EVALUATION OF THE PROVISION AND MANAGEMENT OF FACILITIES IN SECONDARY SCHOOLS IN ZARIA EDUCATION ZONE, KADUNA STATE, NIGERIA

BY

Yakubu Magaji ZUBAIRU

M.ED/EDUC/31957/2012-2013

August, 2017

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A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA-NIGERIA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF EDUCATION DEGREE (EDUCATIONAL ADMINISTRATION AND PLANNING), DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND CURRICULUM,

FACULTY OF EDUCATION,
AHMADU BELLO UNIVERSITY,
ZARIA, NIGERIA

August, 2017

DECLARATION

I,YakubuMagaji ZUBAIRU, with registration number M.ED/EDUC/31957/2012-2013 hereby declare that this study entitled "Evaluation of the Provision and Management of Facilities in Secondary Schools in Zaria Education Zone, Kaduna State, Nigeria" has been carried out by me in the Department of Educational Foundations and Curriculum ABU, Zaria under the supervision of Prof. B.A.Maina and Dr. A.M. Jumare. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this dissertation was previously presented for another degree at any university.

....

YakubuMagaji ZUBAIRU Date

M.ED/EDUC/31957/2012-2013

CERTIFICATION

This dissertation titled "Evaluation of the Provision and Management of Facilities in Secondary Schools in Zaria Education Zone, Kaduna State, Nigeria" by YakubuMagaji ZUBAIRU with registration number M.ED/EDUC/31957/2012-2013 meets the regulations governing the award of the degree of master of Educational Administration and planning of Ahmadu Bello University and is approved for its contribution to knowledge and literary presentation.

....
Prof. B. A.Maina **Date**
Chairman, Supervisory Committee

..... **.....**
Dr. A.M. Jumare **Date**
Member, Supervisory Committee

..... **.....**
Prof. B. A.Maina **Date**
Head, Department of Educational Foundations and Curriculum

..... **.....**
Prof. S. Z. Abubakar **Date**
Dean, School of Post Graduate Studies

DEDICATION

This work is dedicated to my family and friends and to the authorities of Federal College of Education, Zaria for their unrelenting support.

ACKNOWLEDGEMENTS

All praise and gratitude is due to Allah, the cherisher and the sustainer of mankind and all creatures in the entire universe. May His peace and blessings be upon the seal of the Prophets; Muhammad (S.A.W.).

I would like to acknowledge the support of some individuals in the course of undertaking this work. On top of the list is Prof. B.A.Maina; the Head of Department, Educational Foundations and Curriculum who is also my major Supervisor along with Dr. A.M. Jumare my second Supervisor. Others are my lecturers- Dr. A.A.Igunnu, Dr. I.E. Makoju, Dr. M.I. Harbau, Prof. D.O Otu and late Dr. M.O Dare, my Research Assistant Mal. J.J.Salihu and my Colleague Mal. Muhammad Gimba ALFA of staff school, Ahmadu Bello University, Zaria they all deserve my commendation.

Moreover, my appreciation goes to the authorities of Zaria Education Zone office for giving me the necessary support in the course of carrying out this study. Also not forgetting the helping hands of management and teachers of secondary schools that falls under the jurisdictions of this study.

On the final notes, I will like to register my heartfelt gratitude and appreciation to my parents in persons of AlhajiZubairu MahmudDandodo and HajiyaUmmul-Khairi Mustapha Danraka for their tireless moral and financial supports from my cradle stage to date. I also want to thank my elder brother in person of Professor. I.K. Zubairu for his guidance and support at all times. Also not forgetting my spiritual mentor in person of Alhaji Muhammad Bashir S. Diwan.

I also want to register my appreciation to the authorities of Federal College of Education, Zaria for giving me the opportunity to pursue my master's degree to the end. I also want to thankspersons like Dr. A.K. Tijjani TET FUND (Desk Officer) and Dean, School of Education, FCE, Zaria Dr. M.I. Tanimu. Also not forgetting the helping hands of Dr. MusaYa'uZakari, head, Department of Curriculum and Instruction, FCE, Zaria. I also want to thanksDr. (Mrs.) HajiyaSafiyaShehuGani, Head, Department of Educational Foundations, F.C.E, Zaria. Dr. (Mrs.) Maryam Garba Head, Admin and Planning Department, FCE, Zaria. And Hon, Dr. Muh'dLawal among others that time will not permit. Thanks You and God Bless.

ABSTRACT

The study was on the evaluation of the provision and management of facilities in secondary schools in Zaria Education Zone, Kaduna State, Nigeria. To achieve the main objectives, four specific objectives were stated which are to: ascertain the provision and management of teaching facilities in Secondary Schools in Zaria Education Zone, Kaduna State, Nigeria; examine the provision and management of learning facilities in Secondary Schools in Zaria Education Zone, Kadunastate,Nigeria; determine the provision and management of recreational and sport facilities in Secondary Schools in Zaria Education Zone, Kaduna state, Nigeria; assess the provision and management of welfare/health facilities in Secondary Schools in Zaria Education Zone, Kaduna state, Nigeria. Corresponding research questions and hypotheses were stated. The descriptive survey research design was used. The population of the study consists of teachers and management of secondary schools in Zaria Education Zone numbering 1055 and 152, respectively. However, 292 respondents were purposively selected using research advisers table of sample selection. The instrument for data collection is called "Provision and Management of Facilities in Secondary Schools Questionnaire" (PAMAFASSQ). The instrument is duly validated. The data analysis tools were percentage and frequency counts, arithmetic means, standard deviation and independent samples t-test. The study among other things discovered that the provision and management of teaching facilities in secondary schools in Zaria Education Zone is very low especially on management of laboratories. There was poor provision and management of recreation and sport facilities in secondary schools in Zaria Education Zone, which was not adequate provided. The study among others recommend that, there is need for adequate funds to be set aside by Kaduna State Government to assist in the provision and effective management of facilities in secondary schools in the study area; Learning facilities such as stationeries, text books, projectors be supplied by the schools from internally generated revenue instead of waiting for the state government.

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OPERATIONAL DEFINITION OF TERMS

Evaluation: Assessing the availability and management of teaching, learning, recreation/sports and welfare/health facilities in secondary schools.

Provision: Level of availability of teaching, learning, recreation/sports and welfare/health facilities in secondary schools

Management: Effective utilization and maintenance of teaching, learning, recreation/sports and welfare/health facilities in secondary schools

Facilities: Refers to teaching, learning, recreation/sports and welfare/health facilities in secondary schools.

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Governments at all levels, private individuals, organizations and other stakeholders like Parents Development Partners among others are investing on education as a means of fostering national development. The Government stated that, 'education has witnessed active participation by non-government agencies communities and individuals as well as government intervention' (Federal Republic of Nigeria 2013). Thus, educational institutions have been established at primary, secondary and tertiary levels, with the hope that the nation's human resources would he transformed into competent and productive agents of development in all sectors of the economy.

In order to fulfill their objectives, educational institutions require an environment where teachers, students and other personnel will enjoy their stay and perform their duties effectively. According to Akubue (1991), good school environment would foster desirable behavior, creativity, harmonious relationship and problem-solving skills among students. In the educational institutions, facilities constitute essential inputs which could generate favorable learning environment, facilitate interaction and enhance achievement of educational objectives. In fact,

school curriculum would be meaningful and functional if required facilities are provided in adequate quantity at appropriate time.

School facilities are a key resource in meeting teaching and learning objectives. The effective management of school plants/facilities involves the alignment of asset planning and decision making with educational priorities and strategies. Sound management across the facilities life cycle facilitates better decision-making about the acquisition, ongoing use or operation and ultimately the disposal of assets at the right time, and in a cost effective manner (Adeboye, 2010).

The public school administrator as stated by Evans (2009) is the executive head of one of the largest businesses in any city or country. His functions are unique and complex, for he is responsible for tremendous investments in real property and for the lives, safety, and well-being of thousands of students. In the day to day exercise of his function, the demands made upon his time, ability, and judgment are many and varied. The most important function of the school head is the administration of the instructional program. To this responsibility he should devote the major portion of his time. Good teaching requires a good learning environment. According to Abdulkarim (2007), the atmosphere of a school depends considerably upon the quality of care given the plant and its equipment. Schools can be truly effective only in

a system which provides a well-planned, well-supervised program of services to enhance the educational climate.

The administration of public schools has become a complex array of tasks which require a high order of management skills. Although emphasis may be placed on a specific tale at various times, public school management is a total skill, a sum of many tasks, each bearing a relationship to the whole. Good educational management comprehends this responsibility and gives due emphasis to the separate tasks as becomes necessary. The work of school plant management therefore depends upon an understanding of the total philosophy and purposes of the school. It is a complex of its own within the total pattern faced by the school administrator. The administrative responsibility for plant management may be divided into functions or areas (Black, 2003). In an attempt to discuss the management role in school plants Fasasi (n.d) identified two stages in the management of facilities in secondary schools where the management role can be manifest. They are provision and utilization stages. Fasasi (n.d) further asserts that in the process of utilization, two other functions emerge. They are maintenance and improvement stages.

The provision of Educational Facilities is the combined responsibility of the public and the private sectors. Execution of

educational programmes demands that facilities are provided if success is to be achieved. Government, school proprietors, parents and other stakeholders are expected to provide the facilities for their schools. The Government stated that all stakeholders would be involved in every aspect of school management. This undoubtedly includes the provision of school plants. However, this aspect is one of the most neglected areas in the school system (Olagboye, 2004). As a result there is disparity in provision of facility from one school to another in urban center. While the schools located in rural areas are neglected. However, on the aspect of utilization of school plants in secondary schools, Adeboyeje (2000) stated that utilization is the-degree or extent to which an item has been rut into effective use. According to him, various degrees of utilization include non-utilization, under-utilization, maximum utilization, optimum utilization and over-utilization. Non-utilization occurs when a facility is not put into use all. When a facility is not used in its full capacity, under utilization occurs. There is over-utilization when a facility is used more than its capacity. These degrees of utilization constitute a waste of resources and are counter-productive. On 'the other hand maximum utilization occurs when facilities are put into effective usage in line with primary objectives. Optimum utilization occurs when facilities are used for many purposes

by the school and members of the community resources put into maximum and optimum usage are not wasted. They are likely to enhance achievement of educational objectives.

Nevertheless, facilities tend to depreciate as soon as they are provided and put into use. Therefore, there is need for maintenance through repair and servicing of components in order to restore their physical condition and sustain their working capacity. Maintenance enhances performance and durability. It also prevents wastages. There are preventive, corrective, breakdown and shutdown maintenance services (Adeboyeje, 2000). Preventive maintenance occurs regularly by checking and rechecking the available facilities and taking necessary measures to prevent mal functioning or non-functioning of a particular facility. Prevention is not only better: it is also cheaper than any other measures. It is ' proactive in nature. Corrective maintenance involves reactivation or replacement of facilities in order to normalize their performances. When a Facility or equipment breaks down completely, a major repair or replacement may be needed. There may be a time when the institution may need to close down in order to allow a major repair to be carried out. Flood, fire or wind disaster may warrant closure of an institution for a major repair to be effected. Apart from depreciation Galadanchi (2006) opine that facilities tend be outdated as

a result of changing needs of the society which necessitate a change in school curriculum. In this regard, facilities will need to be improved different periods. Improvement of facilities implies alteration or modification of Facilities to suit a new demand, new situation or new programme. Whenever there are changes in any part of the education system, the existing facilities will require modification or replacement. The management role in the above can be seen in the areas of planning, organizing, coordinating, directing, controlling, staffing, budgeting and reporting. The school management has to plan for the provision, utilization, maintenance and improvement of the school plant. This also applied to other functions of the management.

Demand for educational facilities is on increase in Nigerian secondary schools. This is partly due to the Federal Government's efforts, through educational policies such as Universal Basic Education, to bring all categories of citizens into school and to ensure their retention till graduation. Also, the Government is highly committed to the actualization of objectives of developmental1 programmes such as "the Millennium Development Goals, Vision 20:2020, and the Agenda 2063 among other developmental programmes. The commitment, as demonstrated in the implementation of educational policies, implies a further increase in number of schools and consequently in facilities

required. In this situation, greater demands would be mounted on the available facilities. Nwadiani (2001) observed that the facilities are not only over utilized, they are also poorly maintained. Similarly, in a study conducted by Aigboje (2007) on Universal Basic Education in Nigeria, he found out that some school facilities were inadequate while others were not available at all .These situations are posing challenges to administrators of schools who are supposed to manage available facilities efficiently and effectively. Sequel to the above, this study attempts to evaluate the provision and management of school plants in secondary schools in Zaria Education Zone, Kaduna State-Nigeria as a contribution towards the development of knowledge and literary presentation in the study area and Nigeria at large.

1.2 Statement of the Problem

The relevant literature reviewed for this study revealed that many of the Nigeria's secondary schools face the combined challenges of deteriorating conditions, out-of-date design and capacity utilization pressures. These combined deficiencies impair the quality of teaching and learning and also create health and safety problems for staff and students. The effects of deteriorating condition and poor maintenance of school infrastructure are threats to school management, curriculum delivery and students' academic performance. The results of Senior

School Certificate Examination conducted by the West African Examination Council and the National Examination Council were not commendable in Nigeria between 2007 and 2014. The percentage of students who obtained credit level passes in five subjects and above including English Language and Mathematics was about 25% in Nigeria and 35-45% in Kaduna State during the period under review.

Also in 2011 May/June Senior School Certificate Examination conducted by the West African Examination Council, only 30.99% of the 1,540,250 candidates obtained credit level passes and above in five subjects including English Language and Mathematics in the 36 States of the Federation, and the Federal Capital Territory. The abysmal performance of students in examinations had been largely attributed to inadequate provision and management of school plant which include teaching facilities, learning, recreational and sport and welfare facilities. This consequently leads to ineffective implementation of the school curriculum. Hence, there is a big gap in quality, resulting from large number of students in crowded classrooms, using inadequate and obsolete equipment and with disillusioned teachers. These combined deficiencies perhaps constituted a major gap in the quality of school plant, thus, many challenges bear on teaching and learning that prevent the education system from getting the best out of its efforts to achieve

the required level of attainment in teaching and learning activities in secondary schools.

This situation has been a source of concern to the school administrators, government and other stakeholders. It is against this background that this study assessed the provision and Management of School facilities in Zaria Education Zone, Kaduna State, Nigeria.

1.3 Objectives of the Study

The main objective of this study is to evaluate of the provision and management of school facilities in Zaria Education Zone, Kaduna State-Nigeria. The study seeks to attain the following specific objectives to:

1. ascertain the provision and management of teaching facilities in Secondary Schools in Zaria Education Zone, Kaduna State, Nigeria;
2. examine the provision and management of learning facilities in Secondary Schools in Zaria Education Zone, Kaduna State, Nigeria;
3. determine the provision and management of recreation and sport facilities in Secondary Schools in Zaria Education Zone, Kaduna State, Nigeria; and

4. assess the provision and management of welfare/health facilities in Secondary Schools in Zaria Education Zone, Kaduna State, Nigeria.

1.4 Research Questions

Based on the specific objectives stated above, the following Research Questions are stipulated to guide the study:

1. Are teaching facilities provided and managed in secondary schools in Zaria Education Zone, Kaduna State, Nigeria?
2. Is there provision and management of learning facilities in Secondary Schools in Zaria Education Zone, Kaduna State, Nigeria?
3. Is there provision and management of recreation and sport facilities in secondary schools in Zaria Education Zone, Kaduna State, Nigeria?
4. Are welfare/health facilities provided and managed in Secondary Schools in Zaria Education Zone, Kaduna State, Nigeria?

1.5 Research Hypotheses

The following null Hypotheses were formulated for the study:

$H_{01:}$ There is no significant difference in the opinions of teachers and management on the provision and management of teaching facilities in secondary schools in Zaria Education Zone, Kaduna State, Nigeria;

$H_{02:}$ There is no significant difference in the opinions of teachers and management on the provision and management of learning facilities in secondary Schools in Zaria Education Zone, Kaduna State, Nigeria;

$H_{03:}$ There is no significant difference in the opinions of teachers and management on the provision and management of recreational and sport facilities in secondary schools in Zaria Education Zone, Kaduna State, Nigeria;

$H_{04:}$ There is no significant difference in the opinions of teachers and management on the provision and management of welfare/health facilities in secondary schools in Zaria Education Zone, Kaduna State, Nigeria.

1.6 Significance of the Study

The study assessed the provision and Management of School facilities in Zaria Education zone, Kaduna State, Nigeria. The study if well utilized will be of utmost importance to all stakeholders in the business of education in the study area, Kaduna state and Nigeria at large.

The study will assist government in its effort to provide adequate, time-tested and relevant educational facilities to promote effective transaction and communication between teacher and the students. The

study will also bring to the limelight the state of the school facilities in the study area with a view to finding solution to their inadequacies where necessary. The study will also reveal the management attitude towards school facilities provision, utilization, maintenance and improvement. The study will also reveal the competencies of the school management teams and their approaches towards effective school facilities management.

Furthermore, the study will bring to the limelight areas that need adequate and prompt attention with regards to school facilities management. The study will also provide parents and philanthropists on areas that need their helping hands with regards to school facilities provision, utilization, maintenance and improvements with a view to providing optimum school facilities utilization.

The study will serve as a viable source of literature for future researchers who want to delve further in the area of school facilities management in the study area and beyond. It will assist future researchers' with choice adequate research methodology for effective results.

1.7 Scope of the Study

The study assessed the provision and management of school plants in Zaria education zone, Kaduna state-Nigeria. The study is delimited to

secondary schools in Zaria education zone, Kaduna state. The study also covered school management team and teachers in the study area. The school management team in this study refers to the following: The Principal; Vice Principal Administration; Vice Principal Academic; Senior Master and Maintenance officer. The study considers them as the management team and should have adequate knowledge with regards to schoolfacilities provision, utilization, maintenance and improvement. The study covered the provision and management of the following categories of school facilities:

i. Teaching facilities;
ii. Learning facilities;
iii. Recreational and sport facilities; and
iv. Welfare/Health facilities;

CHAPTER TWO
REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter presents the review of existing literature relevant to this study. The review of related literature was done under the following headings:

- Theoretical Framework;
- The Concept of Management;
- Meaning of Educational Management;
- The concept of Evaluation;
- The Concept of School Facilities;
- Importance of School Facilities;
- The Concept of School Facilities Management;
- Stages in Facilities Management;
- Justification for Managing School Facilities;
- Types of School Facilities;
- School Facilities and Academic Performance;
- Types of Maintenance Services in Schools;
- Issue and Problem of School Maintenance;
- Empirical Studies; and
- Summary.

2.2. Theoretical Framework.

2.2.1. Theories and Components of Management.

The origin of management theories according to Peretomode (1996) is traceable to the applications of technological principles at manual work. Interest in organizational management was a natural consequence of an increasing world-wide trend towards industrialization at the beginning of the twentieth century. Similarly, Peretomode further stated that while Henry R. town is known to have initiated the search for a science of management, the birth of science management is generally credited to Frederick W. Taylor (1856-1915) which has been honoured with the title "father of science management".

2.2.2 The Scientific Management School

As already mentioned, Frederick Winslow Taylor is generally acknowledged the father of scientific management. Ukeje, Akabogu&Ndu (1992), observed that Taylor's main concern was the achievement of efficiency of human beings. In his view, excellent management resides in "knowing exactly what you want men to do and then seeing that they do it in the best cheapest way". He pronounced six management principles, which Peretonode (1996) summarized as

1. Time-study principle

2. Piece-rate principle

3. Separation of planning – from – performance

4. Scientific method of the work principle

5. Management-control principle

6. Functional management principle

Tailor wrote a lot of books where he provided the following as guides for the best type of management:

1. A large Daily Task: each person in the establishment, high or low should have a clearly defined daily task

2. Standard Condition: The worker should be given such standardized conditions and appliance as will enable him to accomplish his task with certainty.

3. High pay for Success: The worker should be sure of high pay when he accomplishes his task.

4. Loss in Case of Failure: When the worker fails, he should be sure that sooner or later he would be the loser for it.

Furthermore, Taylor provided a base upon which much of the current thinking about on modern management can still be felt in various areas of management functions such as personnel training, posting and placement other writers who contributes to the development of scientific management were Henry I. Gautt, Freank B, Gilbert, Gulick&Urwick, Fayol among others.

Peretomode (1996) noted that among these prominent proponents of scientific management theory, Fayol was among the first to formulate a universal list of good management actions. These principles were referred to as classical principles of management. They are

1. Division of labour
2. Parity of authority and responsibility
3. Discipline
4. Unity of command
5. Unity of direction
6. Subordinate of individual interest to common goal
7. Remuneration
8. Centralization
9. Scalar chain
10. Order
11. Equity
12. Stability of personnel
13. Initiative
14. Espirit de corps

Fayol concentrated much of his effort on top management and saw Taylor's work as complementary to his own. Fayol was also the first management theorist to present a breakdown of function of management,

which he listed as planning, organizing, commanding, coordinating and controlling, Gulick&Erwick expanded Fayol's five management functions to seven and came up with an acronym 'POSDCORB' – planning, organizing, staffing, directing, coordinating, reporting and budgeting, (Ukeje, Akabogu&Ndu 1992). All the foregoing implies that managers must plan for the future, organize, direct the activities of the employees and control the overall organizations operations towards the achievement of a common goal.

The emphasis is on the determination of the aims and goals of the organization, planning how to achieve such aims and objectives and coordinating all the efforts of the people involved towards the successful achievement of the desired goal. A major operation in the school organization is effective resource management. It is therefore the duty of the school managers to ensure the provision and prudent use of available human, financial and material resources, in this respect, the school plant.

2.2.3 The Behavioural Management School

This school of thought championed by Mary PakerFollect, was a reactions against the scientific management point of view. This school of thought found that the classical approach did not always achieve total co-efficiency and work place harmony. This approach concentrates more on the human aspects of management with emphasis on the need for

managers to understand people (Ajagbaonwu, 1997), it focuses especially on motivation, leadership, group influence and other psychological aspects of people at work.

2.2.4 The Social Science School

Chester Barnard formulated this school of thought in 1938, (Ukeje, Akabogu&Ndu, 1992). Barnard's approach was quite different from the other two above. In his treatise, "the functions of the executive", he sets forth clearly the need for a general theory of administrative relationships. As an executive himself, he tried to determine how to make an executive job contribute more to the business. In his search to understand the executive roles, he drew constantly from the principles of psychology and sociology. He concluded that within an organization, there is definite need for a communication system (Ajagbonwu, 1997).

He said that all executives who occupy positions in the management hierarchy are important links in the flow of information.

From expositions above, we have an insight into the evolution of management thought of some early management theories. Some of the management functions like planning, organizing, communicating and supervising proposed by the theorists are relevant to this study. Management is therefore vital in every educational institution for effective

implementation of its programmes of which management of school plant is one.

Concept of Planning

It is one of the basic management functions needed for effective administration of school plant. Basically, to plan means to project, forecast, design, or chart out a course, (Ogbonnaya, 1997). No organization can expect efficiency of its programmes without sound planning. Thus Obi (2003) stressed that failure to plan gives rise to inefficiency, lack of direction and wastage of resources. Good planning is a pre-condition for better results he further said. Planning though variously defined, is agreed to mean dreaming, the practical thinking, scheming of the actions and activities that would be performed in order to achieve the objective for which the enterprise was set up (Ejiogu, 1990).

From all indications, planning is a purposeful attempt to get ready for future, today and therefore, a wise way of avoiding the frustration of last minute rush which often leads to making of wrong decisions. Past and present analysis of educational programmes that failed, show definite deficiencies in planning. Universal Primary Education (UPE) of 1976 was a concrete example of such programme. Ezeocha, (1992) confirmed this when he asserted that one of the problems of UPE scheme was inadequate planning for the supply of teaching personnel and facilities to run the

scheme. Ogbonnaya (1997) quoting Ukeje, said that in planning any educational programme, goals must be made clear, machinery to achieve the goals set up, various categories of staff provided including the provision of funds and equipment. Ejiogu (1990) in the same vein suggested that in planning processes the planner should:

a) Assess the available human, material and financial resources within the particular system to carry out the plan.

b) Examine the present infrastructural facilities and equipment that are available within the school system and how appropriate e they are for the realization of the envisaged plan for the future and

c) Access the basic characteristic, potential and capabilities of the personal and weight them against the ideal situation.

From evidence above, concretized planning is very important for the successful implementation of programme especially in the management of school plant. Careful planning will help to examine the infrastructural facilities and equipment available to ensure that they will be enough for the process of teaching and learning.

Concept of Organizing

This is another management function needed for effective school plant management. Organizing has been defined by Obi (2003) as relating all the components of an organization into a coordinated whole so as to

achieve set goals. It is through organizing that the activities and programmes of an institution is separated into different task and assigned to various positions. Edem (1982) stated that organizing includes the establishment of formal structural line of authority, which defines what is to be done, and by whom. In other words, through the processes of organizing, the task of an institution are subdivided, arranged and defined and coordinated for defined objective. Organizing, per say in the institutions is one dimension of the task of achieving objectives by means of harnessing the actions of many individual to group purposes. For example, in an organization like school, the head or leader according to Akubue (1991) has the authority and responsibility of assigning roles to his staff. Directing, this to the management of school plant, the school administrator/principals should realize that a lot of effort is needed especially in the area of maintenance. It is for them to assign roles to the appropriate individuals or groups who can perform the jobs efficiently.

From the foregoing, it is evident that effective organizational arrangements are necessary for the smooth management of the school plant. The present study therefore is undertaken to determine the strategies for improving on the organizational arrangement for the management of school plant in Kaduna State.

Concept of Supervision

Supervision is among the management functions that can help for the smooth management of the school plant in Kaduna state. Therefore, Nwaogu (1980) defined supervision as a process of an activity whereby individual by means of advising and stimulating interests in teachers and pupils help to improve teaching and learning situations in educational programmes, Obi (2003). Supervision is therefore the process of improving on all elements and conditions surrounding educational programmes to produce better results, more so, the management of school plant.

Effective supervision, Obi (2003) further said, requires the establishment and maintenance of satisfactory human relations among the staff to function effectively. This implies that collective efforts of principals, his assistants and senior staff are needed to ensure, foster and improve the supervision of educational programmes including the management of school plant.

Supervision serves as evaluative process that is crucial to successful programme planning. It also helps teachers to learn what their problems are and to seek the best possible method of solving them (Adesina, 1981). The idea of solving these problems is to improve effectiveness of teachers

so that they can contribute maximally to the attainment of the systems goals.

For supervision to achieve its purposes, it is necessary that the supervisor have a clear understanding of what he wants in the supervision and how he can go about achieving them. This is important because an unclear purpose will definitely become hazardous in the process of supervision.

Concept of Communication

This is among the important management functions needed for effective school plant management. Eyre (1982) stated that communication is the transmission and reception of a message from one party to another in such a fashion that it is mutually understandable.

Similarly, Obi (2004) defined communication as a process of meaningful interaction and exchange of information, feelings, ideas and signs among members of a group. This definition agrees with that of Mussai (1982), who saw communication as conveying of information, instruction, advice, feeling options and facts correctly and accurately from one person to another or group of people. The key words in the above definitions are mutually understandable, because unless both parties to a communication are one mind as to what the communication means, there is no communication at all. These definitions imply that the sender of

information is not only clear about what the message is intended to convey but also the message is communicated correctly and accurately to the receiver. It follows therefore that unless management can make itself properly understood throughout the undertaking, then the proper functioning of the organization will be impaired. Stressing the need for effective communication in the school organization, Obi (2004) asserted that communication will help to maintain association with the community in which the institution stands and succor the utilization of available school resources.

More so, it is expected that information should be communicated through the right channel and the techniques employed to be efficient. To this effect, Campbell and Gregg (1991) suggested that the flow of communication should move downwards, upwards and across. The principals should encourage such flow of communication in the schools. When communication flows only downward from top to bottom, authoritarianism is ensured and those at the bottom who have useful information may not feel free to go up to the head to discuss. (Obi, 2004). It is therefore necessary that communication should flow freely from top to bottom and vice versa in the organization. This is very important since information and reports given by the subordinate (teachers and students) can help to improve the plant management.

2.3 The Concept of Management

Management in business and organizations is the function that coordinates the efforts of people to accomplish goals and objectives using available resources efficiently and effectively. Management comprises planning, organizing, staffing, leading or directing, and controlling an organization to accomplish the goal. Resourcing encompasses the deployment and manipulation of human resources, financial resources, technological resources, and natural resources. Management is also an academic discipline, a social science whose objective is to study social organization.

The verb 'manage' comes from the Italian *maneggiare* (to handle, especially tools), which derives from the Latin word *manus* (hand). The French word *mesnagement* (later *ménagement*) influenced the development in meaning of the English word *management* in the 17th and 18th centuries (Oxford, n.d). There are diverse views on the definition and scope of management which include:

According to Henri Fayol, "to manage is to forecast and to plan, to organise, to command, to co-ordinate and to control (Gulshan, 2009). Moreover, Fredmund Malik defines it as "the transformation of resources into utility." Management included as one of the factors of production -

along with machines, materials and money. Drucker (1909–2005) saw the basic task of a management as twofold: marketing and innovation. Nevertheless, innovation is also linked to marketing (product innovation is a central strategic marketing issue). Drucker identifies marketing as a key essence for business success, but management and marketing are generally understood as two different branches of business administration knowledge. Similarly, Kaplan (2006) specifically defines European Management as a cross-cultural, societal management approach based on interdisciplinary principles.

Directors and managers should have the authority and responsibility to make decisions to direct an enterprise when given the authority. As a discipline, management comprises the interlocking functions of formulating corporate policy and organizing, planning, controlling, and directing a firm's resources to achieve a policy's objectives. The size of management can range from one person in a small firm to hundreds or thousands of managers in multinational companies. In large firms, the board of directors formulates the policy that the chief executive officer implements (Business Dictionary, 2014).

Management involves identifying the mission, objective, procedures, rules and the manipulation of the human capital of an

enterprise to contribute to the success of the enterprise. This implies effective communication: an enterprise environment (as opposed to a physical or mechanical mechanism), implies human motivation and implies some sort of successful progress or system outcome. As such, management is not the manipulation of a mechanism (machine or automated program), not the herding of animals, and can occur in both a legal as well as illegal enterprise and environment. Management does not need to be seen from enterprise point of view alone, because management is an essential function to improve one's life and relationships. Management is there everywhere and it has a wider range of application. Based on this, management must have humans, communication, and a positive enterprise endeavor. Plans, measurements, motivational psychological tools, goals, and economic measures (profit, etc.) may or may not be necessary components for there to be management. At first, one views management functionally, such as measuring quantity, adjusting plans, meeting goals. This applies even in situations where planning does not take place. From this perspective, Henri Fayol (1841–1925) (Dunod 1966) considers management to consist of six functions:

i. Forecasting

ii. Planning

iii. Organizing

iv. Commanding

v. Coordinating

vi. Controlling

Henri Fayol was one of the most influential contributors to modern concepts of management. In another way of thinking, Follett (1868–1933), defined management as "the art of getting things done through people". She described management as philosophy (Barret, 2003).

Critics, however, find this definition useful but far too narrow. The phrase "management is what managers do" occurs widely, suggesting the difficulty of defining management, the shifting nature of definitions and the connection of managerial practices with the existence of a managerial cadre or class.

One habit of thought regards management as equivalent to "business administration" and thus excludes management in places outside commerce, as for example in charities and in the public sector. More broadly, every organization must manage its work, people, processes, technology, etc. to maximize effectiveness. Nonetheless, many people refer to university departments that teach management as "business schools". Some institutions (such as the Harvard Business School) use that

name while others (such as the Yale School of Management) employ the more inclusive term "management".

English speakers may also use the term "management" or "the management" as a collective word describing the managers of an organization, for example of a corporation. Historically this use of the term often contrasted with the term "Labor" - referring to those being managed.

But in the present era management's use is identified in the wide areas and its frontiers have been pushed to a broader range. Apart from profitable organizations even non-profitable organizations (NGO) apply management concepts. The concept and its uses are not constrained. Management on the whole is the process of planning, organizing, staffing, leading and controlling.

In educational organizations, management's primary function is the satisfaction of a range of stakeholders (parents, government, society and the employers of labour among others). This typically involves making a profit (for the shareholders), creating valued products at a reasonable cost (for customers), and providing great employment opportunities for employees. In nonprofit management, add the importance of keeping the faith of donors. In most models of management and governance,

shareholders vote for the board of directors, and the board then hires senior management. Some organizations have experimented with other methods (such as employee-voting models) of selecting or reviewing managers, but this is rare.

Management operates through five basic functions: planning, organizing, coordinating, commanding, and controlling (Stroh, Northcraft& Neale, 2002).

- Planning: Deciding what needs to happen in the future and generating plans for action (deciding in advance).
- Organizing: Making sure the human and nonhuman resources are put into place
- Coordinating: Creating a structure through which an organization's goals can be accomplished.
- Commanding: Determining what must be done in a situation and getting people to do it.
- Controlling: Checking progress against plans.

- Interpersonal: roles that involve coordination and interaction with employees

- Informational: roles that involve handling, sharing, and analyzing information
- Decision: roles that require decision-making
- Managerial skills.

Political used to build a power base and establish connections. Conceptual used to analyze complex situations.Interpersonalused to communicate, motivate, mentor and delegate.

Diagnostic ability to visualize most appropriate response to a situation.Leadershipability to lead and provide guidance to a specific group. Technical Expertise in one's particular functional area (Encyclopedia of Business, 2010).

2.4 Meaning of Educational Management

Educational management is a field of study and practice concerned with the operation of educational organizations. There is no single generally accepted definition of the subject because its development has drawn heavily on several more firmly established disciplines, including sociology, political science, economics and general management.

Interpretations drawn from different disciplines necessarily emphasize diverse aspects of educational management and these varying approaches are reflected in subsequent chapters of this book. Bolam (1999: 194) defines educational management as ‘an executive function for

carrying out agreed policy'. He differentiates management from educational leadership which has 'at its core the responsibility for policy formulation and, where appropriate, organizational transformation' (ibid. 194). Writing from an Indian perspective, Sapre (2002: 102) states that 'management is a set of activities directed towards efficient and effective utilization of organizational resources in order to achieve organizational goals'.

The present author has argued consistently (Bush, 1986; 1995; 1999; 2003) that educational management should be centrally concerned with the purpose or aims of education. These are the subject of continuing debate and disagreement, but the principle of linking management activities and tasks to the aims and objectives of schools or colleges remains vital. These purposes or goals provide the crucial sense of direction which should underpin the management of educational institutions. Management is directed at the achievement of certain educational objectives.

Unless this link between purpose and management is clear and close, there is a danger of 'managerialism', 'a stress on procedures at the expense of educational purpose and values' (Bush, 1999: 240). Managerialism places the emphasis on managerial efficiency rather than the aims and purposes of education (Newman and Clarke, 1994; Gunter,

1997). ‘Management possesses no super-ordinate goals or values of its own. The pursuit of efficiency may be the mission statement of management – but this is efficiency in the achievement of objectives which others define’(Newman and Clarke, 1994: 29).

While the emphasis on educational purpose is important, this does not mean that all aims or targets are appropriate, particularly if they are imposed from outside the school by government or other official bodies. Managing towards the achievement of educational aims is vital but these must be purposes agreed by the school and its community. If managers simply focus on implementing external initiatives, they risk becoming ‘managerialist’. In England, the levers of central monitoring and target setting have been tightened to allow government to manage schools more closely, for example through the National Literacy and Numeracy strategies (Whitty, 2008: 173). Successful internal management requires a clear link between values, aims, strategy and day-to-day activities.

The centrality of aims and purposes for the management of schools and colleges is common to most of the different theoretical approaches to the subject. There is disagreement, though, about three aspects of goal-setting in education: Educational management, the name implies, operates in the educational organizations. There is no defining definition of educational management because its development has drawn heavily on

several disciplines like economics, political science and sociology. Most of the definitions of educational management which have been offered by write are partial because they reflect the particular sense of their authors.

"Educational management is the theory and practice of the organization and administration of existing educational establishments and systems." "Management implies an orderly way of thinking. It describes in operator terms what is to be done, how it is to be done and how we know when have done. Management is not a mystique. It is a method of operation. Go management should result in an orderly integration of education and society "School management, as a body of educational doctrines, comprises a number of principles and precepts relating primarily to the technique of classroom procedure and derives largely from the practice of successful teachers. The writers in the field have interpreted these principles and precepts in various ways, usually with reference to longer and more fundamental principles of psychology, sociology and ethics."

Thus educational management is a comprehensive effort dealing with the educational practices. It is the dynamic side of education. It deals with educational institutions - right from the schools and colleges to the secretariat. It is concerned with both human and material resources. The human elements include: (i) Children, (ii) parents, (iii) teachers and (iv)

other employees in general - university of Board of Education at local, state and National levels of Governments. On the material side there are (a) finance, (b) buildings and grounds, (c) equipments and instructional supplies. Besides, there are ideas, laws and regulations and so on, having a bearing on the educational process. The blending of these 'parts' into a 'whole' is educational management.

Need of Educational Management: In a democratic country like ours, educational management is a necessity. The purpose of educational management is to bring pupils and teachers under such conditions as will more successfully promote the end of education. Superior educational management, in fact, is basic to the satisfactory functioning of democracy.

Sir Graham Balfour writes very aptly, "the purpose of educational management is to enable the right pupils to receive the right education from the right teachers, at a cost within the means of the state, which will enable pupils to profit by their learning."

Some suitable, stable elements which are properly motivated and organized in the machinery become necessary to withstand and survive the changes and upheavals caused because of changes of governments. Error of judgement can be retrieved in a farm or factory but these can be fatal when concerned with the moulding of ideas and values of society. An

efficient and sound system of educational management is, in fact, the basis of a good democracy.

As education is a major area of governmental and public management involving millions of schools, teachers and pupils, it is imperative that it should have an excellent infrastructure in line with socio-political aspirations of a people.

Will it, therefore, not be expedient to draw on the gains of management science, with some adjustment here and there, towards the vast potential of this stupendous human activity? The answer to this and similar questions may be found in the succeeding pages where an attempt has been earnestly made by the compilers and editors of this book to synthesise management with teaching- learning.

Management, however, is a single activity, a unity, one continuous process that runs through its elements. The classification of functions is merely to facilitate identification of areas and steps which are mutually inclusive, as well as to promote better organization of resources.

As there is ample identity between the functions, aim and objectives of management and those of an educational process, the application of the law of the former to the body of the latter, for mutual Benefit of both, may be justified. The management movement must encompass teaching-learning process, as a scientifically designed

classroom situation will certainly add to the performance of an educational activity.

2.5 The Concept of Evaluation

Evaluation is a systematic determination of a subject's merit, worth and significance, using criteria governed by a set of standards. It can assist an organization, program, project or any other intervention or initiative to assess any aim, realisable concept/proposal, or any alternative, to help in decision-making; or to ascertain the degree of achievement or value in regard to the aim and objectives and results of any such action that has been completed (Staff, 2002). The primary purpose of evaluation, in addition to gaining insight into prior or existing initiatives, is to enable reflection and assist in the identification of future change (Del Tufo, 2002).

Evaluation is often used to characterize and appraise subjects of interest in a wide range of human enterprises, including the arts, criminal justice, foundations, non-profit organizations, government, health care, and other human services.

Evaluation is the structured interpretation and giving of meaning to predict or actual impacts of proposals or results. It looks at original objectives, and at what is either predicted or what was accomplished and

how it was accomplished. So evaluation can be formative that is taking place during the development of a concept or proposal, project or organization, with the intention of improving the value or effectiveness of the proposal, project, or organisation. It can also be assumptive, drawing lessons from a completed action or project or an organisation at a later point in time or circumstance.

Evaluation is inherently a theoretically informed approach (whether explicitly or not), and consequently any particular definition of evaluation would have be tailored to its context – the theory, needs, purpose, and methodology of the evaluation process itself. Having said this, evaluation has been defined as:

- A systematic, rigorous, and meticulous application of scientific methods to assess the design, implementation, improvement, or outcomes of a program. It is a resource-intensive process, frequently requiring resources, such as, evaluates expertise, labor, time, and a sizable budget.
- "The critical assessment, in as objective a manner as possible, of the degree to which a service or its component parts fulfills stated goals"(Paperboy, 2007). The focus of this definition is on attaining

objective knowledge, and scientifically or quantitatively measuring predetermined and external concepts.

- "A study designed to assist some audience to assess an object's merit and worth" (Shuffleboard).[4] In this definition the focus is on facts as well as value laden judgments of the programs outcomes and worth.

The main purpose of a program evaluation can be to "determine the quality of a program by formulating a judgment" MartheHurteau, Sylvain Houle, StéphanieMongiat (2009). There are two functions considering to the evaluation purpose. Formative Evaluations provide the information on the improving a product or a process .Summative Evaluations provide information of short-term effectiveness or long-term impact to deciding the adoption of a product or process (Staff, 2011).

Not all evaluations serve the same purpose some evaluations serve a monitoring function rather than focusing solely on measurable program outcomes or evaluation findings and a full list of types of evaluations would be difficult to compile. This is because evaluation is not part of a unified theoretical framework, (Ellett,1990) drawing on a number of disciplines, which include management and organisational theory, policy analysis, education, sociology, social anthropology, and social change(potter, 2006).

However, the strict adherence to a set of methodological assumptions may make the field of evaluation more acceptable to a mainstream audience but this adherence will work towards preventing evaluators from developing new strategies for dealing with the myriad problems that programs face (potter, 2006).

2.6 The Concept of School Facilities

The term, school facilities includes the site, the building and the equipment. It includes permanent and semi-permanent structure as well as items such as machines, laboratory equipment, the blackboard/chalkboard, the learner and teacher tools. In a related development, Enaohwo and Eferakeya (1989) defined school plants as the entire physical infrastructural facilities provided in the school for the purpose of educating the child. Similarly, Ojedele (1998) has a broader view of school plant as including the school site and all the structures that have been put in place to aid effective teaching and learning in the school system. In his own view Yusuf (2008) defined school plant as the space interpretation of the school curriculum. The curriculum cannot be implemented if the physical facilities required for teaching and learning are not available. Without school plant, the school cannot exist. To this end, it becomes necessary to ensure that school plant is properly planned and maintained to make the school system effective.

Moreover, school plant refers to all non-consumable items, durable physical and infrastructural facilities available in the school for teachers' and students use in order to make teaching and learning effective and thus ensure the achievement of pre-determined aims and objectives of education. Hence, the school plant includes the 'space' within the school premises which houses the basic systems and structures. In a related development, Yusuf and Adigun (2012) stated that school plants comprise the following:

(i) Machinery: It includes machines and tools used in the workshop, duplicating machines and so on.

(ii) School site: This refers to the entire landscape on which the school's permanent and semi-permanent structures are built.

(iii) Buildings: These include classroom blocks, administrative offices, libraries, workshops, laboratories, students, hostels, staff residential quarters, assembly halls, toilets dining halls and so on.

(iv) Equipment: These consist of typewriters, photocopiers, computers, sporting equipment, laboratory equipment and workshop equipment.

(v) Furniture: Desks and seats used in the classrooms, office furniture, residential furniture and soon.

(vi) Vehicles of various types and sizes.

(vii) Books textbooks, periodicals and all library books.

(viii) Electrical infrastructure: air conditioners, electrical fans, generating sets and other electrical fittings.

(ix) Water supply infrastructure: This involves deep wells, boreholes, water tanks and public water.

(x) Accessories: These include playgrounds, lawns, parks, gardens and farms.

2.7 Importance of the school Facilities

The importance of school plant has been highlighted by many educational administrators and planners. The importance attached to it as a vehicle for effective teaching and learning cannot be over emphasized. Nwaogu (1985) asserted that no matter the strength of manpower resources in the system, educational processes must require a conducive physical accommodation, libraries, furniture and playgrounds. When these instructional facilities are lacking, teachers are hardly effective in their instructional activities. Supporting this view, Bosah (1997) quoting Lorton and Wally, said that learning experiences are richest when the environment around the student meets their needs.

Udoh&Akpan (1987:288) also pointed; the right type of atmosphere required for effective learning is that consisting of better teaching facilities. Adesina (1980) also lends credence to this as he claims that the quality of education that our children get has direct relevance to the availability or the lack of physical facilities and overall atmosphere where the learning takes place. Since the basic aim of the school is to create relatively paramount changes in the behaviour of children, the need for adequate and well maintained facilities becomes eminent.

Mgbodile (1986) stressing the need for school plant, observed that the physical appearance and general condition of school physical facilities are the striking basis upon which many parents and friends of any educational institutions may make their initial judgments about the quality of what goes on in the school. In short, the physical facilities play a major role in determining the type of relationship between the school and the community. This is because parents and pupils make their judgments and take their decisions on whether to associate themselves with a particular school after a careful evaluation and consideration of the facilities in the school. Ani (1997) while supporting the above statement opined that if the quality and quantity of physical facilities attracts the admiration of a parent, the conviction of the parent will be that since the quality and

quantity of facilities is of such level, the quality of the staff and school programme will be of high standard. Thus

Obi (2001) said that the general landscaping of the school speaks succinctly of the tone of the school and the disposition of the management. Therefore to attract the admiration and acceptance from the community, there is need for a well planned school physical facilities and equipment.

In the present day Nigeria, schools cannot be divorced from the communities. Therefore, there is need for the planner of the school plant to bear this observation in mind while structuring and procuring the plant. In most communities that form the neighborhood of schools, certain activities like club or village meetings, marriage ceremonies, church services or other forms of gathering which require the use of good and appropriate environment take place in the school. A school with poorly planned environment in terms of accommodation, furniture and other forms of equipments cannot attract the attention of the community and thus fail to satisfy the social needs of the community. Onwurah (2004) citing Wheler stated that the school plant plays a crucial role in the development of the three domains of Bloom's Taxonomy of educational objectives namely; cognitive, affective and psychomotor. Educational facilities are needed for developing cognitive area of knowledge, abilities and skill, which are prerequisites for academic achievement. They are essential for developing

values, commitment, positive emotions and social interactional sensitivity in learners. In addition, they help the school to develop the hands and muscles of learners. Ejikeme (1999) citing Longman & Longman also called attention to the fact that Montessori, a specialist in educating children laid emphasis on “the importance of providing an environment physically and psychologically adjusted to the stages of growth, so that the child could generally master his environment.

The character of a school plant determines to a considerable extent the types and quality of curricular and co-curricular activities that take place in it. The nature and size of the school building determine the shape and size of the classrooms. The shape and size of the classrooms with their equipment, furniture and the types and variety of educational materials available affect the ways in which learners can be organised for instruction, the possible methods of teaching that can be adopted by teachers and the types of learning activities that the students can be engaged in. If home economics, technical education, music and fine arts, for instance, are part of the curriculum, the appropriate rooms and workshops must be provided with the relevant equipment and materials. Otherwise, the implementation of those aspects of the curriculum will be greatly impaired. Practical lessons cannot be organised for science students in schools without science laboratories or in schools with science

laboratories but without the relevant materials and equipment. The only option for students in such schools who may wish to sit for science subjects in external examinations is the 'Alternative to Science' paper (Olugbenga, 2012).

Some authorities such as Obi (2001) and Abraham (2003) have seen school management as judicious use of human and material resources as to achieve the objectives of the school. In other words, if there are no human and material resources in school, there will be no administration. Therefore, there is need for a well-planned and organized school plant to make for effective school administration and management. If there is shortage of accommodation, furniture, equipment or other material resources, this can affect the productivity of the teachers, the administrator – teacher relationship and even administrator – pupil relationship. Moreover, the academic performance of the student s and their outward behaviour are major yardstick for assessing the effectiveness of school principals and this criteria as earlier mentioned, is closely tied to conducive school environment. Obi (2001) also noted that environment can influence the leader and the led.

Therefore, the extent to which the leader will achieve organizational success depends upon a combination of variables among which effective management of school plant is one.

Moreover, Adesina and Ogunsaji (1984) noted that for effective performance of educational programmes, the school plant and educational goals should be viewed as being closely interwoven and interdependent. Apart from protecting pupils from the sun, the rain, heat and cold, the school building represent a learning environment which has a tremendous impact on the comfort, safety and performances of the children.

The school plant is of special significance to learners. For children who are just entering the school for the first time in particular, "the school building needs to be interesting and inviting" (Cramer &Domian, 1960). This is necessary, according to these authors, because the impressions of those first years may have an impact on the attitude of the child towards school. In the same vein, the school building generates its own ethos to the child by virtue of its appearance, design and general environment in which it is set. This idea is supported by Fagbulu (1972) who opined that a child's sense of belonging to a school is strengthened if its physical plant is sound, functional and pleasing to the eye.

2.8 The Concept of School Facilities Management

A common idea in many definitions of management is that management is goal-directed. These definitions convey the idea that management involves a series of on-going activities, individuals and groups working together use of resources, efficiency and effectiveness. All

these ideas and terms are applicable to the management of the school plant. School plant management entails the making and carrying out a series of decisions by individuals and groups in building school a plant according to need, operating and using it effectively and efficiently and ensuring that it is in a functional state as the educational programme is being implemented. School plant management involves a number of on-going and related activities – determining the need for school plants, educational programme planning, school facility or building design, building construction, furnishing and equipping the school, school plant operation, utilization and maintenance and school plant modernization or renovation if and when the need arises.

Fenker (2004) states that facilities management generally, is a process that ensures that building and other technical systems support the provisions of an organization. School plant management ensures that school buildings and grounds, equipment, materials, technical and other service systems, facilitate and support the provision of education by a school.

The responsibility for managing the school plant rests with the head teacher or the school principal. The school head may not be knowledgeable in some aspects of school plant management such as school facility design and building construction but his/her inputs, and, in

some cases, the inputs of other school staff during decision making in these areas may be necessary as it is the principal or head teacher and the school staff that will make use of the buildings after their completion. It is his/her responsibility to ensure that the school plant is regularly maintained, i.e., kept at as near its original state as possible. It is also part of his/her management responsibilities to ensure that that the school plant is open for use effectively and efficiently on daily basis and that it is kept neat and tidy always.

In his/her attempts to achieve these and other ends for which the school plant has been built, the head teacher or principal must make use of teachers, other school staff and students, detailing their duties and roles and coordinating their efforts to ensure that the right things are done at the right time. Effective school plant management ensures that school facilities are effectively used for teaching and learning with little or no interruption.

School facilities management is a systematic process of rationalizing the provision, use and maintenance of these facilities within an educational institution to ensure their optimal utilization and achievement of educational objectives both in the immediate and in the future given the available resources. In other words, it is a process that involves rationally:

i. Determining which facilities are required to achieve school goals;

ii. Providing such facilities most advantageously in terms of resource use;

iii. Monitoring to ensure optimal use of educational facilities so provided;

iv. Maintaining the facilities regularly to ensure their longevity;

v. Reviewing the provision of these facilities to ensure that it continues to meet both the changing educational needs in the advantageous manner.

2.9 Stages in Facilities Management

The activities that come under the umbrella of educational facilities management or educational facilities planning and administration are sequentially linked. Consequently, these activities will be recognized as stages in a chain of activities. The following are stages in sequential order:

i. Identification of Learning Needs

Specific educational facilities requirement of community or institution in terms of type quantity and quality needs to be properly assessed to provide the operational guide for facilities provision. At the community level, peculiar learning needs are usually tied to people's

culture, religion, occupational life style and the environment. It must be recognized that the learning needs in terms of facilities are contingent on the fundamental educational objectives being pursued.

ii. Inventory Survey

A comprehensive diagnostic inventory survey of the existing stock of educational facilities in the community or institution should be done. Inventory data has to be collected and analyzed to provide information on the location, condition, age, quantity and type of existing educational facilities. This will provide the educational map or the distributional network of the existing educational facilities needed in the development of the facilities master plan.

iii. Facilities Utilization Analysis

Relevant utilization indicators are required to assess the legality of utilization of these educational facilities .Such analysis are meant to reveal areas of stress and weaknesses (i.e. under – utilization and over – utilization) in the existing arrangement with a view to developing facilities master plan.

iv. Establishment of Educational Facilities Master Plan

This is a blue-print that indicates where specific educational facilities are to be provided and existing ones relocated or completely removed during an educational development phase to enhance the level of

utilization of such facilities as well as meet the educational needs of the community or the educational institution.

v. Site Selection and Acquisition

This is the first step in the implementation of the master plan. Professional expertise is brought into selecting and acquiring the most appropriate sites for the specific educational facilities envisaged in the master plan.

Site acquisition has to do with purchasing the land, paying of compensation, getting the necessary documents that entitle the institution to the land and fencing or demarcation.

vi. Preparation of Educational Specifications

Each educational facility, project or programme requires specific patterns in design and implementation. The educational manager or the facility planner is therefore expected at this juncture to prepare educational specifications (i.e. a written description of the curriculum and learning experiences of a project) required for implementing each of the various educational facilities such educational specifications must contain a statement of the philosophy behind the project, the grade levels to be served, enrolment capacity as well as the specification of materials and structural requirement for erecting different types of educational structures

(Classroom building, laboratories etc) and for purchase and installation of the equipment specified in the master plan. All specifications must however be in line with the ministry of education requirement and must make provision for flexibility to meet changing needs of the institutions.

vii. Educational Project Design

Once the educational specifications have been drawn for each project to be executed or facilities to be purchased the educational facilities or plant planner must employ the assistance of other professionals to design the projects in line with the educational specifications. Such professionals may include architects and plant engineers.

viii. Implementation of Educational Project Specifications

Implementation of project specification involves selecting bids, letting contracts for construction and furnishing of buildings or purchase and installation of facilities as well as monitoring and supervision of project execution to ensure they meet the specifications. To accomplish these tasks, the educational facilities planner requires the assistance of a whole lot of professionals, like lawyers to sign contracts, accountant to cost projects, businessmen to execute and architects /engineers to supervise and inspect.

2.10 Justification for Managing School Facilities

The basic justification for giving sufficient attention to the management of educational facilities as an administrative task of the educational system includes the following:

i. The needs to ensure that the right type of facilities are made available at the right time and place for the right type of teaching – learning activities. Since these have been known to have significant bearing on teaching – learning effectiveness, the right educational specification must be brought to bear on the provision of these facilities to meet the desired objectives.

ii. The need to inject economy into educational facilities provision and use. Educational resources are scarce relative to the varied and competing educational needs and demands.

Colossal Wastage (under-utilization and over-utilization) is however, eliminated. Choices are made in favour of school facilities that are economical to operate and maintain.

iii The need to guarantee the safety of facility users. School facilities must conform to some standard specifications or guidelines to make them safe for the students and teachers.

It is only through monitoring, supervision, control and regular maintenance that the provision of these school facilities in an educational institution can be safely guaranteed.

iv The need to improve physical facilities. Since education is dynamic both in content and methods, educational facilities need to be constantly evaluated and modified, not only to remove absolute and dilapidated structure but also to ensure that such facilities continue to meet the modern and ever changing educational needs, changing technology and the dynamic socio-political and economic environment.

The need to add aesthetic value to educational facilities not only to enhance their utilization value but also to make them more healthy, safe and convenient to use and maintain. Poorly organized facilities are not only clumsy to use but accident prone as well as difficult to maintain.

2.11. Types of School Facilities

2.11.1. Instructional Facilities

These are facilities that are specifically meant for direct teaching and learning. It includes classrooms, classroom seats, laboratories, libraries, experimental equipment, chalkboard, audio-visual learning equipment, zoological gardens and experimental agricultural farms. These

facilities bear directly on the teaching – learning process and are therefore considered of prime priority among other school facilities.

According to Oni (1992), facilities constitute a strategic factor in organizational functioning. This is so because they determine to a very large extent the smooth functioning of any social organization or system including education. He further stated that their availability, adequacy and relevance influence efficiency and high productivity. Castaldi (1985) has established the fact that when a skillful teacher works in a well designed and highly functional school building with necessary instructional facilities, he is likely to achieve a level of instructional effectiveness than when those facilities are not provided. School facilities therefore became vital tools or resources in teaching – learning effectiveness and there is need for their proper management.

The students in the attractively decorated school will perform better with all the advantages derived from the school plants. A student sitting on a comfortable seat is prone to produce a better handwriting than a student writing while sitting on a broken chair and table, Nwogu (1997).

Equally, Akintola (1981) and Adeyemi (2007) posit that in public schools, pupils learning environment typically has few facilities, and classes consist more than 50 pupils (higher than 1 to 30/40 standard indicated in the National Policy on Education (FGN, 2004). All these, in

addition to overloaded curricular, inadequate learning materials as well as poor and harsh teaching techniques precipitate teachers loss of interest in the profession and poor academic performance in schools which again made the children become disillusioned, and so search for an escape route outside the school, hence drop outs.

A report of the African Regional Studies programme of the World Bank presents a sorry picture of the conditions in African Schools- Nigeria Inclusive. It points out that most schools in sub-Sahara Africa suffer from very poor condition of learning in dilapidated or half-completed buildings, Insufficient desks, overcrowded classrooms, inadequate learning materials, poorly educated and poor motivated teachers and the use of recitation as the dominant vehicle for learning (World Bank, 1998). It was also observed that in Nigeria, the total enrolment as a percentage of total school age population had been declining since 1983 from 93% in that year till date (Chinsman, 1998 cited in Adeyemi, 2007). Ogun State which is the case study for this research work might not be entirely absolved from this apparent situation and decline in enrolment.

School facilities have been observed as a potent factor to quantitative education. The importance to teaching and learning of the provision of adequate instructional facilities for education cannot be over-emphasized. The dictum that “teaching is inseparable from learning but

learning is not separable from teaching" is that teachers do the teaching to make the students learn, but students can learn without the teachers. According to Akande (1985), learning can occur through one's interaction with one's environment. Environment here refers to facilities that are available to facilitate students learning outcome. It includes books, audio-visual, software and hardware of educational technology; so also, size of classroom, sitting position and arrangement, availability of tables, chairs, chalkboards, shelves on which instruments for practicals are arranged (Farrant, 1991 and Farombi, 1998).

In his words, Farombi (1998) opined that the wealth of a nation or society could determine the quality of education in that land; emphasizing that a society that is wealthy will establish good schools with quality teachers, learning infrastructures that with such, students may learn with ease thus bringing about good academic achievement. Writing on the role of facilities in teaching, Balogun (1982) submitted that no effective science education programme can exist without equipment for teaching. This is because facilities enable the learner to develop problem-solving skills and scientific attitudes. In their contribution, Ajayi and Ogunyemi (1990) reiterated that when facilities are provided to meet relative needs of a school system, students will not only have access to the reference materials mentioned by the teacher, but individual students will also learn

at their own paces. The net effect of this is increased overall academic performance of the entire students.

2.11.2. Recreational Facilities

These are spaces, lawns, fields, pitches and equipment for sports, games and general recreation. Games and Sports apart from developing specific skills also develop a good learning socio-psychological as well as mental environment through relaxation. The importance and level of resources committed to the development and provision of recreational facilities must not exceed their values in facilitating the overall goal of the educational institution. Personal experience has also shown that most secondary school leavers lack requisite technical skills to be able to function effectively in the society. It appears that the schools seem not to consider the importance of sports to the development of individuals and to nation-building. Sporting activity (which is a very good index of psychomotor domain) is not just a routine or an annual fund-raising activity for schools but a very good avenue for talent hunt.

2.11.3 Residential Facilities

These include hostels and hostel facilities, refectory and refectory facilities, staff quarters and other associated facilities meant to provide residential convenience for staff and students

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2.11.4. General –Purpose Facilities

These are facilities that can easily be converted to uses other than those for which they are being used. Such facilities in most cases are made of space facilities. There are basically two types of open space facilities namely: The developed and the undeveloped spaces. Developed Open Space are spaces used as sporting pitches, fields, lawn ,school farms, access roads, parking lots and so on. Their uses can easily be modified as occasion demands. The Undeveloped Open Spaces are all the land area within the legal authority of the institution which is yet to be developed into specific uses. However, it has been observed that there are problems in the area of provision and management of school facilities which may pose some difficulties to the smooth implementation of the programme.

i. Physical Hardware

The various reports referenced in this write up have shown the importance of school buildings and other infrastructural facilities to teachers' performance. A comprehensive case study conducted by White (2004) as referenced in OED of the World Bank (2004) report offers specific evidence that, a minimum basic quality of school facilities matters significantly towards the achievement of higher teachers' performance. For instance, in certain parts of Ghana, schools often close due to roof leakage (White, 2004). Similarly, it was reported that in1988 less than half

of schools could use all their classrooms during rainfall (OED of The World Bank, 2004).

According to Berry (2002), schools manifest common traits including availability of sanitary facilities such as water, toilets, urinals etc; safety of school buildings such as walls without cracks; adequate indoor and outdoor recreational grounds, proper lighting system in classrooms and libraries etc. Harbison and Hanushek (1992) made mention of furniture such as teachers' chair and table, student's desks, classroom cupboards as 'hardware inputs which teachers cannot do without. Cash (1993) as referenced in Brendle-Corum (2010) mentioned furniture and other hardware inputs as comfort factors in school environment that influence student's performance.

A study conducted by Churchill (1965) found a positive relationship between the location of a school, the students and teachers performance. Earthman and Lemasters (1998) posit that, students' perform well in schools that have less external noise. Hence excessive external noise causes stress in students which leads to class dissatisfaction and truancy (cited in Schneider, 2002). This means that, teachers would have to strain their voices in order to make whatever they are saying audible to students. These problems are more acute for children who may have hearing impediments (Nelson and Soli 2000 cited in Schneider, 2002). A

study conducted by Fisher (2000) also supports the assertion that, higher noise level around classrooms causes stress to students.

ii. Class Size

Podmore (1998) as referenced in Cakmak (2009) stated that, there is a relationship between class size and children's achievement, children's motivation, teacher satisfaction, teacher stress, and the organization. Class size is an important factor in a school design, as it drives facility-related issues that are part and parcel of the school building plan, construction, cost, maintenance, and operational plan (Schneider, 2004).

According to Cakmak (2009), classes might be small or large in size but in both cases, it is expected that teachers should teach effectively by having students' interests and learning experience in mind. The definition of a "small" or a "large" classroom might differ in contexts(Cakmak, 2009). Hargreaves, Galton, and Pell (1998) as referenced in Cakmak (2009), for instance indicated that, there is little agreement about the optimal size of a class. According to Croll and Hastings (1996), as reference in Cakmak (2009), class size effects cannot be just a matter of the number of children in a class. The number of children must have an effect on other classroom processes and activities which has an effect on learning. Thus a reduced number of teacher-student ratio would promote quality teaching. The reflective journals, 81

pieces in total by 9 URs, were analysed using both inductive and deductive methods.

School Facilities and Academic Achievement

Many research findings have shown that the success of any educational endeavor rest on the availability of physical facilities especially the school building. Writing on its importance, Olutola (1982), noted that the availability of the school building and other plans contribute to good academic performance as they enhance effective teaching-learning activities. He further stated that well sited school buildings with aesthetic conditions, playground, lavatory, etc. according to the scholar usually contribute to achieving higher educational attainment by the students. Throwing more light on this, the Encyclopedia of Educational Research recorded that the total environment within a school building should be comfortable, pleasant and psychological uplifting. It should provide a passive physical setting that is educationally stimulating, it should produce a feeling of well-being among its occupants, and it should support the educational process (p.1156). The above condition can only be met through the cooperative efforts of imaginative teachers, administrators and a creative knowledgeable architect.

Tracing the history of school building to the past to give credence to above statement, Samuel (1997) noted that school sites were arbitrarily

chosen with little or no consideration for architects, consultants, engineers, and administrators, among others. He observed the flaws as a huge waste of scarce resources. Earlier in his study, Williams (1973) succinctly said that school buildings are very vital input to educational system; emphasizing that even though they do not teach but their use may facilitate or impede learning. However, he did not see school building as one of the critical variables affecting school academic achievement because he found no evidence to show that an expensive school building would necessarily improve academic achievement. Giving credence to the above finding, Owoeye (1991) in his submission, expressed skepticism about any useful relationship between such expensive structures and academic achievement.

Also, in his report on secondary school education in Nigeria, Adaralegbe (1983) reiterated that from Inspector's reports over the years, there is abundant evidence and catalogue of inadequacies in the provision and judicious use of school buildings and materials for instruction. He went further to say that many classes have been held under unhygienic conditions while some schools have no ceiling, some have no doors and windows have no shutters and some classroom floors have not been concreted. The situation is even worst in rural areas and under these unfavourable situations; much learning cannot be expected to take place.

As a result of this deplorable condition, Obemeata (1995) submitted that only a small proportion of secondary school products are qualified to enter the University in Nigeria.

Akinwumiju and Orimoloye (1987) opined that education institutions from Nursery to University require buildings for their effective operations. Classrooms, offices, assembly halls, laboratories and staff quarters are needed...important items like furniture for staff and students, books, science equipment, games and sport equipment should be adequate in number and they should all be in good conditions for schools to function properly. Writing on the deplorable state of public schools in Nigeria, Ogunmoyela (1994) lamented that school buildings of public schools have no roof, windows and doors, some walls are cracked, instructional facilities are lacking while teachers are frustrated consequent upon lack of equipment/facilities to meet educational endeavours.

Comparing schools in developing countries with what obtains in industrialized world, in terms of facilities, materials, utilization, and provision. Akintayo (1997) opined that schooling in developing countries like Nigeria takes place under condition that are very different from those in industrialized countries like Great Britain. He further stated that primary school pupils in developed countries are likely to go to school in modern well-equipped buildings and to have a curriculum that is well

thought out in terms of scope and sequence. In line with the above, Lockheed and Verspoor (1991) stated that on the average they receive 900 hours a year of learning time. The situation is not the same in Nigeria, both primary and secondary schools in Nigeria in particularly Ekiti State battle with dilapidated buildings as well as incessant strike action for upward of three to six months that students' average attendance per session is very poor and discouraging.

Laboratory has been conceptualized as a room or a building specially built for teaching by demonstration of theoretical phenomenon into practical terms. Farombi (1998) argued the saying that "seeing is believing" as the effect of using laboratories in teaching and learning of science and other science related disciplines as students tend to understand and recall what they see than what they hear or were told. Laboratory is essential to the teaching of sciences and the success of any science course is much dependent on the laboratory provision made for it. Affirming this, Ogunniyi (1983) said there is a general consensus among science educators that the laboratory occupies a central position in science instruction. It could be described as a place where theoretical work is practicalized whereas practicals in any learning experience involves students in activities such as observing, counting, measuring, experimenting, recording, observation and carrying out field work. These

activities are totally different from the theoretical work which involves listening to talks and taking down notes from such talks.

According to Ango (1986) laboratory work;

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

Laboratory helps to provide a forum wherein the learner is given the exercise to subjects, his beliefs, ideas, statements, theoretical propositions etc. to some forms of experimental test (Soyibo, 1990). To maintain and arouse the interests of students in subjects involving laboratory work, the teacher should be effectively involved in order to transfer knowledge and facts to learners for a good performance in any examinations. In line with this, one then pauses to ask, to what extent has laboratory been able to achieve its objectives. Odulaja and Ogunwemimo (1989) highlighted that the teacher assumes a position of dispenser of knowledge with the laboratory serving the function of drill or verification. They further explained that at the other extreme, the teacher assumes the

position of guide to learning and laboratory as a place where knowledge is discovered.

However, there are growing evidences that teachers do not exhibit behaviours which are complementary to achieving the stated objectives. They include methods of teaching practical work; inadequacy or absence of well-equipped laboratories; high enrollment of students; inadequacy of resources for teaching and learning practical work; quantity and quality of teachers.

Nwachukwu (1984) discovered in her survey of the resources for the teaching and learning of Biology in some of the new secondary schools in Lagos that there was a general inadequacy of resources. She also found out among other things that (a) out of 80 per cent of the old schools that accepted as having laboratories, none had a well-equipped laboratory and (b) 40 per cent of the schools had no laboratory at all, while the remaining 60 per cent had rooms labeled "laboratory" without adequate apparatus, she concluded that teaching of Biology practical by teachers would be difficult and that students learning experiences would be limited. In his contribution, Balogun (1982) submitted that no effective science education programme can exist without equipment for teaching. Writing on the situation of our secondary schools today, Okoli (1995) reported that laboratories have become shelves of empty bottles of

chemicals. In terms of academic achievement, Soyibo and Nyong (1984) have shown that schools with well-equipped laboratories have better results in the school certificate science examinations than those that are ill-equipped. Corroborating this, Gana (1997) reiterated that students instructed entirely by the laboratory methods had higher attitude's scores but lower achievement scores than students instructed entirely by the traditional lecture or textbook mode. Yadar (2007) opines that no course in science and mathematics can be considered as complete without including some practical work. The practical work ought to be carried out by individuals either in science laboratories or in classes. At school level, practical work is even more important because of the fact that we learn by doing. Scientific practices and applications are thus rendered more meaningful. It is an established truth that an object handled impresses itself more firmly on the mind than the object merely seen from a distance or in an illustration. Thus practical work forms an important feature in any science and mathematics course (UNESCO, 2008). In view of these different and conflicting findings, the study found the relationship between teachers' quality and students' academic achievement.

Oxford advanced learners dictionary described a library as a building or room in which collection of books, tapes, newspapers etc. are kept for people to read, study or borrow. Library is an essential factor in

teaching-learning process. It forms one of the most important educational services. The educational process functions in a world of books. The chief purpose of a school library is to make available to the pupil, at his easy convenience, all books, periodicals and other reproduced materials which are of interest and value to him but which are not provided or assigned to him as basic or supplementary textbooks. The importance of library has been demonstrated by the government when she expressed in the National Policy on Education (NPE) that every state Ministry needs to provide funds for the establishment of libraries in all her educational institutions and to train librarians and library assistants. As a resource, it occupies a central and primary place in any school system. It supports all functions of school-teaching and provides service and guidance to its readers. According to Fowowe (1988) a library must be up-to-date and at the same time allow access to older materials. It must be properly supported financially to fund materials and services among others.

While itemizing the types of libraries, Ola (1990) opined that secondary school library in whatever form, has replaced the traditional method of ‘chalk and talk’ in imparting knowledge to students that its effect on academic performance need not to be over-emphasized. He concluded that a well equipped library is a major facility which enhances good learning and achievement of high educational standard. In his words,

Farombi (1998) reiterated that school libraries may not be effective if the books therein are not adequate and up-to-date as its impact may only be meaningful if the library could be opened to the students always for a considerable length of time in a school day. With all the above mentioned facts, it is sad to know that many schools operate without libraries (Shodimu, 1998) whereas Ogunseye (1986) had earlier noted that total absence of an organized school library would continue to spell dooms for thousands of secondary school students. This statement clearly implied that many schools operate without libraries and had affected the academic performance of their students.

Moreover, Fuller (1986) identified a school library as an instructional resource which may significantly influence pupils' achievement after controlling for pupils' family background. He found that effect of library size and its activity have been positive in 15 out of 18 analyses. Also, in his study on the relationship between instructional facilities and academic performance, Popoola (1989) discovered that library correlates with academic achievement and those schools with well equipped library normally maintain high academic performance.

In another study on raising school quality in developing countries, Fuller (1985) found that collection of books kept for reading in the library is related to performance. Reporting the state of library in Lagos

Secondary Schools, Shodimu (1998) submitted that the guidelines that each school should be provided with a library with 100 students seating capacity was not followed as most of the schools he sampled had seating capacity of less than 100 students.A textbook constitutes an important tool for academic achievement. Many writers (Heyneman and Loxley 1982, Walberg 1984, Beeby 1986) have variously highlighted the contribution of textbooks to academic achievement.

Studies have revealed in some instances, that textbooks provide the only source of information for students as well as the course of study for the subject. Exploring the effects of textbooks and other factors on student achievement gain, Lockheed et.al (1986) found in their longitudinal data from a national sample of eight grade Mathematics classrooms in Thailand that textbooks may affect achievement by substituting for additional post Secondary Mathematics education of teachers and by delivering a more comprehensive curriculum. Earlier in his own contribution, Altbach (1983) opined that "nothing has ever replaced the printed word as the key element in the educational process and, as a result, textbooks are central to schooling at all levels". In his empirical studies of use of textbooks and educational achievement involving 1,006 primary school pupils, Fuller (1985) revealed that students who had used more than two textbooks were almost three times as likely to pass... 67 per cent graduating examination

compared to students who had no textbooks in schools (only 24 per cent graduating).

Squire (1991), writing on teachers reliance on textbooks, stated that those seeking to improve the quality of education believed that improvements in instructional materials would inevitably lead to changes in actual teaching. For many teachers, textbook can provide an excellent and useful resource, without usurping the position of the teacher. While the selection of a textbook has been adjudged to be of vital importance to academic achievement, it is sad to say that relevant textbooks are not available for teaching and learning activities (Soyibo 1987, Odulaja and Ogunwemimo 1989). Lack of textbooks could be identified with the high costs. When this happens, he further noted that students cannot afford to purchase, the implication therefore is that the teacher will serve as the only source of information. Where the teacher is the only source of information his selection of a textbook may be biased. Biased in the sense that his selection may be based on reasonably unsatisfactory criteria such as its attractiveness in terms of color, print, photograph, the author's qualifications and the recognition he has accorded in some other publications. In his study on resources and resources utilization as correlates on academic achievement, Oni (1992), reported that there was a significant relationship between recommended textbooks and academic

performance in introductory technology, Business Studies and Home Management respectively.

2.12 Availability of School Facilities

Our schools can only be what we want them to be if only proper steps are taken in the provision of all that will make teaching and learning effective. Learning cannot take place where facilities are not provided. Therefore the provision of facilities such as building, equipment etc. is of utmost importance.

It is important to note that students and indeed their teachers need a conducive environment to be able to teach and learn adequately and effectively. The school facilities therefore, must meet the needs of the school community. Each building in the school should be sealed to reduce the intensity of heat. They must also be constructed with a design that makes for cross ventilation. Good sanitary facilities (W.C. System) must be provided. Classrooms must not be over crowded and must be spacious enough for free movement. Jacobson et al in Abraham (2003).

The school farm is another important ground of the school; it is an integral part of the school facilities. It is a part of the school compound which many people tend to ignore. Other important facilities are standard and well-equipped library and laboratory, games facilities, equipment etc. Our school can only be what we want them to be only if proper steps are

taken to plan the buildings, the grounds and in fact the general layout of schools.

2.13 Types of Maintenance Services in Schools

Effectiveness and efficiency of a maintenance programme are achieved if the maintenance of the school plant is scheduled instead of only responding to emergencies. This means planning the programme in such a way that some maintenance services are performed on a regular basis, some periodically and others as the need arises. Based on this, some writers distinguish five types of maintenance services in some programmmes –preventive, periodic, replacement, emergency, and improvement maintenance. Other writers, however, recognize only four types of maintenance arguing that there is much overlap between improvement maintenance and the other types of maintenance. Moreover, some improvement 'maintenance' services especially those being performed for the first time, may constitute capital improvement. Therefore, Olugbenga (2012) highlighted the following types of maintenance services:

2.13.1 Preventive Maintenance

This type of maintenance, as the name implies, is the service rendered on school buildings, equipment and furniture in order to prevent malfunctioning of an equipment, or early deterioration of buildings, parts

of buildings, furniture and equipment in order to maximize their useful life. Therefore, Candoli (1988) defines this type of maintenance as "that programme for servicing machines, systems and structures devised to prevent a breakdown of the system or one of its components." Preventive maintenance protects buildings, grounds, furniture and equipment in order to avoid expensive maintenance. Preventive maintenance is often carried out by custodial staff. Their performance of this task may be enhanced by on-the-job training.

Preventive maintenance is rarely practised in Nigerian public schools most of which do not even have the custodial staff to render such services. Absence of any type of maintenance programme and school inspection schedule in schools also hinders the rendering of such maintenance services.

2.13.2 Periodic Maintenance

This is the type of work done on regular intervals of time – yearly or two-year intervals or more. It is the type of work most often done on contract basis at predetermined times. It is the type of work associated with the servicing of office, laboratory, and other equipment in the school periodically. This type of maintenance also includes such work as painting and repair of leaking roofs which can be scheduled to take place periodically as buildings continue to age.

2.13.3 Replacement Maintenance

This type of maintenance involves removing and replacing an equipment or parts of it when due. Some machine and vehicle parts and some plumbing fixtures, for instance, need to be replaced before they become so bad that the item breaks down. It is poor practice to wait until an item of equipment or machine becomes completely unusable before replacing it. Regular replacement of an item of equipment or some of its parts prevents occasional embarrassment. It also prevents unbudgeted expenses during the school year.

2.13.4 Emergency Maintenance

No matter how well a maintenance programme is planned and adhered to, there will always be some unforeseen or unexpected emergencies. This type of maintenance is the work done when a system, an equipment, especially one that is frequently in use, unexpectedly breaks down. It is also the type of work done when a part of a building collapses because of a natural disaster and other reasons. This type of maintenance is the most common in Nigerian schools. Some of the emergency maintenance works could, perhaps, been avoided if there were operational maintenance programmes in the school systems.

In cases of emergency, the first concern should be with the safety and health of the occupants of the facility involved. They need to be

promptly evacuated and settled elsewhere. All school staff and students should be given adequate instruction on what to do and what not to do in emergency situations and when emergency repairs are being done in the school. It has been observed that many school heads forget to realize that they have a duty to play towards the maintenance and upkeep of school plants. Deighton (1971) Nwagwu (1998) Ani (1997) and Nwogu (1997) in their separate studies have confirmed the roles of the school administrator towards the maintenance as:

i. The identification of plants that needs repair,
ii. The establishment of repair inventors,
iii. The establishment of a maintenance workshop,
iv. Renovation of dilapidated school plant.
v. Repair and redecoration of school plant.
vi. Appointment of teachers to custodial duties.
vii. Instruction to students on the careful use of the school plants, preventing students from damage or defacements through writing or drawings on the walls.
viii. Ensuring that school plants are adequate for students' population.
ix. Supervising school custodial staff

x. Providing working materials for the custodial staff allocating un-accommodated buildings where applicable to staff as residential quarters since buildings deteriorate faster when they are not in use.

xi. Reporting all major parts to the government on time.

xii. Teaching students to treat plants as personal properties instead of government facilities.

Ntukidem (1992) maintains that attractive school plants with superior lighting, attractive decoration, comfortable seating and useful service facilities such as libraries, multi-purpose room etc. stimulate learning.

2.14 Issues and Problems of School Facilities Maintenance

Maintenance of school plant is an important aspect of school administration. It is the activities embarked upon by the school administrators to ensure that school plant remains in the same state. The activities include repairs, servicing, painting, greasing etc. Maintenance can also be those activities put in place to keep and restore the original condition of an item. When activities such as repairs, servicing, painting, etc. are put in place to keep or restore the original condition of an item, the item is being maintained. Maintenance of school plant therefore implies the process of or any other activities that involve repairs, servicing, painting, etc and which are being carried out on any of the components of school plant in an attempt to keep or restore it back to the original

condition and more importantly to ensure that the school plants is in good shape.

The aim of maintenance of school plant is to ensure that it remains in the best condition for educational instruction at all times. However, Miller (1965) observed that construction of new block of classroom and other buildings and alteration to the existing buildings are not the whole housing effort; it also involves the continuing operation and maintenance of the school plant. It is therefore necessary for school administrators to have the knowledge of operating and maintaining school plants. School plant maintenance requires maximum cooperation and hard work from the officials of ministry of education, the school administrator, the school staff (academic and non-academic), the students and the community where the school is located (Olugbenga, 2012).

According to Yusuf and Adigun (2012), there are several issues confronting effective school plant maintenance in Nigeria School. These include:

(i) Enrolment explosion leading to excessive pressure on existing school facilities. Inadequate fund arising from economic recessions and competitions for funds by other sectors. Consequently, facilities are inadequate to cope with increased

enrolment pressure. In addition, inadequate funds have not allowed for proper maintenance of available facilities.

(ii) Inadequate and outright lack of experts (artisans) to handle and repair the 'modern' gadgets used in the school system.

(iii) Over-centralization of authority and duty: Many of the school heads do not delegate duties to their subordinates which lead to over-centralization in the school system.

(iv) Non-challant attitude of school head, teachers and students to government property. There is overt lack of maintenance culture among Nigerians.

(v) Lack of dedication on the part of custodians. The custodians are those in charge of the maintenance of the physical facilities in the school. The attitude of the custodians to work is very poor. Some of them are absent from work without reasons. They lack maintenance culture. Incessant power failure and bureaucratic procedure involved in getting order are other excuses given by the custodians for failing to take proper care of the school plant (Olugbenga, 2012).

(vi) Mismanagement of Maintenance Funds and Materials.School administrators in Nigeria mostly do not spend the allocation for maintenance appropriately. Money allocated for maintenance is

either used for personal purposes or on things other than maintenance. Left over materials most times are not cared for; they are abandoned after use (Olugbenga, 2012).

(vii) Financial Constraints.This problem is very common in the primary and secondary schools. The heads at these levels of education are starved by the controlling and regulatory body of funds to maintain school plant. Most of them are not even given imprests. This makes it very cumbersome to procure or maintain the essential equipment and structure needed by the schools. (Olugbenga, 2012).

2.15 Empirical Studies

This section reviewed some empirical studies relevant to this study. Some of the studies were on strategies to improve the management of educational programmes while others on physical facilities and equipment as correlates of academic performances among others.

Adesina, (2011) conducted a study titled "School Plant Planning as Correlate of Students' Academic Performance in Southwest Nigeria Secondary Schools". The study among other things examines the relationship between school plant planning and students` academic performance in south west Nigeria secondary schools using descriptive

survey research design. The sample consists of 1650 respondents comprising 150 school principals and 1500 students. Multistage, stratified and simple random sampling techniques were used to select the sample. Data collected were analyzed using frequency counts, percentages, means and Pearson product moment correlation. Five null hypotheses were tested at 0.05 level of significance. The study revealed that the levels of school plant planning and students` academic performance were relatively close, and as such students` academic performance was significantly related to instructional space planning, Administrative space planning, circulation space planning, planning for accessories and space for convenience planning. Based on the findings, it was recommended that authorities concerned should implement architectural designs of buildings and spaces for education to ensure students` academic performance. The study is relevant to the current as it assisted in questionnaire development, statistical analysis tools, design and the overall methodology. It equally assisted the researcher to avoid duplication of what has already be done. it also assisted the researcher in identifying the gaps left unfilled by the other studies.

In another development, Ofojebe (2011) conducted a study on the state of school plant and strategies to improve its Management in secondary schools in Anambra State the study investigated the state of

school plant and strategies to improve its management in secondary schools in Anambra State. Eight research questions and six null hypotheses guided the study. Related literature was reviewed under conceptual framework, theoretical framework, theoretical studies and empirical studies. The design of the study was descriptive survey. The population consisted of all the 208 principals in government owned senior secondary schools in Anambra State. The entire population of 208 principals was used as subjects for the study, while in the observation of the school plant only 72 schools were used. The researcher used both observational schedule and a questionnaire as instrument for data collection. The instruments were duly validated. Their reliability was established using test re-test and split half method of reliability for the observational schedule and the questionnaire respectively. The data collected from both were subjected to reliability analysis by the technique of Person Product Moment Coefficient of Correlation. Frequency tables were used in answering research questions 1-3, ratio was used in answering research questions 4 and 5 while mean score was used in answering research questions 6 – 8. The t-test was used in testing hypotheses 1 – 6 at 0.05 level of significance. The result showed that more than 50% of the schools have some material resources; there is gross inadequacy of the available material resources in schools; the government,

community, principals, teachers and students all have roles to play towards effective school plant management. Implications and suggestions for further studies were also highlighted. Finally, it was recommended among others that while politicians should allow school administrators to perform their duties, the government should build maintenance cost into the educational budget to take care of deterioration of the school plant.

Similarly, Akubue (1980) undertook a survey study of practical measures for the administration of quality science in secondary schools. The subjects were 62 supervising principals randomly selected from the education zones of Anambra State. Also 600 principals constituted the respondents of the study. A questionnaire instrument titled Administrative Practice for Science Programme Questionnaire (ASP) was used in collecting the relevant data for answering the research questions and testing the hypotheses formulated for the study.

It was the opinions of the respondents that principals should organize staff meetings of the science teachers (on a regular basis) as a forum for shared decisions making on issues affecting school's science programmes, provide facilities and equipment, maintain science laboratories and encourage instructional supervisors. Three aspects of Akubue's study that are relevant to the present study are those bothering on provision of facilities, maintenance and supervision.

Akubue's findings agreed with that of Ugonabo (1988). In Ugonabo's study on effective management of Vocational and Technical Education for successful implementation of the 6-3-3-4 system of education, among the three measures listed was the provision of adequate facilities and efficient supervision. Both agreed that no institution or programme could succeed without effective management of facilities. No wonder Ezewu (1983) opined that a properly designed and fully utilized school building with a wide array of teaching aids provides delivery of school curriculum and are positively related to academic achievement. The finding of the above, the researcher agreed with the assertion of Ukeje (1997) that no programme of education can be effectively implemented without the provision of adequate physical facilities and equipment.

Since the present study will focus on strategies to improve the management of school plant, the two studies are considered relevant.

The studies of Nzeako (1997) further buttressed the need for physical facilities and equipment for effective administration of schools. Her study was a study on the strategies to improve the administration of secondary schools in Awka education zone of Anambra State. The subjects were secondary school principals and teachers in Awka Education zone. The data gathering instrument was a 25-item questionnaire structured in four clusters bothering on facilities, disciplinary, staff

personnel and financial management. The results of the study showed that it was the opinions of the secondary school principals and teachers that principals should raise funds for their schools through many sources spend on thing of absolute necessity and maintain proper accounting system. These respondents also indicated that principals should organize seminars and workshops for serving teachers, provide adequate facilities and equipment as well as maintain the ones available.

Moreover, Ehiemetalor (1998) carried out a study on Management of Primary Schools in Edo State. The variable of the study were cost of running the system, the training of teaching personnel and their workload and facilities available for teaching and learning and the support system.The researcher's discussion of the study here concentrates only in area of facilities which is one of the most important factors of production in the school system. The study revealed that 87.5 per cent of the schools in the study did not have any kind of teaching aids, and the

12.5% that has some form of teaching aids did not have enough to meet their needs. The findings also show that classrooms were not adequate and those available required renovation. It was also noticed that seats and desks available were not enough for students and teachers.The presentation of the findings of the study is first to reinforce the assertion

that institutions of learning, irrespective of the level have not started to maintain the facilities available for their production.

The problems of acute shortage of facilities and equipment for learning in Onitsha Education zone prompted another study by Ejikeme in 1999. In her study on management of Physical Facilities and Equipment in Onitsha Education Zone, 1520 teachers and 23 principals constitute the population of the study. The findings of her study revealed that both principals and teachers agreed that the PTA construct classrooms blocks, the State Education Commission provides important school records, the community provides land for erection of structures.

The study revealed that parents provide desks and chairs for their children. However, Ejikeme commented pathetically, that despite these contributions, her studies revealed that there were no stores officers in charge of these facilities. The deplorable conditions of the plants in the schools in Onitsha Education zone was thus an epitome of total neglect.

The best-planned plant that is not maintained soon becomes defaced and losses its aesthetics value and worth. Owodogu (1989:11) said that "a poorly kept building … or poorly maintained site, all inhibit the development of a good educational programme".In their bid to find out the extent of plant maintenance in our schools, Ogonor and Sani(2001) carried out a study on maintenance of secondary school facilities in Midwestern

Nigeria. The survey study, which used (250) principals of secondary schools in the then Midwestern Nigeria (Edo-Delta States) as respondents, had four research questions and four hypotheses. The study revealed that the facilities, which are provided in schools, were grossly inadequate vis-à-vis the number of users of the facilities. The classrooms are without ceilings, and chairs and desks were grossly inadequate for students. The study also revealed that the conveniences available were not only inadequate but also unkempt. It was also discovered that there appeared to be a culture of non-replacement of worn out facilities as school personnel have not been responsive to the repairs of facilities.

The influence of the environment on teaching and learning processes also motivated a study by Unachukwu and Nwankwo (2005) on the status of learning environment in Anambra Secondary Schools. The survey study which used 1040 students as respondents had seven research questions and five null hypotheses. The study focused on the status of the following:

- Classroom situation;
- Citing of the school;
- Home situation;
- Infrastructural facilities;
- Lesson plan;

- Staffing of the school;

- Personality of the teachers; and

- The extent to which the responses of the subjects from urban will differ for those of the rural located schools.

The findings revealed that secondary schools in urban and rural areas have poor classroom environment. They have classrooms with broken walls, glasses … and are above 50 students in most classes. The sighting of schools in the urban areas is very poor and inadequate for learning because of the distracting factors surrounding the schools. Schools in the rural areas are more conducive and adequate for learning. It was discovered that necessary infrastructural facilities to facilitate learning are not available in both urban and rural secondary schools. The few that are available are not adequate.

Secondary school curriculum especially at the junior secondary school level places great premium on vocation and technical subjects. It would have been expected that the plants in the schools would not only be adequate in number but also well maintained. However, an obvious explanation to the contrary has been the excuse of the economic down turns in the nation since the eighties and a general notion that public property is nobody's property. If this is the case, then both teachers and the school administrators are unknowledgeable of their role towards

school plant maintenance. Since the sight of our schools tends to be replica of the teaching/learning activities that go on in such school, there is necessity of carrying out investigation on strategies to improve the management of school plant.

Summary

The review of literature related to this study was carried out in this chapter. The concept of management and school plant were highlighted. Reviewed also were the reviews of authors and scholars on the theory and components of management for educational programmes. The importance of school plant in educational institutions especially as it relates to student academic performance, effective school administrators and mutual relationship between the school and community were also presented. The literature also established the need for proper plant planning, procurement and maintenance and necessary steps to take for actualizing them.

The constraint to effective plant management such as finance, lack of policy, poor planning due to lack of time and adequate personnel etc. were fully discussed. Empirical studies related to the current study were presented equally.

From the above reviews, it is deduced that:

i. Effective school plant management is a sine-qua-non to effective teaching and learning processes.

ii. School administrators should as a matter of urgency pursue the provision and maintenance of the school plant since it is a major yardstick for measuring administrative effectiveness.

iii. Physical facilities and equipment in our schools are not only inadequate but also poorly maintained.

iv. Proper school plant planning is pre-requisite to proper procurement and maintenance of the plant among others.

The literature reviewed some studies conducted on physical facilities and equipment in the school. However, none of the literary materials reached and mentioned looked precisely on the management of school plant in Zaria Education Zone, Kaduna state-Nigeria. Hence a gap in knowledge exists. It against this background and in a bid to fill up this gap in knowledge that informed the conception for this study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter discussed the procedure used in carrying out the research. The chapter focussed on the following sub-headings:

- Research Design;
- Research Population;
- Sample and Sampling Technique;
- Instrumentation;
- Reliability and Validity of Instrument;
- Procedure for Data Collection; and
- Statistical Tool for Data Analysis.

3.2. Research Design

The design used in this study is descriptive survey design. This is a research method that describes a given state of affairs at a particular time. According to Olayiwola (2010) this research design permits the gathering of information through the use of questionnaires and interviews, from a population based on appropriate sampling techniques. According to Obeka, (2011) survey research is interested in some characteristics of the population or universe he uses a carefully selected sample from the

population for intensive study of the characteristics of the population.This is in line with the opinion of Kennedy (2011) who asserts that "survey design studied large and small population by selecting samples drawn from the population to discover the idealistic incidence, distribution and inter-relations on sociological and psychological variables of the study. This corresponds with the main objective of this study which seeks to survey the management of school plant in secondary schools in Zaria education zone, Kaduna state-Nigeria.

3.3. Population of the Study

The population for the study consisted of secondary schools management which for the purpose of this study referred to:principals, vice-principals and senior masters and teachers in the study area. There are 1,055 teachers spread across 38 public secondary schools in the study area. There is also 152 School Management. This is based on the official data collected from Zaria Education Zone office, September, 2014. The appendix “A” shows the population of teachers, school management according to schools:

3.4. Sample and Sampling Technique

The study used purposive sampling technique for the survey. According to Bichi (2004) in purposive sampling elements judged to be typical or representative are chosen from the population for inclusion in

the sample. This procedure is based on the assumption that erroneous judgment will counterbalance one another. In a related development, Michael (2009) also asserted that purposive sampling is used when the selected samples are spatial and difficult to reach. However, the researcher employs this technique due to the following reasons:

- For convenience;
- Financial implication of large samples;
- To ensure credibility by covering manageable samples;
- Proximity of the school;

A total number of 292 respondents out of the entire population of 1,207 in the study area are selected. The decision was based on the sample size table by research Advisors (2006). They opined that for population of 1,207, at 95 percent confidence level and margin error of 5 percent, 292 sample size could be used. Table 1 shows the population of respondents from each category. Proportionate sampling is used in the determining the sample size of teachers and management.

Table 1: Frequency Distribution of Study Sample

S/no	**Variables**	**Population**	**Sample**
1.	Teachers	1,055	(1,055/1,207*292)= 255
2.	School Management	152	(152/1,207*292)= 37
	Total	1,207	292

3.5 Instrumentation

The study used structured questionnaire as an instrument for data gathering. Questionnaire is defined as the statement which the respondent have to react in writing so as to find out their feelings, and opinion on the designed items in the questionnaire. The study utilizes structured questionnaire as an instrument for data gathering because of the following obvious reasons:

i) It would help the researcher to distribute the questionnaires to respondents easily in order to meet up with the time factor;

ii) It would give enough time to respondents to respond to the items appropriately

iii) It helps to cover large area and sample population of the study

iv) It would instill confidence in the respondents to freely give out views they fear might get them into trouble or disapproved by others.

The questionnaire is prepared based on Likert five point scale. The respondents are expected to react to each item on a five point scale ranging from strongly agreed (S.A) 5, Agreed (A) 4, Disagreed (D) 3, Strongly Disagreed (S.D) 2 and (U.D) 1. The questionnaire was divided into six (6) parts. The first part section contains the respondent's personal information, while section B-F contains statements aimed at answering the questions raised by the study. The instrument is called "Provision and Management of Facilities in Secondary Schools Questionnaire" (PAMAFASSQ).

3.5.1 Validity of Instrument

The instrument was duly validated**.** The initial draft of the questionnaire, objectives of the study, research questions and hypotheses was given to experts from Educational foundations and Curriculum and Measurement and Evaluation. The instrument was assessed in terms of content coverage, the language used, arrangement of questions and hypotheses. However, useful input such as reframing some of the items, deleting irrelevant ones and simplifying some ambiguous ones, comments

and observations will form the basis of necessary modification of the instrument.

3.5.2 Reliability of the Instrument

In order to determine the stability and consistency of the research instrument, pilot study was conducted at Demonstration Secondary School, Ahmadu Bello University-Zaria using 30 respondents. The data collected from the pilot study was statistically analyzed for the purpose of determining the reliability coefficient. TheCronbach alpha formula for calculating reliability co-efficient was used. However, Danjuma and Muhammad (2011) said that an instrument is considered reliable if its reliability co-efficient has between 0.64 and closer to 1, the more the reliable is the instrument.

3.6. Procedures for Data Collection

The researcher received letter of introduction from the Department of Educational Foundations and Curriculum, Ahmadu Bello University, Zaria. This enabled the researcher to obtained official data needed for the study from Zaria Education Zone Office, Zaria. Further, the letters of introduction will be forwarded to the schools that fall under the study sample. This is aimed at introducing the researcher and the study objectives. It also serves as a means of soliciting for official co-operation

to ensure the success of the study. The questionnaires were administered to the respondents (School management and Teachers). This took the researcher five working days to go round the schools and administer the questionnaire.

3.7. Methods of Data Analysis

The study used t-test independent sample to test the research hypotheses. All the study's hypotheses have two variables (School Management and Teachers). The t-test independent sample is good in establishing if differences exist between two variables. According to Ekeh (2003) t-test is used for determining the significant difference between two mean. The study's research questions were answered using mean, standard deviation and standard error. All hypotheses were tested at 0.05 alpha level of significance.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSION OF RESULTS

4.1. Introduction

The study aims primarily at evaluating the provision and management of facilities in secondary schools in Zaria Education Zone, Kaduna state, Nigeria.A total of 292 respondents were used for the study representing 100.0%. The first section presents descriptive statistics of frequencies and percentages to determine distribution of sampled respondents by their sex, age, status and qualification. The second section answers the four research questions using frequency counts, means and standard deviations. The established decision mean is 3.00 computed based on the five scale Likert scale options i.e. (5+4+3+2+1)/5 =3.00. A total of four null hypotheses are tested using the Independent samples t-test statistics. All hypotheses are tested at 0.05 level of significance. Summary of findings and discussions on findings was also included in this chapter.

4.2. Results and Analysis of Personal Data of the Respondents.

This segment present data of respondents on Qualifications.

Table 2: Education Qualifications.

Qualifications	Frequency	Percentage
Below NCE	40	13.7
NCE	80	27.4
first-degree	116	39.7
Masters	31	10.6
PHD	9	3.1
Others	16	5.5
Total	292	100.0

Table 2 is on the educational qualification of the respondents. According to the table, 40 of them possess qualification below NCE, 80 have their NCE certificates, 116 of them have their first Degree, 31 of them have their Master's degree, 9 of them have their PhD degree and 16 of them have other educational qualifications. Thus, we can conclude that majority of the respondents have their first degree.

Table 3: Respondents by Status

Categories	Frequency	Percentage
Teachers	255	87.3
Principals	37	12.7
Total	292	100.0

Table 3 presents the frequency distribution of respondents by status. It shows that 255 respondents representing 87.3 percent are classroom teachers while 37 respondents representing 12.7 percent are principals. This shows that teachers who participated in the study outnumbered the Principals.

Table 4: Respondents by School Location

Location	Frequency	Percentage
Urban	100	34.2
Rural	192	65.8
Total	292	100.0

Details from table 4 indicate that 100 respondents representing 34.2 percent are from schools located in the urban areas while 192 respondents representing 65.8 percent are from rural schools. This shows that respondents from schools located in rural areas are higher than the respondents from urban schools.

Table 5: Respondents by Gender/Sex

Gender	Frequency	Percentage
Male	160	55
Female	132	45
Total	292	100

Results from Table 5 shows that 160 respondents representing 55.00 percent are males while 132 respondents representing 45.00 percent are females. This shows that the male respondents outnumbered the female counterparts. The gender distribution can be said to fair and balanced as the difference between male and female respondents is wide.

4.3 Presentation and Analysis of Data.

This segment introduced item statement of the questionnaire which includes provision and management of teaching facilities.

Research Question One:

Are teaching facilities provided and managed in secondary schools in Zaria Education Zone, Kaduna State, Nigeria?

Table 6: Opinions of Respondents on the Provision and Management of Teaching Facilities in Secondary Schools in Zaria Education Zone

S/No	ITEM STATEMENT	SA	A	UD	D	SD	MEAN	SD
1	Classrooms are adequately provided.	60	36	42	70	84	2.509	0.121
2	Classrooms are adequately managed.	30	25	50	55	132	2.510	0.0125
3	Chalk Boards are adequately provided.	121	30	40	35	66	2.199	1.0210
4	Chalk Boards are adequately managed.	84	70	42	36	60	2.640	0.9412
5	Laboratories are adequately provided.	13	18	41	107	113	2.719	0.543
6	Laboratories are adequately managed.	30	25	50	55	132	2.010	0.841
7	Chairs are adequately provided.	48	35	35	74	100	2.199	0.8843
8	Chairs are adequately managed.	66	35	40	30	121	2.510	0.851
9	Tables are adequately provided.	60	36	42	70	84	2.640	0.543
10	Tables are adequately managed.	48	35	35	74	100	2.719	0.0125
11	Public Address systems are adequately provided.	30	25	50	55	132	2.510	1.0210
12	Public Address systems are adequately managed.	66	45	40	30	121	2.199	0.9512
13	Flip charts are adequately provided.	60	36	42	70	84	2.640	0.543
14	Flip charts are adequately managed.	13	18	41	107	113	2.719	0.841
15	Models are adequately provided.	30	25	50	55	132	2.010	0.8843
16	Models are adequately managed.	48	35	35	74	100	2.199	0.851
17	Specimens are adequately provided.	66	35	40	30	121	2.510	0.851
18	Specimens are adequately managed.	60	36	42	70	84	2.640	0.4562
19	Workshops are adequately provided.	48	35	35	74	100	2.719	0.285
20	Workshops are adequately managed.	64	47	38	32	121	2.175	0.789
Cumulative mean							2.423	

Decision mean=3

Table 6 is on the Provision and Management of Teaching Facilities in Secondary Schools in Zaria Education Zone. The table is negative since the cumulative mean of 2.423 is less than the decision mean of 3. The item stating Workshops are adequately provided attained the highest mean of

2.719; further details revealed that 48 of them strongly agreed, 35 of them agreed, 35 of them were undecided, 74 of them disagreed while the rest 100 of them strongly disagreed. The item holding that Tables are adequately provided attained the second highest mean of 2.640 with further details revealing that 60 of them strongly agreed, 36 of them agreed, and 42 of them were undecided, 70 of them disagreed and the rest 84 of them strongly disagreed with the view. In summary the Provision and Management of Teaching Facilities in Secondary Schools in Zaria Education Zone is very low especially on management of laboratories

Research Question Two:

Is there Provision and Management of Learning Facilities in Secondary Schools in Zaria Education Zone, Kaduna state, Nigeria?

Table 7: Opinions of Respondents on the Provision and Management of Learning Facilities in Secondary Schools in Zaria Education Zone

S/No	Item statement	SA	A	UD	D	SD	Mean	SD
1	Computers are provided.	60	36	42	70	84	2.719	0.875
2	Computers are managed.	13	18	41	107	113	2.020	0.0125
3	Libraries are adequately provided.	30	25	50	55	132	2.199	1.0210
4	Libraries are adequately managed.	48	35	35	74	100	2.510	0.9412
5	Internet/ICT is provided.	66	35	40	30	121	2.640	0.543
6	Internet/ICT is managed.	60	36	42	70	84	2.719	0.841
7	Microscopes are provided adequately.	40	32	41	50	129	2.329	0.8843
8	Microscopes are adequately managed.	13	18	41	107	113	2.010	0.851
9	Projectors provided adequately.	30	25	50	55	132	2.199	1.0210
10	Projectors are adequately managed.	48	35	35	74	100	2.510	0.0125
11	Video CD Players are provided.	66	35	40	30	121	2.640	1.0210
12	Video CD Players are managed.	60	36	42	70	84	2.719	0.9512
13	Audio CD Players are provided.	48	35	35	74	100	2.510	0.543
14	Audio CD Players are managed.	30	25	50	55	132	2.199	0.841
15	Text Books are provided.	66	35	40	30	121	2.640	0.8843
16	Text Books are managed.	60	36	42	70	84	2.719	0.851
17	Stationeries are adequately provided.	13	18	41	107	113	2.010	0.851
18	Stationeries are managed adequately.	30	25	50	55	132	2.199	0.846
19	Exercise Books are provided.	48	35	35	74	100	2.510	0.745
20	Exercise Books are managed.	66	35	40	30	121	2.640	0.854
Cumulative mean							2.432	

Decision mean=3

Table 7 is on the Provision and Management of Learning Facilities in Secondary Schools in Zaria Education Zone. This table is negative since the decision mean of 3.00 is greater than the cumulative mean of 2.432, implying that Provision and Management of Learning Facilities in Secondary Schools in Zaria Education Zone is below average .the item stating that Computers are provided., scored the highest mean value of 2.719 as further details revealed that 60 of the respondents strongly agreed,36 of them agreed ,42 of them were undecided,70 of them disagreed and the rest 84 of them strongly disagreed with the view. Also obtaining the second highest mean of 2.640 was the item stating that Video CD Players are provided furthermore, 66 of the respondents strongly agreed with the goal, 35 of them agreed, 40 of them were undecided,30 of them disagreed and the remaining 121 of the respondents strongly disagreed with the view. The provisions of Stationeries are not adequately provided as this attracted the least mean of 2.010. In summary, that Provision and Management of Learning Facilities in Secondary Schools in Zaria Education Zone is below average especially the provision of Stationeries.

Research Question Three:

What is the level of Provision and Management of Recreation and Sports Facilities in Secondary Schools in Zaria Education Zone**?**

Table 8: Opinions of Respondents on the Provision and Management of Recreation and Sports Facilities in Secondary Schools in Zaria Education Zone

S/NO	Item statement	SA	A	UD	D	SD	Mean	SD
1	Football pitch is adequately provided.	66	35	40	30	121	2.640	0.2225
2	Football pitch is adequately managed.	60	36	42	70	84	2.719	1.0110
3	Football equipment/gadget is provided.	40	32	41	50	129	2.329	0.9512
4	Football equipment/gadget is managed	13	18	41	107	113	2.007	0.543
5	Sport/game transport facilities are provided.	30	25	50	55	132	2.199	0.841
6	Sport/game transport facilities are managed.	48	35	35	74	100	2.510	0.8843
7	Athletics facilities are provided.	66	35	40	30	121	2.640	0.851
8	Athletics facilities are managed.	60	36	42	70	84	2.719	0.851
9	Out-doors facilities are provided.	48	35	35	74	100	2.510	0.846
10	Out-doors facilities are managed.	30	25	50	55	132	2.199	0.745
11	In-doors facilities are adequately provided.	66	35	40	30	121	2.640	0.658
12	In-doors facilities are adequately managed.	60	36	42	70	84	2.719	0.880
13	Volleyball facilities are provided.	13	18	41	107	113	2.010	0.111
14	Volleyball facilities are managed.	30	25	50	55	132	2.199	0.745
15	Basket ball facilities are provided.	48	35	35	74	100	2.510	0.874
16	Basket ball facilities are managed.	66	35	40	30	121	2.640	0.685
17	Handball facilities are provided.	60	36	42	70	84	2.719	0.754
18	Handball facilities are managed.	40	32	41	50	129	2.329	0.854
19	Table-tennis facilities are provided.	13	18	41	107	113	2.010	1.010
20	Table-tennis facilities are managed.	30	25	50	55	132	2.199	1.011
Cumulative mean							2.432	

Decision mean=3.00

Table 8 is on the Provision and Management Recreation and Sports Facilities in Secondary Schools in Zaria Education Zone. Provision and Management of Recreation and Sports Facilities in Secondary Schools in Zaria Education Zone need improvement as the cumulative mean of 2.432 is lower than the decision mean of 3.00. Of particular interest is the management of Football equipment/gadget which attracted the least mean of 2.007 and the provision of volleyball facilities which attracted mean of 2.010. In summary Provision and Management Recreation and Sport Facilities in Secondary Schools in Zaria Education Zone. Provision and Management of Recreation and Sport Facilities in Secondary Schools in Zaria Education Zone need improvement especially as it concerns the management of Football equipment/gadget and provision of volleyball gadgets.

Research Question Four:

Are Health/ Welfare Facilities provided and managed in Secondary Schools in Zaria Education Zone?

Table 9: Opinions of Respondents on the Provision and Management of Welfare and Health Facilities in Secondary Schools in Zaria Education Zone

S/No	Items statement	SA	A	UD	D	SD	Mean	SD
1	Staff transport facilities are adequately provided.	48	35	35	74	100	2.510	0.2225
2	Staff transport facilities are adequately managed.	66	35	40	30	121	2.640	1.0110
3	Office health equipments are provided.	60	36	42	70	84	2.719	0.9512
4	Office health equipments are managed.	48	35	41	74	100	2.510	0.543
5	Office generators are provided.	30	25	50	55	132	2.199	0.841
6	Office generators are managed.	66	35	40	30	121	2.640	0.8843
7	Office sitting facilities are provided.	60	36	42	70	84	2.719	0.851
8	Office sitting facilities are managed.	13	18	41	107	113	2.010	0.851
9	School canteen is provided.	30	25	50	55	132	2.199	0.846
10	School canteen is managed.	48	35	35	74	100	2.510	0.745
11	Staff common room is adequately provided.	66	35	40	30	121	2.640	0.658
12	Staff common room is adequately managed.	60	36	42	70	84	2.719	0.880
13	Office fans/air conditions are provided.	40	32	41	50	129	2.329	0.111
14	Office fans/air conditions are managed.	60	34	40	36	122	2.569	0.745
15	Office lighting facilities are adequately provided.	60	36	36	69	91	2.675	0.874
16	Office lighting facilities are adequately managed.	42	34	35	74	107	2.418	0.685
17	School maintenance facilities are well provided.	36	26	50	55	125	2.291	0.754
18	School maintenance facilities are managed.	60	34	40	36	122	2.569	0.854
19	School cafeteria/workshop is provided.	60	36	36	69	91	2.675	1.010
20	School cafeteria/workshop is managed.	13	18	41	105	115	2.003	1.011
Cumulative mean							2.473	

Decision mean=3.00

Table 9 is on the Provision and Management of Health/Welfare Facilities in Secondary Schools in Zaria Education Zone**.** The response rate on this is negative since the cumulative mean of 2.473 is lower than the decision mean of 3.00. However the item stating thatOffice health equipments are well provided. Had the highest mean of 2.719 with further details revealing that 60 of the respondents strongly agreed with the view, 36 of them agreed, 42 of them were undecided, 70 of them disagreed, and the rest 84 of them strongly disagreed. Adding to that, the item scoring the second highest mean of 2.675 states that School cafeteria/workshop is well provided. Further details revealed that 60 of the respondents strongly agreed with the view, 36 of them agreed, 36 of them were undecided, 69 of them disagreed with the view, and the remaining 91 of them strongly disagreed with the views. In summary, the Provision and Management of Health/ Welfare Facilities in Secondary Schools in Zaria Education Zone need to be looked into properly, especiallySchool maintenance facilities provision.

4.3. Hypotheses Testing.

This segment present tested hypothesis.

Hypothesis One:

There is no significant difference between teachers and management on the provision and management of teaching facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria;

Table 10: Independent t-test summary on the Provision and Management of Teaching Facilities in Secondary Schools in Zaria Education Zone, Kaduna State-Nigeria

Variable	Status	N	Mean	Std.dev	Df	Cal-t	Crit-t	P
provision and management of teaching facilities	Teacher	255	49.1804	13.8253	290	0.593	1.96	0.554
	Management	37	47.7838	9.7014				

Calculated p >0.05 calculated t< 1.96

Results of the Independent t-test statistics in Table 10 showed that there is no significant difference between teachers and management on the provision and management of teaching facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria. Reason being that the calculated p value of 0.554 was found to be higher than the 0.05 alpha level of significance, while the calculated t value of 0.593 was found to be lower than the 1.96 t critical at Df 290. Their computed mean opinions on provision and management of teaching facilities in Secondary

Schools in Zaria Education Zone are 49.1805 and 47.7838 by teachers and management staff respectively. Therefore the null hypothesis which states that there is no significant difference between teachers and management on the provision and management of teaching facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria, is hereby accepted and retained.

Hypothesis Two:

There is no significant difference between teachers and management on the provision and management of learning facilities in Secondary Schools in Zaria Education Zone, Kaduna state, Nigeria;

Table 11: Independent t-test summary on the Provision and Management of Learning Facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria

Variable	Status	N	Mean	Std.dev	Df	Cal-t	Crit-t	P
provision and management of Learning facilities	Teacher	255	49.0627	12.6856	290	1.569	1.96	0.118
	Management	37	45.6757	8.7941				

Calculated p >0.05 calculated t< 1.96

Results of the Independent t test statistics in Table 11 shows that there is no significant difference between teachers and management on the provision and management of learning facilities in Secondary

Schools in Zaria Education Zone, Kaduna state-Nigeria. Reason being that the calculated p value of 0.118 was found to be higher than the 0.05 alpha level of significance, while the calculated t value of 1.569 was found to be lower than the 1.96 t critical at Df 290. Their computed mean scores on provision and management of learning facilities in Secondary Schools in Zaria Education Zone are 49.0627 and 45.6757 by teachers and management respectively. Therefore, the null hypothesis which states that there is no significant difference between teachers and management on the provision and management of learning facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria, is hereby accepted and retained.

Hypothesis Three:

There is no significant difference between teachers and management on the provision and management of Sports and Recreation facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria;

Table 12: Independent t-test summary on the Provision and Management of Sports and Recreation Facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria.

Variable	Status	N	Mean	Std.dev	Df	Cal-t	Crit-t	P
Provision and Management of Recreation and Sports Facilities	Teacher	255	49.0471	11.8480	290	2.341	1.96	0.020
	Management	37	44.3514	7.5322				

Calculated p <0.05 calculated t > 1.96

Results of the Independent t test statistics in Table 12 shows that significant difference exist between teachers and management on the provision and management of Recreation and sports facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria. Reason being that the calculated p value of 0.020 is found to be less than the 0.05 alpha level of significance, while the calculated t value of 2.341 is found to be higher than the 1.96 t critical at Df 290. Their computed mean opinions on provision and management of Recreation and sports facilities in Secondary Schools in Zaria Education Zone are 49.0471 and 44.3514 for teachers and management respectively, indicating that the teachers had higher opinions than the management regarding provision and management of Recreation and sports facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria.

Therefore the null hypothesis which states that there is no significant difference between teachers and management on the provision and management of Recreation and sports facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria, is hereby rejected.

Hypothesis Four:

There is no significant difference between teachers and school management on the provision and management of Welfare/health facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria;

Table13: Independent t-test summary on the Provision and Management of Health/Welfare Facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria.

Variable	Status	N	Mean	Std.dev	Df	Calc-t	Crit-t	P
provision and management of welfare/ health facilities	Teacher	255	49.9294	11.8857	290	1.502	1.96	0.134
	Management	37	46.8919	8.2151				

Calculated p >0.05 calculated t< 1.96

Results of the Independent t test statistics in Table 13.Shows that there is no significant difference between teachers and management on the provision and management of welfare/health facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria. Reason being that the calculated p value of 0.134 was found to be higher than the

0.05 alpha level of significance, while the calculated t value of 1.502 was found to be lower than the 1.96 t-critical at Df 290. Their computed mean opinions on provision and management of welfare/health facilities in Secondary Schools in Zaria Education Zone are 49.9294 and 46.8919 for teachers and management staff respectively. Therefore the null hypothesis which states that there is no significant difference between teachers and management on the provision and management of health facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria, is hereby retained.

4.5 Summary of Major Findings

The study revealed that:

1. Teaching facilities such as laboratories were not properly provided and managed in secondary schools in Zaria Education Zone;
2. Provision and Management of Learning Facilities such as stationeries in Secondary Schools in Zaria Education Zone were poor;
3. There was poor provision and management of recreational and sport facilities in secondary schools in Zaria Education Zone; and

4. There was no adequateprovision and management of health/welfare facilities in secondary schools in Zaria Education Zone.

4.6Discussions of the Findings

Presented below are summary of major findings made by the study citing similar or contrary finding to further discuss them.

The study discovered that there is no significant difference between teachers and management on the provision and management of teaching facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria. It was confirmed from their responses that majority of the respondents are of the opinion that the provision and Management of Teaching Facilities in Secondary Schools in Zaria Education Zone is below expectation as the cumulative mean of 2.423 is less than the decision mean of 3.00. In summary the Provision and Management of Teaching Facilities in Secondary Schools in Zaria Education Zone is very low especially on management of laboratories. Buttressing on the above, Akubue (1991) states that, good school environment would foster desirable behavior, creativity, harmonious relationship and problem-solving skills among students. In the educational institutions, facilities constitute essential inputs which could generate favorable learning environment, facilitate interaction and enhance achievement of educational objectives. In fact, school curriculum would be meaningful

and functional if required facilities are provided in adequate quantity at appropriate time.

It was also discovered that there is no significant difference between teachers and management on the provision and management of learning facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria. Most of the respondents believe that Provision and Management of Learning Facilities in Secondary Schools in Zaria Education Zone is not satisfactory implying that Provision and Management of Learning Facilities in Secondary Schools in Zaria Education Zone is below average even though that Computers are provided., in summary, that Provision and Management of Learning Facilities in Secondary Schools in Zaria Education Zone is below average especially the provision of Stationeries. According to Abdulkarim (2007), the atmosphere of a school depends considerably upon the quality of care given the plant and its equipment. Schools can be truly effective only in a system which provides a well-planned, well-supervised program of services to enhance the educational climate.

Moreover, it was found that significant differences exist between teachers and management on the provision and management of Recreation and sports facilities in Secondary Schools in Zaria Education Zone,

Kaduna state-Nigeria. The respondent's responses on the items under this shows that Provision and Management of Recreation and Sport Facilities in Secondary Schools in Zaria Education Zone need improvement as the cumulative mean of 2.432 is lower than the decision mean of 3.000. Of particular interest is the management of Football equipment/gadget which attracted the least mean of 2.007 and the provision of volleyball facilities which attracted mean of 2.010. In summary Provision and Management Recreation and Sport Facilities in Secondary Schools in Zaria Education Zone. Provision and Management of Recreation and Sport Facilities in Secondary Schools in Zaria Education Zone need improvement especially as it concerns the management of Football equipment/gadget and provision of Volleyball gadgets.

There is no significant difference between teachers and management on the provision and management of welfare/health facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria. The responses also showed that response rate on this are negative since the cumulative mean of 2.473 is lower than the decision mean of 3.000.In summary the Provision and Management of Health/ Welfare Facilities in Secondary Schools in Zaria Education Zone need to be looked into properly, especiallySchool maintenance facilities provision. Apart from depreciation Galadanchi (2006) opine that facilities tend be outdated as a

result of changing needs of the society which necessitate a change in school curriculum. In this regard, facilities will need to be improved different periods. Improvement of facilities implies alteration or modification of Facilities to suit a new demand, new situation or new programme. Whenever there are changes in any part of the education system, the existing facilities will require modification or replacement. The management role in the above can be seen in the areas of planning, organizing, coordinating, directing, controlling, staffing, budgeting and reporting. The school management has to plan for the provision, utilization, maintenance and improvement of the school plant. This also applied to other functions of the management.

Nwadiani (2001) observed that the facilities are not only over utilized, they are also poorly maintained. Similarly, in a study conducted by Aigboje (2007) on Universal Basic Education in Nigeria, he found out that some school facilities were inadequate while others were not available at all .These situations are posing challenges to administrators of schools who are supposed to manage available facilities efficiently and effectively. Udoh&Akpan (1987:288) also pointed; the right type of atmosphere required for effective learning is that consisting of better teaching facilities. Adesina (1980) also lends credence to this as he claims that the quality of education that our children get has direct relevance to the

availability or the lack of physical facilities and overall atmosphere where the learning takes place. Since the basic aim of the school is to create relatively paramount changes in the behaviour of children, the need for adequate and well maintained facilities becomes eminent.

Mgbodile (1986) stressing the need for school plant, observed that the physical appearance and general condition of school physical facilities are the striking basis upon which many parents and friends of any educational institutions may make their initial judgments about the quality of what goes on in the school. In short, the physical facilities play a major role in determining the type of relationship between the school and the community. This is because parents and pupils make their judgments and take their decisions on whether to associate themselves with a particular school after a careful evaluation and consideration of the facilities in the school. Ani (1997) while supporting the above statement opined that if the quality and quantity of physical facilities attracts the admiration of a parent, the conviction of the parent will be that since the quality and quantity of facilities is of such level, the quality of the staff and school programme will be of high standard. Thus Obi (2001) said that the general landscaping of the school speaks succinctly of the tone of the school and the disposition of the management. Therefore to attract the admiration and

acceptance from the community, there is need for a well planned school physical facilities and equipment.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusion and recommendations on the evaluation of the provision and management of school plants in secondary school in Zaria Education zone Kaduna state-Nigeria.

5.2 Summary

The study is titled "Evaluation of the Provision and Management of Facilities in secondary schools in Zaria Education Zone, Kaduna state, Nigeria". The study was guided by four objectives, four research questions and four corresponding null hypotheses. However, the study used Teachers and Management as respondents. Furthermore, related empirical studies were reviewed, citing similarities and identifying differences with the current study. The review further identifies some of the gaps between the current study and other studies.

Survey research design was used for the study and purposive sampling technique to pick sample was used. The study also used structured questionnaire, titled "Provision and Management of Facilities in Secondary Schools Questionnaire (PAMOFISSQ) as a means of data

collection". The instrument was validated by supervisors and statisticians for content and face values. The study pilot tested the instrument and it was certified as statistically fit for the main work.

However, the study used simple percentage and frequency counts to analyses the bio-data variables of the respondents. The arithmetic mean and standard deviation are used to answer the questions raised by the study while independent samples t-test to validate the study's hypotheses. The study discovered the following:

1. There is no significant difference between teachers and management on the provision and management of teaching facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria.
2. There is no significant difference between teachers and management on the provision and management of learning facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria
3. Significant differences exist between teachers and management on the provision and management of Recreation and sports facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria.

4. There is no significant difference between teachers and management on the provision and management of welfare/health facilities in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria.

5.3 Conclusions

The following conclusions are drawn from the study;

1. Provision and Management of Teaching Facilities such as laboratories in Secondary Schools in Zaria Education Zone werevery poor;
2. Provision and Management of Learning Facilities such as statoneries in Secondary Schools in Zaria Education Zone were very poor;
3. The Provision and Management of Recreational and Sport Facilities in Secondary Schools in Zaria Education Zone were very poor; and
4. The Provision and Management of Health/ Welfare Facilities in Secondary Schools in Zaria Education Zone were poor.

5.4 Recommendations

Based on the outcome of the study, the followings recommendations are made:

1. There is the need for adequate funds to be set aside by Kaduna State Government to assist in the provision and effective management of facilities in secondary schools in the study area;
2. Learning facilities such as stationeries, Text books, projectors be supplied by the schools from internally generated revenue instead of waiting for the state government;
3. Sports facilities/gadgets can be acquired if schools are encouraged to participate in competitive sports and money realized be channeled towards providing sport equipment in popular sports like Football and Volleyballs.
4. The management should provide functional welfare facilities and health centres in all schools as health is very crucial to the well being of any set of persons

5.5 Suggestions for Further Studies

The following suggestion is put forward for further studies;

Effect of Adequate Provision and Management of Facilities in Secondary School on Students' Academic Performance in Zaria Education Zone, Kaduna State, Nigeria.

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APPENDIX A: Population Distribution of Teachers and School Management by Schools

S/n	Name of the schools	LGAs	Teachers	Management
1.	Barewa College, Zaria.	Zaria	51	4
2.	G.S.S, Tudun-Jukun, Zaria.	Zaria	38	4
3.	G.S.S, Kuyan-Bana, Zaria City.	Zaria	29	4
4.	Alhuda-Huda College, Zaria	Zaria	53	4
5.	Sheikh Ibrahim Arab Special Secondary School.	Zaria	45	4
6.	G.S.S, Dakace.	Zaria	39	4
7.	G.S.S, Kugu.	Zaria	27	4
8.	Science Secondary school, Kufena.	Zaria	42	4
9.	Government Commercial College, Zaria	S/Gari	50	4
10.	G.G.S.S, (WTC), Zaria	Zaria	35	4
11.	G.G.S.S, Kofan-Gayan, Zaria	Zaria	31	4
12	G.J.S.S, Tudun-wada, Zaria	Zaria	22	4
13.	G.J.S.S, Gyallesu, Zaria	Zaria	27	4
14.	G.J.S.S, RiminDoko, Zaria	Zaria	20	4
15.	G.J.S.S, Mangi, Zaria	Zaria	15	4
16.	G.J.S.S, KofarJatau, Zaria	Zaria	27	4
17.	G.J.S.S, Aba, Zaria	Zaria	17	4
18.	G.J.S.S, KofanDoka, Zaria	Zaria	29	4
19.	G.J.S.S, Chikaji, Zaria	S/Gari	31	4
20.	G.J.S.S, Muchiya	S/Gari	37	4
21.	G.J.S.S, Aminu	S/Gari	40	4
22.	G.J.S.S, (Boys) Chindit	S/Gari	27	4
23.	Girls Junior Secondary School, Chindit	S/Gari	31	4
24.	G.J.S.S, Magajiya	Zaria	22	4
25.	Girls Junior Secondary School, Pada	Zaria	17	4
26.	G.J.S.S, Dongon-Bauchi	S/Gari	28	4
27.	G.J.S.S, Kaura, Zaria City	Zaria	16	4
28.	G.J.S.S, Tudun Saibu	Soba	23	4
29.	G.J.S.S, Richifa	Soba	14	4
30.	G.J.S.S, Kinkiba	Soba	24	4
31.	G.J.S.S, Yakasai	Soba	13	4
32.	G.J.S.S, Dinya	Soba	18	4
33.	G.J.S.S, Likoro	Zaria	22	4
34.	G.J.S.S, Awai	Soba	17	4
35.	G.J.S.S, Tukur-tukur	Zaria	25	4
36.	G.J.S.S, Matari	Soba	18	4
37.	G.J.S.S, Gimba	Soba	19	4
38.	G.J.S.S, Bogari	Soba	16	4
	Total		1,055	152

Source: Zaria Education Zone, 2014

APPENDIX 'B'

PROVISION AND MANAGEMENT OF FACILITIES IN SECONDARY SCHOOL QESTIONAIRE(PAMAFASSQ)

Department of Foundations and Curriculum,

Faculty of Education,

Ahmadu Bello University, Zaria

10th March, 2016.

Dear Respondent,

The researcher is a master of Education Student from the above named Institution carrying out a research work on the "Evaluation of the Provision and Management of School Plant in Secondary Schools in Zaria Education Zone, Kaduna state-Nigeria".

The questionnaire items are designed to elicit the right type of response based on your own objective opinion.

The reliability of the study depends on your sincerity and solemn judgment.

Thanking in anticipation for your favorable response.

Yours'

sincerely,

ZUBAIRU,
MagajiYakubuM.ED/EDUC/31957
/2012-2013

SECTION 'A' (Bio-Data)

INSTRUCTION: Please tick (√) fill the

Information you think is appropriate to your opinion.

1. Status:
    a. Teacher [ ]
    b. Principal [ ]
    c. Vice- Principal [ ]
    d. M.O.E. Official [ ]

2. Gender:
    a. Male [ ]
    b. Female [ ]

3. Qualification:
    a. Below NCE[ ]
    b. NCE [ ]
    c. First degree[ ]
    d. Masters [ ]
    e. Ph.D [ ]
    f. Others specify _____

4. School location:
    a. Urban [ ]
    b. Rural [ ]

S/N	**SECTION B: Provision and Management of Teaching Facilities in Secondary Schools in Zaria Education Zone.**	**Strongly Agreed**	**Agree**	**Undecided**	**Disagree**	**Strongly Disagree**
1.	Classrooms are adequately provided.					
2.	Classrooms are adequately managed.					
3.	Chalk Boards are adequately provided.					
4.	Chalk Boards are adequately managed.					
5.	Laboratories are adequately provided.					
6.	Laboratories are adequately managed.					
7.	Chairs are adequately provided.					
8.	Chairs are adequately managed.					
9.	Tables are adequately provided.					
10.	Tables are adequately managed.					
11.	Public Address systems are adequately provided.					
12.	Public Address systems are adequately managed.					
13.	Flip charts are adequately provided.					
14.	Flip charts are adequately managed.					
15.	Models are adequately provided.					
16.	Models are adequately managed.					
17.	Specimens are adequately provided.					
18.	Specimens are adequately managed.					
19.	Workshops are adequately provided.					
20.	Workshops are adequately managed.					
	SECTION C: Provision and Management of Learning Facilities in Secondary Schools in Zaria Education Zone.	**Strongly Agreed**	**Agree**	**Undecided**	**Disagree**	**Strongly Disagree**
21.	Computers are provided.					
22.	Computers are managed.					
23.	Libraries are adequately provided.					
24.	Libraries are adequately managed.					
25.	Internet/ICT is provided.					
26.	Internet/ICT is managed.					
27.	Microscopes are provided adequately.					
28.	Microscopes are adequately managed.					

29.	Projectors provided adequately.					
30.	Projectors are adequately managed.					
31.	Video CD Players are provided.					
32.	Video CD Players are managed.					
33.	Audio CD Players are provided.					
34.	Audio CD Players are managed.					
35.	Text Books are provided.					
36.	Text Books are managed.					
37.	Stationeries are adequately provided.					
38.	Stationeries are managed adequately.					
39.	Exercise Books are provided.					
40.	Exercise Books are managed.					
	SECTION D: Provision and Management Recreation and Sport Facilities in Secondary Schools in Zaria Education Zone.	**Strongly Agreed**	**Agree**	**Undecided**	**Disagree**	**Strongly Disagree**
41.	Football pitch is adequately provided.					
42.	Football pitch is adequately managed.					
43.	Football equipment/gadget is provided.					
44.	Football equipment/gadget is managed					
45.	Sport/game transport facilities are provided.					
46.	Sport/game transport facilities are managed.					
47.	Athletics facilities are provided.					
48	Athletics facilities are managed.					
49.	Out-doors facilities are provided.					
50.	Out-doors facilities are managed.					
51.	In-doors facilities are adequately provided.					
52.	In-doors facilities are adequately managed.					
53.	Volleyball facilities are provided.					
54.	Volleyball facilities are managed.					
55.	Basket ball facilities are provided.					
56.	Basket ball facilities are managed.					
57.	Handball facilities are provided.					
58.	Handball facilities are managed.					

59.	Table-tennis facilities are provided.					
60.	Table-tennis facilities are managed.					
	SECTION E: Provision and Management of Health/ Welfare Facilities in Secondary Schools in Zaria Education Zone.	**Strongly Agreed**	**Agree**	**Undecided**	**Disagree**	**Strongly Disagree**
61.	Staff transport facilities are adequately provided.					
62.	Staff transport facilities are adequately managed.					
63.	Office health equipments are provided.					
64.	Office health equipments are managed.					
65.	Office generators are provided.					
66.	Office generators are managed.					
67.	Office sitting facilities are provided.					
68.	Office sitting facilities are managed.					
69.	School canteen is provided.					
70.	School canteen is managed.					
71.	Staff common room is adequately provided.					
72.	Staff common room is adequately managed.					
73.	Office fans/air conditions are provided.					
74.	Office fans/air conditions are managed.					
75.	Office lighting facilities are adequately provided.					
76.	Office lighting facilities are adequately managed.					
77.	School maintenance facilities are provided.					
78.	School maintenance facilities are managed.					
79.	School cafeteria/workshop is provided.					
80.	School cafeteria/workshop is managed.					

APPENDIX 'C'