principals in the provision and maintenance of learning facilities in secondary schools.	Significant	Rejected
Hypothesis Three	Role performances of principals in the provision and maintenance of sport and welfare facilities in secondary schools.	Not Significant	Accepted
Hypothesis Four	Role performances of principals in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools.	Significant	Rejected
Hypothesis Five	Role performances of principals in the provision and maintenance of learning facilities in public and private secondary schools.	Significant	Rejected

4.10 Summary of major findings

The following are the major findings of the study;

1. Findings revealed no significant difference in the opinions of principals and teachers on the role performances of principal in the provision and maintenance of teaching facilities in secondary schools in Zaria Educational zone, Kaduna State.
2. Study depicts a significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational zone, Kaduna State.
3. Findings show no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of sport and welfare facilities in secondary schools in Zaria Educational zone, Kaduna State.

4. A significant difference exist in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools in Zaria Educational zone, Kaduna State.
5. Findings revealed a significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in public and private secondary schools in Zaria Educational zone, Kaduna State.

Also, the followings were also discovered in the course of this study that:

6. In the rural area there is functional school-community base which is reflective in better school maintenance.
7. In urban area there is larger students population so the facilities are more obsessed in which in case there is poor maintenance.
8. Some of the rural schools have no electricity therefore some facilities are not used.
9. Facilities in urban area are well maintain than the facilities in the rural area due to skillful personnel we have in the urban area and unskillful one in the rural area or I don't care personnel are also found in the rural area.
10. The public schools have more facilities than the private school.
11. The provisions of facilities are much more found in the public school than in the private school.
12. Also, in terms of maintenance private schools maintain their facilities than the public school.

4.11 Discussions of the Findings

In respect to the results of the null hypotheses tested and answers to research questions, the following are the discussions of the findings:

The findings on table 4.8.1 using Analysis of Variance (ANOVA) statistics revealed no significant difference in the opinions of principals and teachers on the role performances of principal in the provision and maintenance of teaching facilities in secondary schools in Zaria Educational zone, Kaduna State. Reason for this is because the calculate significant (p) value of .116 is higher than 0.05 alpha level of significance while the calculated f ratio value of 2.480 is lower than the F critical value of 2.60. Consequently, the null hypothesis was accepted. It was revealed that principal ensures that laboratory facilities are provided and that chalkboards are maintained in the school, this item attracted the highest mean responses of the respondents. This findings correlate with the study conducted by Okonkwo (2011) who stated that the principal of a school is the main administrator of that organization. The success or failure of the school depends on his administrative effectiveness.

The result of Analysis of Variance (ANOVA) statistics on table 4.8.2 show a significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational zone, Kaduna State. The calculate significant (p) value of .000 is lower than 0.05 alpha level of significance while the calculated f ratio value of 3.010 is higher than the F critical value of 2.60. As a result, the null hypothesis which states that there is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational zone, Kaduna State, was rejected. Findings show that principal, through the head of computer unit, ensures that computer facilities are highly provided in the school. Equally, result shows that principal ensures that library is maintained in the school as this item recorded the highest response mean. This result contradict the view of Owuamanan,

(2005) who noted that the inadequacy of infrastructural facilities and lack of adequate maintenance for available facilities were major problems facing Nigeria educational system.

Table 4.8.3 revealed the outcome of the analysis of the opinions of principal and teachers on the role performances of principals in the provision and maintenance of sport and welfare facilities in secondary schools in Zaria Educational zone, Kaduna State. Findings show no significant difference in the opinions of respondents as the calculate significant (p) value of **.**350 is higher than 0.05 alpha level of significance while the calculated f ratio value of **.**877 is lower than the F critical value of 2.60. Therefore, the null hypothesis which states that there is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of sport and welfare facilities in secondary schools in Zaria Educational zone, Kaduna State, was accepted. Specifically, majority of the respondents were of the opinion that principal ensures that football fields are provided in the school and that principal, through the vice principal academic, ensures that staff quarters and school buses are properly maintained.

The findings on table 4.8.4 revealed that significant difference exists in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools in Zaria Educational zone, Kaduna State. The calculate significant (p) value of **.**004 is lower than 0.05 alpha level of significance while the calculated f ratio value of 7.730 is higher than the F critical value of 2.60. Hence, the null hypothesis which states that there is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools in Zaria Educational zone, Kaduna State, was rejected. From the response of the respondents, it was revealed that principal ensures that chairs are adequately provided and

maintained for effective teaching in the school. This finding is in consonant with Nwangwu (1997) who said that educational resources facilitate teaching and learning process.

Table 4.8.5 depicts the analysis of opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in public and private secondary schools in Zaria Educational zone, Kaduna State. Analysis of Variance (ANOVA) statistics was used in order to determine the possible difference in the opinions of respondents. The calculate significant (p) value of .002 is lower than 0.05 alpha level of significance while the calculated f ratio value of 12.691 is higher than the F critical value of 2.60. As a result, the null hypothesis which states that there is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in public and private secondary schools in Zaria Educational zone, Kaduna State, is hereby rejected. It was revealed that principal, through the vice principal academic, ensures that textbooks are highly provided in the school. This item attracted the highest mean response from both the principals and teachers.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

This study entitled "Assessment of Role Performances of Principals in the Provision and Maintenance of Facilities in Secondary Schools in Zaria Educational Zone, Kaduna State, Nigeria", was conducted with five research objectives, five research questions and five null hypotheses. The total of fifteen (15) principals and two hundred and seventy-six (276) teachers responded to the instrument. Survey design was adopted for the study and data were collected using a researcher designed questionnaire. The data gathered were analyzed using Analysis of Variance (ANOVA) statistics and hypotheses were tested at 0.05% level of significance. Findings revealed among others that no significant difference exists in the opinions of principals and teachers on the role performances of principals in the provision and maintenance of teaching facilities in secondary schools in Zaria Educational zone, Kaduna State. Also, findings show a significant difference in the opinions of principals and teachers on the role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational Zone, Kaduna State. Based on the findings, recommendations were made, that since principal of a school is the main administrator of that organization, he/she should ensure that teaching facilities are highly provided and maintained in the school. Also, as adequate learning facilities are determinanst of students' success, principals should ensure that learning facilities are provided and well maintained in their schools.

5.2 Conclusions

Based on the outcomes of the study, the following conclusions can be made that;

1. there is a significant difference in the opinions of principals and teachers on the role performances of principal in the provision and maintenance of teaching facilities in secondary schools in Zaria Educational zone, Kaduna State.
2. there is a significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in secondary schools in Zaria Educational zone, Kaduna State.
3. there is no significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of sport and welfare facilities in secondary schools in Zaria Educational zone, Kaduna State.
4. there is a significant difference exist in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of teaching facilities in urban and rural areas in secondary schools in Zaria Educational zone, Kaduna State.
5. there is a significant difference in the opinions of principal and teachers on the role performances of principals in the provision and maintenance of learning facilities in public and private secondary schools in Zaria Educational zone, Kaduna State.

5.3 Recommendations

From the findings of the study, the following recommendations are hereby put forward:

1. Since principal of a school is the main administrator of that organization, he/she should ensure that teaching facilities are highly provided and maintained in the school.

2. As, adequate learning facilities are determinant of student's success, principals should ensure that learning facilities are provided and well maintained in schools.
3. Likewise, principals should ensure that sport and welfare facilities are adequately provided and maintained in schools.
4. Since teaching facilities are all the things that are needed for effective teaching and learning process to take place, government should provide and maintain the teaching facilities in both urban and rural schools.
5. Lastly, learning facilities makes learning to be more real to the students and also serve as great assistance to the teacher in the school. Hence, principals should ensure that learning facilities are adequately provided and maintained in the schools.

5.4 Suggestions for further studies

Further studies can be carried out in the following areas:

1. Impact of school facilities on the learning environment
2. Assessment of the management of school facilities
3. Impact of facilities on educational outcomes

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APPENDIX A

QUESTIONNAIRE ON THE ASSESSMENT OF ROLE PERFORMANCES OF PRINCIPALS IN THE PROVISION AND MAINTENANCE OF FACILITIES IN SECONDARY SCHOOLS IN ZARIA EDUCATIONAL ZONE, KADUNA STATE

Department of Educational
Foundations and Curriculum,
Faculty of Education,
Ahmadu Bello University,
Zaria.

Dear Respondent,

REQUEST TO FILL QUESTIONNIARE

I am a student of Educational Administration and Planning Section, Department of Educational Foundations and Curriculum, Faculty of Education, Ahmadu Bello University (ABU), Zaria. I am currently conducting a research on the Assessment of role performances of principals in the provision and maintenance of facilities in secondary schools in Zaria Educational Zone, Kaduna state. The research is purely for academic purposes. Thus, information provided in the questionnaire will be treated with utmost confidentiality.

Yours Sincerely,

Muhammed Usman.

APPENDIX B

SECTION A: PERSONAL DATA

Instruction: Please tick (√) in the appropriate box.

1. Status: (a) Principal ( ) (b) Teacher ( )
2. Gender: (a) Male ( ) (b) Female ( )
3. Age: (a) 20–30 (b) 31–40 (c) 41–50 (d) 51 and above
4. Qualifications: (a) NCE ( ) (b) B.Ed ( ) (c) M.Ed ( ) (d) Others (specify) _____
5. Location: (a) Urban ( ) (b) Rural ( )
6. Teaching Experience: (a) 1−10yrs (b) 11−20yrs (c) 21−30yrs (d) 31 and above.
7. Ownership of School: (a) Public ( ) (b) Private ( )

SECTION B: The role performances of principals in the provision of teaching facilities in secondary schools in Zaria Educational Zone, Kaduna state.

Please tick (√) the appropriate box that relate to your opinion.

S/N	ITEM STATEMENT	5 Strongly Agreed	4 Agreed	3 Undecided	2 Disagreed	1 Strongly Disagreed
1.	The principal ensures that laboratory facilities are provided in the school.					
2.	The principal, through the head of department, ensures that laboratory facilities are well provided through regular visit to the laboratory.					
3.	The principal ensures that chalkboards are provided adequately in the school.					
4.	The principal, through the vice principal academic, ensures that chalkboard are highly provided in the school.					
5.	The principal ensures that chairs are adequately provided for effective teaching in the school.					
6.	The principal, through the vice principal academic, ensures that chairs are highly provided in the school.					
7.	The principal ensures that tables are adequately provided for students' use in the school.					
8.	The principal, through the vice principal academic, ensures that tables are highly provided in the school.					
9.	The principal ensures that public address system is provided in the school.					
10.	The principal, through the vice principal academic, ensures that public address system is well provided in the school.					

SECTION B: The role performances of principals in the maintenance of teaching facilities in secondary schools in Zaria Educational Zone, Kaduna state.

Please tick (√) the appropriate box that relate to your opinion.

S/N	ITEM STATEMENT	5 Strongly Agreed	4 Agreed	3 Undecided	2 Disagreed	1 Strongly Disagreed
11.	The principal ensures that laboratory facilities are maintained in the school.					
12.	The principal, through the head of department, ensures that laboratory facilities are well maintained through regular visit to the laboratory.					
13.	The principal ensures that chalkboards are maintained in the school.					
14.	The principal, through the vice principal academic, ensures that chalkboard are properly maintained in the school.					
15.	The principal ensures that chairs are maintained for effective teaching in the school.					
16.	The principal, through the vice principal academic, ensures that chairs are properly maintained in the school.					
17.	The principal ensures that tables are maintained for students' use in the school.					
18.	The principal, through the vice principal academic, ensures that tables are properly maintained in the school.					
19.	The principal ensures that public address system is maintained in the school.					
20.	The principal, through the vice principal academic, ensures that public address system is well maintained in the school.					

SECTION C: The role performances of principals in the provision of learning facilities in secondary schools in Zaria Educational Zone, Kaduna state.

Please tick (√) the appropriate box that relate to your opinion.

S/N	ITEM STATEMENT	5 Strongly Agreed	4 Agreed	3 Undecided	2 Disagreed	1 Strongly Disagreed
1.	The principal ensures that library is provided in the school.					
2.	The principal ensures that library is well provided in the school.					
3.	The principal, through the vice principal academic, ensures that microscope facilities are adequately provided in the school.					
4.	The principal, through the head of the department, ensures that microscopes are highly provided in the school.					
5.	The principal ensures that computer facilities are provided in the school.					
6.	The principal, through the head of computer unit, ensures that computer facilities are highly provided in the school.					
7.	The principal ensures that journals and reference books are provided in the school.					
8.	The principal, through the vice principal ensures that journals and reference books are highly provided in the school.					
9.	The principal ensures that textbooks are adequately provided in the school.					
10.	The principal, through the vice principal academic, ensures that textbooks are highly provided in the school.					

SECTION C: The role performances of principals in the maintenance of learning facilities in secondary schools in Zaria Educational Zone, Kaduna state.

Please tick (√) the appropriate box that relate to your opinion.

S/N	ITEM STATEMENT	5 Strongly Agreed	4 Agreed	3 Undecided	2 Disagreed	1 Strongly Disagreed
11.	The principal ensures that library is maintained in the school.					
12.	The principal, through the vice principal academic, ensures that library is well maintained in the school.					
13.	The principal ensures that microscope facilities are maintained in the school.					
14.	The principal, through the head of the department, ensures that microscopes are properly maintained in the school.					
15.	The principal ensures that computer facilities are maintained in the school.					
16.	The principal, through the head of computer unit, ensures that computer facilities are well maintained in the school.					
17.	The principal ensures that journals and reference books are maintained in the school.					
18.	The principal, through the vice principal ensures that journals and reference books are appropriately maintained in the school.					
19.	The principal ensures that textbooks are maintained in the school.					
20.	The principal, through the vice principal academic, ensures that textbooks are properly maintained in the school.					

SECTION D: The role performances of principals in the provision of sports and welfare facilities in secondary schools in Zaria Educational Zone, Kaduna state.

Please tick (√) the appropriate box that relate to your opinion.

S/N	ITEM STATEMENT	5 Strongly Agreed	4 Agreed	3 Undecided	2 Disagreed	1 Strongly Disagreed
1.	The principal ensures that football fields are provided in the school.					
2.	The principal, through the game master, ensures that football fields are highly provided in the school.					
3.	The principal ensures that volley ball and hand ball courts are provided in the school.					
4.	The principal, through the game master, ensures that volley ball and hand ball courts are highly provided in the school.					
5.	The principal ensures that sick bay is provided in the school.					
6.	The principal, through the head of department, ensures that sick bay is well provided in the school.					
7.	The principal ensures that jerseys and balls are provided in the school.					
8.	The principal, through the game master, ensures that jerseys and balls are adequately provided in the school in the school.					
9.	The principal ensures that staff quarters and school buses are provided in the school.					
10.	The principal, through the vice principal academic, ensures that staff quarters and school buses are well provided in the school.					

SECTION D: The role performances of principals in the maintenance of sports and welfare facilities in secondary schools in Zaria Educational Zone, Kaduna state.

Please tick (√) the appropriate box that relate to your opinion.

S/N	ITEM STATEMENT	5 Strongly Agreed	4 Agreed	3 Undecided	2 Disagreed	1 Strongly Disagreed
11.	The principal ensures that football fields are maintained in the school.					
12.	The principal, through the game master, ensures that football fields are well maintained in the school.					
13.	The principal ensures that volley ball and hand ball courts are maintained in the school.					
14.	The principal, through the game master, ensures that volley ball and hand ball courts are well maintained in the school.					
15.	The principal ensures that sick bay is maintained in the school.					
16.	The principal, through the head of department, ensures that sick bay is well maintained in the school.					
17.	The principal ensures that jerseys and balls are maintained in the school.					
18.	The principal, through the game master, ensures that jerseys and balls are well maintained in the school in the school.					
19.	The principal ensures that staff quarters and school buses are maintained in the school.					
20.	The principal, through the vice principal academic, ensures that staff quarters and school buses are properly maintained in the school.					

APPENDIX C

RELIABILITY TEST ON ASSESSMENT OF ROLE PERFORMANCES OF PRINCIPALS IN THE PROVISION AND MAINTENANCE OF FACILITIES IN SECONDARY SCHOOLS IN ZARIA EDUCATIONAL ZONE, KADUNA STATE

```
VARIABLES= VAR00001
SCALE('ALL VARIABLES') ALL
MODEL=ALPHA.
```

Case Processing Summary

		N	%
Cases	Valid	40	100.0
	Excluded[a]	0	.0
	Total	40	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.84	60