

**EVALUATION OF PROVISION AND MAINTENANCE OF INFRASTRUCTURAL
FACILITIES IN BOARDING SECONDARY SCHOOLS IN YOLA METROPOLIS
ADAMAWA STATE, NIGERIA**

BY

**AHMED RUKAIYA SAAD
M.ED/EDUC/7304/2009-2010**

**A THESIS SUBMITTED TO THE DEPARTMENT OF EDUCATIONAL
FOUNDATION AND CURRICULUM, FACULTY OF EDUCATION, AHMADU
BELLO UNIVERSITY, ZARIA-NIGERIA IN PARTIAL FULFILLMENT FOR THE
REQUIREMENT FOR THE AWARD OF MASTER'S OF EDUCATION DEGREE
(M.ED) IN EDUCATIONAL ADMINISTRATION AND PLANNING**

**DEPARTMENT OF EDUCATIONAL FOUNDATION AND CURRICULUM
FACULTY OF EDUCATION
AHMADU BELLO UNIVERSITY, ZARIA**

JUNE, 2014

DECLARATION

I hereby declare that this thesis is as a result of my personal research work. It has never been presented anywhere for the purpose of the award of a higher degree. All qualitative and source of information are either indented or acknowledged by means of references.

Ahmed Rukaiya Saad
M.Ed/Educ/7304/2009-2010

Date

CERTIFICATION

This thesis entitled “Evaluation of Provision and Maintenance of Infrastructural Facilities in Boarding Secondary Schools in Yola Metropolis Adamawa State, Nigeria” by Ahmed Rukaiya Saad meets the regulations governing the award of the Master’s Degree in Education (Educational Administration and Planning) of Ahmadu Bello University, Zaria-Nigeria is approved for its contribution to knowledge and literary presentation.

Dr. B.A. Maina
Chairman, Supervisory Committee

Date

Dr. M.O. Dare
Member, Supervisory Committee

Date

Dr. B.A. Maina
Head of Department

Date

Prof. A.A. Joshua
Dean, School of Postgraduate Studies

Date

DEDICATION

I dedicate this work to my parents late Alhaji Mustapha Ahmed Chiroma and Hajiya Aishat Bawuro. My beloved husband Dr. Saad Ahmed and my children Zainab, Muhammad and Aisha.

ACKNOWLEDGEMENTS

My highest level of gratitude goes to Almighty Allah, the Beneficent and most Merciful for bring me thus far in my academic pursuits.

I would like to express my heartfelt appreciation for the motivation, encouragement and support given to me by my supervisors Dr. B.A. Maina and Dr. M.O. Dare of their advice, criticism and suggestions at various stages of the work. I must not forget other pillars in the academic house, Dr. E.I. Makoju, Prof. D. Otu, Prof. I.O. Inekwe, Dr. H.O. Yusuf, Dr. A.A. Igunnu and Dr. A. Guga for their encouragement throughout my course.

My special thanks to my husband Dr. Saad Ahmed for his encouragement and unwavering support throughout my studies. I owe a big thanks to my brother in-law Barr. Mustapha Hammawa Malabu for his immeasurable contributions towards this work. May Allah bless and reward you. Ameen.

I also wish to thank my respondents, all those who helped in the distribution and collection of the questionnaires, my typist Chris Okon and Mr. Cletus for the statistical analysis.

Hajiya Mairo Aliyu Oga, Ahmed Mustapha, Bilkisu, Hadiza, Jamila, Aminu, Walid Mustapha Chiroma all my course mates and my extended family members cannot be forgotten for their moral and financial assistance towards the success of this work. May Almighty Allah (SWT) bless and guide us a right path.

TABLE OF CONTENTS

TITLE PAGE.....	i
DECLARATION.....	ii
CERTIFICATION.....	iii
DEDICATION.....	iv
ACKNOWLEDGEMENTS.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES.....	ix
ABSTRACT.....	xi
CHAPTER ONE: INTRODUCTION	
1.1 Background to the Study.....	1
1.2 Statement of the Problem.....	3
1.3 Objectives of the Study.....	5
1.4 Research Questions.....	6
1.5 Research Hypotheses.....	6
1.6 Basic Assumptions.....	7
1.7 Significance of the Study.....	7
1.8 Scope of the Study.....	8
CHAPTER TWO: REVIEW OF RELATED LITERATURE	
2.1 Introduction.....	9
2.2 Conceptual Framework.....	9
2.2.1 Concept of Facilities.....	11
2.2.2 Types of school facilities.....	11
2.3 Provision and Maintenance of School Infrastructural Facilities.....	12

2.3.1	Provision and Maintenance of Classroom Facilities	14
2.3.2	Provision and Maintenance of Laboratory/Workshop Facilities	18
2.3.3	Provision and Maintenance of Library Facilities	22
2.3.4	Provision and Maintenance of Water and Electricity Supply	24
2.3.5	Provision and Maintenance of Games Facilities	25
2.3.6	Provision and Maintenance of Accommodation Facilities	26
2.4	The Roles of Principals in planning and maintaining school facilities	28
2.5	The Role of Teachers in Maintaining School Facilities	30
2.6	The Roles of Students in Maintaining School Facilities	31
2.7	The Roles of Inspectors on the Improvement and Maintenance of School Facilities .	32
2.8	How to Improve School Facilities through Effective Administration and Planning ..	33
2.9	Empirical Studies	35
2.10	Summary.....	36

CHAPTER THREE: METHODOLOGY

3.1	Introduction.....	37
3.2	Research Design.....	37
3.3	Population	37
3.4	Sample and Sampling Techniques	38
3.5	Instrumentation.....	39
3.5.1	Validity of the Instrument.....	40
3.5.2	Reliability of the Instrument	41
3.6	Pilot Study.....	41
3.7	Administration of the Instrument	41
3.8	Method of Data Analysis	41

CHAPTER FOUR: DATA PRESENTATION AND ANALYSIS

4.1	Introduction.....	42
4.2	Presentation of Tables and Interpretation.....	42
4.3	Hypothesis Testing.....	67
4.4	Summary of hypotheses.....	73
4.5	Discussion of the Findings.....	74

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1	Summary.....	79
5.2	Conclusion.....	81
5.3	Recommendations.....	82
5.4	Suggestion for Further Research.....	83
	REFERENCES.....	84
	APPENDIX.....	88

LIST OF TABLES

Table	Pages
1. School Plants Component and Item.....	11
2: Summary of Distribution of the population of Respondents in the study.....	39
3: Enrolment / Staff Strength of sampled schools	39
4: Opinions of Respondents on the Provision and Maintenance of Classroom Facilities in Boarding Secondary Schools in Yola Metropolis.....	44
5: Opinions of Respondents on the Provision and Maintenance of Laboratories/Workshop Facilities in Boarding Secondary Schools in Yola Metropolis	48
6: Opinions of Respondents on the Provision and Maintenance of Library Facilities in Boarding Secondary Schools in Yola Metropolis.....	52
7: Opinion of Respondents on the Provision and Maintenance of Accommodation Facilities in Boarding Secondary Schools in Yola Metropolis.....	56
8: Opinions of Respondents on the Provision and Maintenance of Games Facilities in Boarding Secondary Schools in Yola Metropolis.....	60
9: Opinions of Respondents on the Provision and Maintenance of Electricity and water Supply in Boarding Secondary Schools in Yola Metropolis.....	64
10: Summary of one way Analysis of Variance (ANOVA) on the Opinions of the Respondents on Provision and Maintenance of Classroom Facilities in Boarding Secondary Schools in Yola Metropolis.....	67
11: Summary of one way analysis of variance (ANOVA) on the opinions of respondents on provision and maintenance of laboratory facilities in boarding secondary schools in Yola Metropolis.	68
12: Summary of one way Analysis of Variance (ANOVA) on the opinions of respondents on provision and maintenance of library facilities in Boarding Secondary Schools in Yola Metropolis.....	69
13: Summary of one way analysis of variance (ANOVA) on the opinions of respondents on provision and maintenance of accommodation facilities in Boarding Secondary School in Yola Metropolis.....	70

14:	Summary of one way analysis of variance (ANOVA) on the opinions of respondents on provision and maintenance of Games facilities in Boarding Secondary School in Yola Metropolis	71
15:	Summary of one way analysis of variance (ANOVA) on the opinions of respondents on provision and maintenance of water and electricity supply in Boarding Secondary Schools in Yola Metropolis	72
16:	Summary of Scheffe Test on the difference in opinions of Teachers, Principals, Non-teaching Staff and Officials of M.O.E on the Provision and Maintenance of Electricity in Boarding Secondary Schools in Yola Metropolis.....	73

ABBREVIATIONS

ANOVA	-	Analysis of variance
WAEC	-	West African Examination Council
UPE	-	Universal Free Primary Education
JSS	-	Junior Secondary School
SSS	-	Senior Secondary School
SPSS	-	Statistical Package for Social Sciences
MOE	-	Ministry of Education
UNESCO	-	United Nations Educational, Scientific and Cultural Organization

OPERATIONAL DEFINATION OF TERMS

- Infrastructure - Infrastructure are basic systems or services that are necessary for an organization to run smoothly such as buildings, transport, water and power supply.
- Facilities - Sometime designed, built or installed to serve a specific function affording a convenience of service, such as, buildings, services, equipments, some provided for a purpose.
- Boarding School - Is a school where some or all student study and live during the school year with their fellow student's and teachers and/or administrators. The word "Boarding" is used in the sense of bed and board, i.e lodging and meals. Some boarding schools also have day students who attend the institution by day and return off-campus to their families in the evening.

ABSTRACT

This study evaluates the provision and maintenance of infrastructural facilities in boarding secondary schools in Yola metropolis. The researcher was interested to check whether there is appropriate provision of infrastructural facilities to solve the problem of students' overpopulation in classrooms, provision of laboratories and workshop facilities, the accommodation of students and teachers, games facilities for students sporting activities and water and electricity supply in boarding secondary schools. The study was a survey method that covers all boarding secondary schools within Yola metropolis. The questionnaire was used to collect relevant data. To give the general description of the data, frequency tables and simple percentages were used. Six (6) hypotheses were formulated and the testing was done by using analysis of Variance (ANOVA). The results showed that school facilities were inadequately provided and where some of these were provided they were inadequately managed. It was revealed that libraries, laboratories and workshops are not well equipped and maintained, therefore, did not facilitate teaching and learning. It was also evident that accommodation facilities are not enough for both staff and students. There was inadequate supply of water and electricity in the boarding secondary schools in Yola metropolis. Game fields are provided in all the schools, however, there were no sporting equipments. Generally, there was lack of maintenance of infrastructural facilities in the schools. It was recommended that Adamawa State government should make effort to provide the boarding secondary schools with adequate school infrastructural facilities while school managers on their part should put a system in place on maintaining and managing the facilities given to their schools. The Ministry of Education officials should monitor and supervise the schools on regular basis.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

School is a complex social organization established for the production of human capital (educated persons). The schools input resources are human (that is, teaching and non-teaching staff) and non human (that is, time strategies physical and financial resources). These input resources are obtained, procured, produced or developed and utilized to produce the output (that is, school graduates).

The operational input resources in the education industry are referred to as school infrastructural facilities (Olutola, 1998). The provision and proper management of these facilities have been found to be significantly related to school performance (Adeboyeje, 1999). For instance, Olutola's (1998) study revealed that schools with adequate facilities recorded greater achievement in West African Examination Council (WAEC) Examinations than schools with poor Educational facilities.

Teaching and learning are very important aspects of education, because the realization of educational objectives depends largely on them. Education involves the inculcation of norms, values and right attitudes in an individual. As such to learn, a person must be taught and to teach there must be someone to impart knowledge and there must be facilities to instruct with. For teaching and learning to be effectively carried out there must be infrastructural facilities such as classrooms, laboratory equipment, playground, hostel facilities, water and light supply. All these facilities help to facilities teaching and learning. Adequate classrooms, laboratory equipment, playground, library and furniture are necessary for effective teaching.

Adequate facilities in a school improve the quality of instruction and striving to create healthy school climate. Most instructional facilities in schools are stale, broken, out date and inferior such that they cannot meet up with the standard of the educational system and can result in low performance of students academically. There is the increasing belief in the efficacy of education as a powerful instrument of development, especially among developing nations, including Nigeria. Consequently, the nation's school system is witnessing a historical expansion in school enrolment and school programmes.

This would expectedly necessitate a great demand for more school facilities to take care of the teaching school population (Abdulkareem, 2003). In spite of the importance of these resources in achieving education goals, adequate attention has not been paid to their provision and management in Nigerian schools. As elucidated by Adeboye (1999), Inspector's report over years have indicated that there is abundant evidence of a catalogue of inadequacies in the provision and judicious use of school buildings and materials for instruction in the country.

In the mid-70s, the Federal Government embarked on Universal Free Primary Education (UPE) in all parts of the country. This programme involved physical development of primary schools in addition to teacher training etc. To ensure the success of that programme, the Federal Ministry of Education Issued some technical guidelines for the building programme which consisted of some prototype school designs (Fafunwa, 2004).

That programme has come and gone and many lessons are obvious. Some of the most glaring aspects include poor quality constructions, unsupervised development and extra ordinary high contract figures (Mulfwang, 2006). In Nigeria, early colonial administrators encouraged the building of government boarding schools

so that the boarding students might be detached from the undesirable influence of ‘native towns’ and their good character developed under the continuous control and influence of British school masters (Fafunwa, 2004). The boarding school portrays a school system where students are kept or confined within a school compound away from their homes. They sleep and study within the compound and are allowed to leave the compound only with the permission of the school authority.

Teaching and learning in a school can only take place in school if there is a provision of classrooms, laboratories and library, because teaching and learning involves learning experiences and the interaction of the learners with their environment (Otu, 2002). Land and buildings are capital assets in any organization. They are prerequisites for educational institutions. It is part of good management to have pieces of land available for use. Educational institutions do not just need land for different building programmes but they need a vast area of it for other facilities both for immediate and future use. Because of this, the acquisition of a large piece of land and the maintenance of it is a necessity. For instance, the types of institution whether a teachers’ college, a technical college, a university, a secondary or primary school will determine the materials to plan for. Besides, materials also vary according to whether the institution is operating a day or boarding system, girls or boys or mixed and so on (Jedo, 2007).

1.2 Statement of the Problem

Education facilities are like raw materials to an industry and thus they are very essential to the whole processes involved in the educational enterprise. Educational development has come a long way, enrolment has risen tremendously while more money is continuously being spent on the educational enterprise with the hope of

improvement in terms of classrooms, computer facilities, laboratories, hostels, accommodation, libraries, furniture, water and electricity supply, etc, but the problem of implementation has continued to be crucial.

Boarding secondary schools in Nigeria require adequate infrastructural facilities such as hostel accommodation, laboratories, classrooms, libraries, and recreational facilities for the teaching and learning to take place effectively. The quality of education that our students receive bears direct relevance to the availability or lack of infrastructural facilities and overall environment in which learning takes place. In other words, educational programmes and processes are greatly influenced by the school environment.

The availability and general appearance of classrooms, hostels, libraries, laboratories and instructional materials such as textbooks, blackboards and furniture of school constitutes the basics upon which many patrons make their initial judgment about the quality of the school and the educational programme. The absence of these facilities often leave a lot of doubt in the minds of students, parents and the general society as to what type of learning and teaching that could take place in such a situation. Appearance and general condition of school facilities are the striking basis upon which many parents and friends of any educational institution make the initial judgment about the quality of what goes on in the boarding schools. Africa in general and Nigerian in particular are characterized by low maintenance culture, especially in respect of government owned properties. Halimatu (2003) observed that school infrastructure is fast deteriorating, while maintenance culture is declining. Many facilities are mismanaged or over utilized which result to damage or collapse of such facilities. Shortages of facilities bring about stretching the inadequate facilities available and consequently result to complete breakdown.

Inadequate maintenance of facilities leads to waste and thereby making plans ineffective. Musa (2003) opined that lack of facilities management result in depression in the academic programme and waste of resources. Absence facilities management also result in low students' performance as learning becomes difficult. Inadequate provision and maintenance of infrastructural facilities in boarding secondary schools has apparently given rise to the allegation of falling standard of education in Adamawa State as well as the country.

The study was therefore directed primarily at evaluating the provision and maintenance of infrastructural facilities in Boarding Secondary Schools in Yola metropolis Adamawa State, Nigeria and identifying the fundamental problems of the existing facilities and thus highlight the shortcomings.

1.3 Objectives of the Study

The objectives of the study are:

1. To evaluate the provision and maintenance of classroom facilities in boarding secondary Schools in Yola metropolis, Adamawa state.
2. To evaluate the provision and maintenance of laboratory and workshop equipment in boarding secondary schools in Yola metropolis, Adamawa state.
3. To assess the provision and maintenance of library facilities in boarding secondary schools in Yola metropolis, Adamawa state.
4. To find out the provision and maintenance of accommodation facilities in boarding secondary schools in Yola metropolis, Adamawa state.
5. To assess the provision and maintenance of games facilities in boarding secondary schools in Yola metropolis, Adamawa state.
6. To determine the provision and maintenance of water and electricity supply in boarding secondary schools in Yola metropolis, Adamawa state.

1.4 Research Questions

To guide the researcher in achieving the objectives of this study, the researcher seeks to find answers to the following research questions:

1. What is the level of provision and maintenance of classroom facilities in Boarding Secondary Schools in Yola metropolis?
2. How relevant are laboratories/workshop facilities to teaching and learning in Boarding Secondary Schools in Yola metropolis?
3. What libraries facilities are readily available for use in boarding secondary schools in Yola metropolis/
4. Are accommodation adequately provided for staff and students in boarding secondary schools in Yola metropolis?
5. Are games field and sporting equipments adequately provided and well maintain in boarding secondary schools in Yola metropolis?

1.5 Research Hypotheses

The following hypotheses have been formulated to guide the study:

1. There is no significant difference in the opinion of principals and teachers on the provision and maintenance of classroom facilities in boarding secondary schools in Yola metropolis.
2. There is no significant difference in the opinion of principals and teachers on the provision and maintenance of laboratory and workshop equipment in boarding secondary schools in Yola metropolis.
3. There is no significant difference in the opinion of principals and teachers on the provision and maintenance of library facilities in boarding secondary schools in Yola metropolis.

4. There is no significant difference in the opinion of principals and teachers on the provision and maintenance of accommodation facilities in boarding secondary schools in Yola metropolis.
5. There is no significant difference in the opinion of principals and teachers on the provision and maintenance of games facilities in boarding secondary schools in Yola metropolis.
6. There is no significant difference in the opinion of principals and teachers on the provision and maintenance of water and electricity supply in boarding secondary schools in Yola metropolis.

1.6 Basic Assumptions

1. If proper funding is made, infrastructural facilities such as classrooms, laboratories, libraries, computer facilities, hostels, playing ground, sporting equipment, furniture, electricity and water supply will be adequate in boarding secondary schools in Yola metropolis.
2. If the school administrators imbibe the culture of maintenance, infrastructural facilities will last longer.
3. If there are infrastructural facilities, students will be given chance to be well educated and achieve their aims in life.
4. If there is good school climate, infrastructural facilities will be maintained.

1.7 Significance of the Study

This study is significant because it is an attempt to evaluate the provision and maintenance of infrastructural facilities in boarding secondary schools in Yola metropolis.

Stakeholders who are responsible for the funding of boarding secondary schools will benefit from the impact of using good infrastructural facilities in enhancing teaching and learning in boarding secondary schools and they will see the benefits of their huge investment.

The findings from the study are expected to alert or educate all those associated with the education process in the following ways:

1. They will provide an understanding into the extent of government contribution in providing educational infrastructural facilities to educational institutions in the light of increasing public expenditure on education.
2. Provide useful information to educational planners and implementers in terms of maintenance and provision of facilities for meaningful educational achievement in boarding secondary schools.
3. Provide an insight into the existing state of infrastructural facilities in boarding secondary schools that might assist in future educational plans.
4. To bring out the relevance of school infrastructural facilities on teaching and learning in boarding secondary schools.

1.8 Scope of the Study

This study will be concerned with the evaluation of the provision and maintenance of infrastructural facilities in boarding secondary schools. The scope of the study is Yola metropolis, Adamawa State.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The main aim of this research work is to evaluate the provision and maintenance of infrastructural schools facilities in boarding secondary schools in Yola metropolis Adamawa state, Nigeria.. In this chapter, the research will review the relevant related literature in respect of which the study will be based on.

2.2 Conceptual Framework

This section focused on the conceptual framework. The concepts related to the study were clarified and put in the context of the study. School facilities are the physical resource inputs that makes the implementation of school curriculum easy or simple. In fact, these facilities have been found to enhance the achievement of school goals in the long run (Olutola, 1998). These facilities may be consumable or non-consumable. Olutola (1998) referred to these as school plants, while Adeboyeje (1999) grouped them as school infrastructural facilities. These facilities include the school site, classrooms, libraries, toilets, cafeteria, stores, gardens, sport fields, tools, instructional facilities, staffs and pupils furniture, teachers and pupils text books, utilities etc.

There is abundant evidence that the available school facilities are far less than the required ones in the Nigerian school system (UNESCO, 2003). Worse still, it has been found that most of the available ones are in poor conditions for use due to poor management (Abdulkareem, 1983 in Adeboyeje 1999). This deplorable condition of facilities in schools has been affecting the efficiency and the effectiveness of the Nigerian school since these are the necessary tools for teachers and learners. As

advised by Abdulkareem (1999), these facilities must be made, purchased, stored, distributed and used in planning educational development. In fact, they are required in adequate quantity and quality especially in pursuing the Universal Basic Education programme started in 1999 in Nigeria.

Abdulkareem (2003) has grouped these under seven components of school plant as follows:

Table 2.2.1 School Plants Component and Items

S/NO	Components of School Plant	Item
1.	Building (a) Instructional	Classrooms, Libraries, Laboratories, Workshops, arts rooms, auditorium, gymnasium, multipurpose rooms/halls, etc.
	(b) Administrative	Head teachers’/principals’ offices, assistant head teachers’ office, vice- principals’ office, guidance-counselor’s office, etc.
	(c) Circulation	Corridors, Lobby, staircases, any other spaces for students’/pupils’ recreation.
	(d) Conveniences	Toilets, dormitories, cafeteria, Stores, custodian (school plant personnel) rooms, staff residential quarters, etc
	(e) Recreational	Parks, garden/school farms fields, courts, lawns etc.
2.	Machinery	Workshop machine & tools, duplicating machine nowers, etc.
3.	Transport	Vehicles (school bus and staff bus), tractors, motor bicycles, etc.
4.	Equipment	Laboratory and workshop equipment, sporting equipment, instructional facilities (teaching aids), computer sets, photocopiers, typewriters, etc.
5.	Furniture	Staff furniture and pupils’/ students’ furniture, etc.
6.	Books	Teachers’ and Pupils’/students textbooks, library books etc.
	Utilities (a) Electrical	Electrical generating sets, air Conditioners, fans, etc.
	(b) Water supply	Boreholes, deep wells, water tanks, pipe-borne water, etc.
7.	(c) Communication	Telephone, relax, fax Machines, etc.

Source: A. Y. Abdulkareem (2003)

2.2.1 Concept of Facilities

Castaldi, (1977) defined facilities as “Those things of education” which enable a skillful teacher to achieve a level of instruction effectiveness that exceeds by far what is possible when they are not provided.

Adesina, (1981) defined infrastructural facilities as material resources that could be used to achieve the stated goals in an organization. The infrastructural school facilities include building such as classrooms, administrative block which comprises of principal’s office, vice principals and staff room. Apart from administrative offices, other buildings such as laboratories and workshops, dormitories, school library, assembly hall, dining hall, kitchen, stores, staff quarters, school farm, toilet facilities, water and electricity, school vehicles and parks, etc.

2.2.2 Types of school facilities

There are different types of school facilities such as, structural facilities, instructional facilities, school records etc.

The structural facilities: Ovnigho (2004) cited that the structural facilities in schools can be grouped in to the following categories: School plant:-the school plant consists of buildings, play ground, sport fields, and outdoor equipment. The school plant can be grouped in to the school areas and housing areas. He went on to stress that, the school area is made up of classrooms, laboratories, workshop, libraries, resources rooms, school shop, school bookshop, assembly hall, furniture, road network, parking lot, administrative block. such buildings include premises used for teaching/learning administration or those premises that are used for related purposes.

The housing area on the other hand, consist of the area where accommodation is provided for both students and staff members. In some schools dispensaries or

clinic, stores, dining halls, school poultry farm or garden, generator room, security post, are located in the housing area.

The instructional materials: These includes audio visual and visual aids, computers, projectors, type writers, etc. other facilities are school bell, school wall clock, school posters.

School records: These also consist of administrative files, register, log book, certificate / testimonials, result booklets, duty books, diaries and scheme of works, departmental files, club and societies files, personnel or staff movement book, cash or finance and account book, health record book, parent teachers association minute book, staff minutes book, etc.

2.3 Provision and Maintenance of School Infrastructural Facilities

Castaldi (1977) observed that before independence in Nigeria, the community as a whole was keenly interested in providing adequate school infrastructural facilities while the school administrators, teachers and students were fully engaged in the management of these school facilities. Ironically, the believe by an average Nigerian that the business of education is that of government has led to the impression that the government should build schools to take over the existing ones, and must stock the schools with personnel and facilities. Unfortunately, education is just one out of the numerous sectors on which government should spread its limited resources. This probably explains why people complain that the standard of education is falling in Nigeria (Abdulkareem, 1999) because school facilities are far less than the demand on them in fact many adults recall their own school days when teachers were devoted, when class were small, when facilities were enough for teaching and learning and

when overall learning was fun. Such people have expressed concern over the deplorable state of facilities in our schools (Adeboyeje 1999).

In spite of government huge financial allocations of education in its annual budget, school facilities are still grossly inadequate in Nigeria. Hence, there is the dire need to explore strategies for providing, utilizing and maintaining these facilities in the school system (UBE Monitoring Manual, 2003).

Maintenance of school infrastructural facilities implies activities put in place to restore the physical condition of the school facilities. Maintenance is the concern of the following:

1. Federal government
2. State government
3. State Universal Basic Education Board
4. Local government education authority
5. Principals
6. Teachers
7. Students

It is important to note that only when infrastructural facilities are properly maintained in excellent condition that complete and sound educational programmes will be offered. It should also be noted that proper maintenance of school facilities is very vital because it ensures durability and its lifespan. In addition, in today's economic climate no organization can afford to waste money on purchases of new equipment every time. Therefore, it is everybody's responsibility to ensure proper maintenance of school facilities.

2.3.1 Provision and Maintenance of Classroom Facilities

According to Oxford New Mini Dictionary (1995) a classroom is a room in a school where lessons take place. Jedo (2007) says a classroom is any place where one learns or gains experience. Classroom can be seen as a room in a school or college, in which classes are held. Structural and mechanical features of a classroom include foundation, walls, roofs, floors, ceilings and electrical wiring. Structure should meet or exceed all barriers both externally and internally. Foundations should be strong and stable. Roofs should be structurally sound and well maintained ceilings should be ensured to adequately prevent sound. Windows, doors and walls should be of good finish materials that require minimum maintenance, ceilings and walls should be the kinds that are easily cleaned and resistance to stain. Classroom floor coverings should be the type which requires minimum care.

There are elements of the classroom environment that research shows to be critical to the success of students. Physical conditions in the classroom impact student attention and focus. Elements that are important include temperature, heating and air quality (Otu, 2002). Classrooms should be very spacious to accommodate all the students. Classroom door should be adequate to provide free movement. Emergency doors should be provided where necessary. Glass should be properly located and protected to prevent accidental students contact and to ensure their safety. Emergency lighting should be provided throughout the building. Floors should be maintained in a nonslip condition. Multi-story buildings where application should have at least two stairways. Ventilation system should be provided for adequate circulation of clean air. Lighting system should provide adequate distribution of illumination for teaching and learning. External noise should not be allowed to distract students' attention in

the classroom. Colour schemes, building materials and decorations should be appealing.

Furniture and equipment should be the type that provides comfort and pleasing atmosphere. Instructional materials should be adequate for teachers and students utility. The space for art should be sufficient to accommodate the programme and equipment. There is need for provision of first aid box. Electrical service should be ensured. Electrical controls should be safely protected with disconnect switches easily accessible. Well maintained light sources should be properly placed to provide adequate lighting. Chalkboard should be adequately provided and well managed. Finally, there should be provision for fire extinguisher in case of fire outbreak.

A school building can have a significant positive or negative effect towards fostering a productive learning environment. Classrooms that are dark, uncomfortable, crowded, noisy or when the teacher is a long way from the students can be a disincentive for students to learn or even to continue with their studies (Mutfwang, 2006).

Classrooms are necessary facilities in any institution of learning. Students learn under a favourable and convenient atmosphere. It is psychological that when buildings and classrooms are imposing and attractive, students tend to learn with enthusiasm out of love and interest in the conducive environment. Thus, classrooms should be well designed in a comfortable and colourful manner to make students and teachers be proud of them. The size or dimensions of each classroom should not be too small or too large. Adequate means of ventilation should be provided in order to keep the students hygienically sound and healthy. Classrooms should be kept away from unnecessary noise and distractions.

Classroom facilities are essential educational facilities that are required for effective teaching and learning and realization of educational objectives at any level of education. Classroom facilities can be classified as durable or non-durable. The durable ones include the classroom building, structures, laboratory and workshop equipment, the library, computer machines, chalkboard, furniture and other educational equipment. Furthermore, the perishable or non-durable classroom facilities include stationery, chalk, textbooks, writing materials, educational pictures, perishable laboratory tools and spare parts.

It is the responsibility of the classroom teacher to manipulate the various classroom facilities to impart knowledge in the learner using appropriate teaching methods. The teacher is also expected to be skillful and resourceful in providing alternative facilities where the conventional ones are not available in the aspect of instructional materials.

Stated by Jedo (2007), the number of classrooms depends on the number of students and the different types of subjects to be taught and learnt. Essentially, a boarding secondary school should possess three kinds of classrooms. These are permanent classrooms, the special subject classrooms and laboratories or workshops.

- a.** The permanent classrooms are places where students have their individual chairs and lockers in which they keep their books.

The number of classrooms in this category depends on the number of streams in each class. For instance, a boarding secondary school running the Junior Secondary School (JSS) system with four streams will have 24 permanent classrooms labeled Junior Secondary School (JSS) / Form 1A, 1B, 1C, 1D and so on to Senior Secondary School (SSS) / Form 1A, 1B, 1C, 1D and so on. All these can be in form of blocks, viz:

Block A = 4 classrooms

Block B = 4 classroom

Block C = 4 classroom

Block D = 4 classroom

Block E = 4 classroom

Block F = 4 classroom

(Jedo, 2007)

A permanent form teacher is assigned to mark the register and as such it is easy to discover when students are absent from school. Students have their chairs and lockers in their different classrooms. Individuals' books are kept in the lockers, thus making for proper arrangement and adequate preparation for lessons. Inside the classroom the teacher has his own table and a storage cupboard. The permanent classroom makes class order, discipline and management easy to execute.

- b.** The special subject classroom: These are classrooms where students in each class go when they have specialized subjects and quit as soon as they finish their own lessons. The number of such classrooms depends on the number of the special subjects. The subjects included in this category are French, Arabic, History, IRK / CRK and Social Studies (Jedo, 2007)

The York School Division (2006) enumerated strategies which school managers and policy maker need to take seriously, for effective school maintenance.

- Roofs, ceilings, floors, walls, doors, windows and electrical fittings in classrooms should be constantly kept in good condition.
- There should be regular checking of classrooms to detect damages and an up-to-date record of damaged facilities to be taken for prompt action.
- Repairing broken furniture and leaking roofs or blown off roofs.

- Sweeping the floor, cleaning the door, windows, walls, ceilings, etc, for teaching and learning to take place effectiveness.

Maintenance of classroom facilities implies activities put in place to restore the physical condition of the classroom facilities. Principals should organized a periodic and systematic inspection for classroom facilities. This should be made in order to beautify areas of need or that need repairs. Everything in the classrooms including furniture, lockers, doors, windows, blackboard or whiteboard and laboratories equipments should be itemized on a check list and be inspected. All staff in the school including teachers and non-teaching staff should be involved in identifying and reporting those areas that needed repairs. The school head / principal in return evaluates and collects the report for onward transmission to appropriate authority for further action.

The classroom environment has great impact on teaching and learning at all levels of education. Classroom facilities in particular make teaching and learning convenient, meaningful and innovative. It is therefore necessary for all the stakeholders in the secondary education to make meaningful financial and material contributions to the provision of educational facilities for the realization of the national educational objectives in Nigeria.

2.3.2 Provision and Maintenance of Laboratory/Workshop Facilities

In defining the laboratory, Castaldi (1977) see it as the space where staff and students perform experiments to gain knowledge on the basis of direct experiences. He assures us that students gain knowledge in the laboratory under the guidance of an instructor, or by self-instruction. He categorized the laboratories into two which are;

1. Laboratories for Physics, Chemistry, Biology, Integrated Science and Home Economics
2. And workshop for languages, Carpentry, Engineering, Computer room, and other vocational programs should be housed in space that meets standard.

There should be laboratories for the sciences, that is Geography, Biology, Chemistry, Physics and General Science. So also, there is the need for workshops for the teaching of such subjects as Fine Art, Technical Drawing, Woodwork, Metal Work, Music, Mechanics and so on.

Laboratory and workshop facilities also enable the teacher to teach the three domains of learning. These include the cognitive, the psychomotor and the affective domains. Facilities such as laboratory equipment, workshops, experimental facilities, computer machines help the teacher to impart knowledge in the aspect of the cognitive. This involves the effective teaching of science subjects such as mathematics, physics, chemistry and biology.

Similarly, availability of laboratory and workshop facilities in the school will enhance teaching and learning in aspects such as technical drawing, mechanical, home economics and agriculture while the affected domain can be done through the use of educational pictures, story books, educational films and literature books.

Special subjects classrooms are necessary because of the following reasons:

- a. Each specialist teacher is afforded the opportunity of adequate preparation.
- b. All teaching aid in the room is permanent for the particular subject. Such aids are easily and quickly displayed and well cared for.
- c. It makes the school equipment in the laboratories and workshops safe, secure and easy to maintain. This is because all are kept consistently in their appropriate places.

- d. As students from different streams of a class come together in the special classrooms for the same lesson, it helps to kill monotony and provide cross fertilization of ideas with due understanding of one another.

However, a great deal of careful planning must be put into it, to prevent any waste of classroom. It is unfair and rather uneconomical at any time to put up buildings that cannot be used to the optimum (Mutfwang 2006).

For us to appreciate the importance of laboratory / workshop facilities, there must be adequate laboratory and workshop facilities for effective teaching and learning to take place. Science laboratories should provide sufficient space for group instruction, individual experiments and adequate locked storage.

- i. The laboratory space should be sufficient to accommodate the program and equipment
- ii. Design of learning areas and instructional materials should be compatible with instructional needs or educational specifications.
- iii. Workshop programs such as carpentry and engineering should be housed in space that meets standard
- iv. Storage for teacher's materials in special learning areas should be adequate too.
- v. Laboratories apparatus should be adequate for both teacher's and students' utility.
- vi. Glass should be properly located and protected to prevent accidental students contact and to ensure their safety.

Results from various research studies have shown that laboratories / workshop facilities are facilitators of teaching learning activities when properly used. According

to Adesina (1988), laboratories / workshop materials are designed, produced, and used for the following reasons;

- i. They promote greater acquisition and longer retention of factual knowledge
- ii. They provide objectivity for the study of a delicate or controversial subject
- iii. They provide increased, interest in learning
- iv. They allow all members of group the opportunity to share a joint experience
- v. They get and hold attention
- vi. They provide integrated sciences that vary from concrete to abstract
- vii. They facilitate attitudes and behaviour changes
- viii. They illustrate and clarify nonverbal symbols and images quantitative relationship
- ix. They provide for a direct interaction of students with the realities of their social and physical environment
- x. They reinforce verbal message, aid teacher's presentation of the learning task.

Other scholars such as Bower & Burkett (1999), Abdulkareem (2003) and Ayeni and Atanda (2004) also emphasized the importance of laboratories/workshop facilities in enhancing effective teaching and learning. They stressed that the availability of laboratory and workshop facilities make teaching and learning to be child centered. This implies that the facilities encourage more student's participation in learning process. It also enables the teacher to involve the various sense organs in the teaching and learning, flashing of instructional materials provide concrete objects and make it into practical use. It also arouse the curiosity of the learner. As soon as the curiosity of the learner is aroused, a natural dependency of capturing the attention and commitment of the learner to teaching and learning can be readily achieved.

2.3.3 Provision and Maintenance of Library Facilities

It is often said that the greatest benefit to students after the teacher in the teaching and learning situation is a good library. In this regard, premium should be placed on the establishment and equipment of the boarding secondary school library. The library is centrally located on the school compound to make it easy for students to have free access to it. The building should be large and spacious enough to accommodate a sizeable number of students at any time and all the various books that are necessary on the different subjects that are taught in the institution. Apart from the subject matter textbooks, there should be sections for reference books including dictionaries and encyclopedia, provisions should also be made in the library for novels, periodicals, journals, magazines, daily papers and books on hobbies, sports, game and leisure. Books in the library are to be well labeled according to particular subjects to make it convenient for students to find out which ones they need without undue waste of time. They library can also be used as an assignment room for a class of about 35 students. The management of the school library should be in the care of student officer in charge of the library, the paid library attendants, the staff librarian and the principal (Jedo, 2007).

Castaldi (1977) had categorically enumerated basic services offered by the school library which are considered very crucial for educational purposes. They are as follows:

- i. It provides materials for use by students and teachers
- ii. It develops and promotes reading interests for both teachers and students.
- iii. It encourages research and study from many sources.
- iv. It teaches the use of books and library
- v. It provides recreational, and leisure reading

- vi. Library serves as the most important intellectual resources of the academic community
- vii. The library serves to implement the purposes of the institution's general programme and to meet the specific objectives of the institutional programme
- viii. It endeavour to meet the legitimate demands of all its patrons. From the serious professor engaged in research to the freshman beginning education.
- ix. It stimulate and encourage the students and teacher to develop a lifelong habit of good learning.
- x. The library stress those particular area of knowledge which are central to the curriculum.

Castaldi (1977) amplified the importance of school libraries and laboratories by stating that they are the most important instructional buildings on school campuses besides classrooms. He envisioned the library as a store house, workshop centre, the heart, where ideas from many sources are communicated to the individual learner whether he be a student, a faculty member, a research fellow and employee. He also uphold that the library is a store house of knowledge where teachers and students can endeavour to develop their individual excellence at their own pace.

Castaldi, also maintains that the functions of the libraries to the educational system are similar to those of the heart to the body system. He strongly argues that quality education is impossible without a quality library; and one cannot have a quality school without a quality library. Thus, his views teaches educational policy-makers to attach more value toward the provision of quality libraries to schools for the attainment of quality staff, students and the educational system.

2.3.4 Provision and Maintenance of Water and Electricity Supply

Light and water supply facilities are necessary requirements for institutions whether running day or boarding system. Efforts should be made to see that the facilities are not in acute short supply at any period. Schools in the urban area where electricity and pipe borne water are available do not have much difficulty in this respect except during occasional setbacks. In the rural and less urban areas, schools should make use of any source of water that is adequate and clean enough for the students. Whatever the sources of water supply whether through wells, boreholes or river, they should be kept pure and clean before drinking. Proper water storage is called for through the use of big pots and water storage tanks. (Maina, 2009).

Suleiman (1997) pointed out that the electrical services should ensure;

1. Electrical controls should safely protected with disconnect switches easily accessible
2. Labelled electrical system should be provided
3. Well maintained electricity sources should be properly placed to provide adequate lighting
4. Lighting system should provide adequate distribution of illumination for teaching and learning
5. Outdoor light fixtures. Electric outlets, equipment and other fixtures should be accessible for repair and replacement
6. Outside water supply should be adequate for normal usage
7. There should be adequate number of drinking water taps strategically placed for students use and proper maintenance
8. Drainage systems should be properly maintained to meet safety and health requirements

9. Water supply should be adequate with sufficient pressure to meet health and safety needs.
10. Alternative source of water should be provided.

2.3.5 Provision and Maintenance of Games Facilities

Games are an integral part of a boarding secondary school system. Care must be taken to give it the due prominence it deserves because of the development of the body, which extends to that of the mind and for the discovery of talents in the fields of sports, athletics and games. The school is bound to have a sufficient area as playground, which should be properly developed, labeled and made suitable for the free use of pieces of apparatus (Ibrahim, 2010).

In educational institutions, the following sports and games are necessary in order to cater for all sundry. There are:

- a. Athletics: track and field activities.
- b. Ball Games: Football, handball ,netball, basketball, lawn tennis, table tennis, badminton, e.t.c
- c. Swimming and gymnastics.

Students are to be grouped according to their interest, skills, and abilities. Through supervision and proper keeping of records of student's performance are necessary on the parts of the teachers in charge and the heads of institutions. Students should be made to compete among themselves and with outsiders. Sports and games are in educational institutions to make students use their leisure time judiciously, develop in them a competitive spirit, fair play and good citizenship. Furthermore, sports and games competitions are sources of advertisements for educational institutions they give students a sense of self- actualization and help to provide talented ones with some careers in life (Murfwang 2006).

2.3.6 Provision and Maintenance of Accommodation Facilities

There is no doubt that the type of environment in which students study has a great deal of influence on their achievements. Hostel accommodation for students is therefore an important area in educational management that must be given careful attention.

The school administrator should have at the back of his mind a provision for the building of dormitories for student boarders. Such dormitories are to be built under strict hygienic sanitary conditions. Adequate and proper means of ventilation are to be provided with enough spaces for the free movement of the occupants. A situation where students are packed full in a stuffy room should be avoided on grounds of health and psychological considerations. The architectural design of a dormitory should give allowance for common rooms, cloakrooms, bathroom and toilet facilities. Boys and girls dormitories are to be built separately and properly maintained dormitories cannot be overemphasized.

Students from various homes with different socio-economic backgrounds come together physically and socially. This paves way for unity, fellowship and understanding. By so doing, they are made to learn and imbibe the spirit of good neighborliness, give and take, tolerance and endurance.

Students from poor backgrounds are educated to lead balanced and enriched live as a result of their experiences in the boarding houses.

It is a sound and safe training ground for children who have lost their parents and also those from deprived homes. Most students from distant places often find it comfortable and convenient to stay on the school compound as boarders. This saves time and the risk involved in moving from their homes to the school.

Through the boarding system, students are well integrated into the school life. They imbibe the norms and tradition of the school environment. This spirit of belonging results, more often than not, into the formation of old students associations of institutions and the age-long attachment to their Alma Mata. The boarding system makes it easier and more convenient for labour, farm work and co-curricular activities to be performed in the school. Students can quickly come out for such duties as soon as the bell is rung for them without any undue waste of time.

From the foregoing, any efforts that are made to find pieces of land and a fund for the building of dormitories is worthwhile and educationally advantageous.

The staff quarters: the provision of adequate staff quarters is very essential for the proper running of every boarding secondary school. It is essential for the principal, vice principal, the head of departments and the house-master/house mistresses to be resident on the school compound. In spite of the fact that it gives the principals and the teachers with special duties a sense of belonging, it also helps to maintain discipline and order on the school compound.

The housemaster / housemistresses, in particular, can carry out their duties without any unnecessary waste of time when they live on the compound. The principal's residence should be centrally positioned to make him know what is going on in the length and breadth of the school without such strain and waste of time. Where land and funds are available the ideal thing is to make it possible for most of the members of the teaching staff to be resident on the school compound.

Staff quarter's and hostel accommodation structural and mechanical features stated by (Suleiman, 1997) includes;

- Foundations should be strong and stable with proper expansion joints
- Structure should meet all barriers both externally and internally

- Roofs should be structurally sound, with good drainage
- Entrances and exits should be strategically located so as to permit free student movement
- Well maintained ceilings should be ensure to adequately prevent sound
- Interior should be free of dangerous materials
- Windows, doors walls, roofs should be of materials and finish requiring minimum maintenance
- Adequate storage space, with water and drain should be accessible in every area to permit routine cleaning.
- Floor coverings should be the type which requires minimum care
- Number and size of hostel accommodation should the population of the students to avoid over population in the rooms
- Ventilation system should be provided for adequate circulation of clean air
- Colour schemes, building materials and decorations should be aesthetically appealing
- Furniture and equipment should be the type that provide comfort and pleasing atmosphere

2.4 The Roles of Principals in planning and maintaining school facilities

In analyzing the roles of school principals in the management of school physical facilities, most authors such as Castaldi (1977). Ozigi (1977) Maruthachalan (1986), Otu (1989) and Suleiman (1997) emphasized that the principal is the key person who supervises and coordinates all aspect of school management, particularly physical facilities, personnel, finance, academic affairs, health, labour, games and school community relations.

For instance, Ozigi (1977) in Ibrahim (2010) enumerated the specific functions of the school administrator as follows:

1. The secondary school principal is charged with the responsibility of seeing to it that essential equipment and materials are provided in adequate quantity, and in good time;
2. He should also ensure satisfactory storage of the various school items;
3. He should keep and carefully maintain a good register of all school equipment;
4. He should develop a good system of supplying, issuing, and distributing items from the school store and from contractors;
5. The school principals' major task includes seeing to it that the buildings, grounds, furniture and other physical facilities in the school, are well maintained and used for ensuring the health and safety of staff and students, and for the achievement of instructional efficiency;
6. It is necessary for secondary school principals in Nigeria to have a prepared plan of the school physical plant, with its prescribed specifications extension requirements and qualified personnel for its operation and maintenance; and
7. It is also the principals' responsibility to see it that adequate financial provision is made in the budget for effective operation and maintenance of school physical facilities.

Discussing the roles of the school principals, Castaldi (1977) stressed that the school head is responsible for major repairs reported to him by the personnel, while those that are considered major are further forwarded to the central administration for administrative support, in terms of money, materials, and personnel that will execute the repairs.

Other staff known to carry much of the weight for the operation and

maintenance of the school physical facilities, under the leadership and supervision of the secondary school principals is the custodial staff. The custodial staff includes porters, cleaners, janitors, storekeepers, and watchmen. Both Castaldi (1977) and Olutola in Adesina (1984) in Ibrahim (2010) pointed out that it is the duty of the school principal to lure efficient custodial staff, that respects and desire to keep the school physical plant clean, beautiful and attractive. They went on to stress that for the principal to secure such a caliber of staff he should be aware of their qualifications and functions, as well as their materials for working. They also hold the view that can have high grade materials such as hoes, Cutlasses, Buckets, Disinfectants to keep the environment clean or else maintenance programme may be ineffective in the school system.

2.5 The Role of Teachers in Maintaining School Facilities

It is the task of the teacher to bridge the gap between theory and practice in education. Helping the students to see how philosophy, psychology and sociology relate to what goes on in the classroom. Through him, the students' educational horizons grow so that he is helped to see his work in perspective and understand the significance of its elements.

The teacher does not have one role, but many. He is a manager organizing his students so as to accomplish set objectives. He is a source person providing students with information and able to guide them to other fruitful sources. He is what the French called animateur, stimulating and arousing the interest of students so that they generate their motivation.

Teachers as well as other staff must all be involved in maintenance of school facilities. They should monitor and supervise usage especially by students. Where

necessary like in laboratories and workshops checklist/inventory of all equipment should be taken and adequate maintenance adhered to, this may involve simple cleaning to general servicing or replacement of faulty parts. Classroom, games, library and accommodation facilities should likewise be monitored and reported by relevant teachers, most a times certain persons are charged with these responsibilities to report to the school principal on regular basis.

2.6 The Roles of Students in Maintaining School Facilities

For information on management of school facilities at the secondary school, the students have their own roles to play in the management and maintenance of school facilities.

On their role in the management of school physical facilities, Olutola in Adesina, (1984) in Ibrahim (2010) maintained that schools which involve student in grass cutting, path hoeing, classroom sweeping, toilet cleaning, tree planting and other duties connected with school plant maintenance succeed in maintaining a clean, beautiful, respectable school premises. Olutola's statement reaffirmed that effective management of school facilities tends to improve if students feel involved and are responsible for the operation and maintenance of the school physical plant.

Some roles of students in the school maintenance include the followings: -

1. Overall responsibilities for maintaining discipline in the school compound outside teaching hour of the school;
2. They are responsible to keep their hostels and the school premises clean;
3. Maintain discipline and order among themselves;
4. Like the duty prefects they will report to the principal's office every morning before the assembly for briefing and any instructions on any special

- assignment for the day;
5. All house captains and house prefects are responsible for the maintenance and welfare of their houses;
 6. Such prefects may punish students for breach of discipline, disobedience or violation of school rules;
 7. They assist the sick students to receive proper medical attention from the school dispenser;
 8. Also like school head-boy will be responsible to receive all visiting teams from various schools, as well as individuals and be responsible for their welfare and comfortable stay in the compound;
 9. They are responsible for organizing and Maintaining discipline in the morning assembly; and
 10. After the school hours the prefects will be responsible for supervising the smooth running of the school routine. For instance punishment of students, roll call, prep, bed check, light out, etc. Dare, (2011)

2.7 The Roles of Inspectors on the Improvement and Maintenance of School Facilities

The concept of inspection is being transformed to one of healthy supervision and guidance. Supervision is intended to cause improvement of teaching and learning by working with teachers who are working with pupils. Inspection or supervision is now recognized with the primary aim advise, which was charged with the duty not of finding fault but of giving practical help and guidance. It is democratic, not bureaucratic or autocratic. Direction and regimentation have to be replaced by wise and constructive suggestions and expert guidance. Therefore, some roles of inspectors are as follows: as cited by (Kochhar, 2003):

1. The inspector serves as an adviser and guide to the teachers;
2. Running an induction courses for the newly recruited teachers and the school principals;
3. Take accurate and positive reports to the ministry of education on the schools he visited;
4. They also inspect such things as school buildings, furniture, equipment, sufficient books, classroom materials, visual aids and so on;
5. They carry information from ministry of education to various schools.

2.8 How to Improve School Facilities through Effective Administration and Planning

According to Ibrahim (2010), the following is expected to help in the modalities on how to improve effective administration and planning in secondary schools

- To sustain secondary education programme in Nigeria adequate financial and human resources should –be made available and any act of mismanagement of school facilities should be checked and prosecuted;
- Doors, windows, walls and roofs should be of material and finishing requiring minimum maintenance;
- Out, door light fixtures, electric outlets, equipment and other fixtures should be accessible for repairs and replacement.
- Classroom floor coverings should be the type which require minimum care;
- Ceilings and walls should be the kinds that are easily cleaned and resistant to stain;
- Built-in equipment in the laboratories should be designed and constructed for

ease of maintenance;

- Walls ceilings in specially designated areas should be the type that can be easily cleaned;
- Recreational areas should be kept clean always
- Adequate storage space with water and drain should be accessible all areas
- Adequate electric outlets and power should be available in every area to permit routine cleaning
- Assess streets should have sufficient signals or signs to permit safe entrance into an exist from school areas
- Sidewalks and steps should be protected by proper signs and signal students play areas should be segregated from vehicular traffic and pedestrian walk ways.
- Location of play ground and games equipment should be free from hazard.
- Emergency doors should be provided where necessary.
- Special learning areas such as libraries, laboratories, workshops and room for specific subjects should meet minimum standard in terms of size
- Libraries and resources centers should provide appropriate and attractive space for reading and research etc.
- Science laboratories should provide sufficient space for group instructions, individual experiments and adequate locked storage.
- Storage space for teachers' materials in special learning areas should be adequately maintained in every schools
- Dining halls or cafeterias should be attractive with sufficient space for service delivery, storage and food preparation
- Clinic should be equipped to treat minor and emergency cases

- Site and buildings should be well landscaped
- Adequate fire safety, fire-lighting equipment should be properly located at strategic points
- There should be no extravagance in the uses of supplementary school recourses e.g. chalk, chalk-board, stationary and other consumable resources.
- Avoiding waste and guiding the available school facilities, a maintenance culture must cultivated in the school system.
- The facilities that needs repair should be done and those that requires parts replacement be replaced without hesitation.

2.9 Empirical Studies

All the works have been carried out on school infrastructural facilities above are related to this study. However, there are some differences for example, Ibrahim (Zolo) carried out his study in Taraba State while this study was carried in Adamawa State.

In this work of Abdulkareem (2003) conducted his study in Kwara State primary schools while this study was carried out in boarding schools in Yola metropolis Adamawa State. Sani (2007) conducted his study in Kebbi State while this study was in Adamawa State while Sani (2007) used regression and pearson correlation while this study used was ANOVA.

Bower and Burkett (1990) investigated the effect of maintenance of physical facilities on students academic performance in Florida High Schools. While this study was carried out on evaluation of provision and maintenance of infrastructural facilities in Boarding Secondary Schools in Yola Metropolis Adamawa State, Nigeria.

2.10 Summary

In the act of teaching and learning, the importance of the school infrastructural facilities can never be over emphasized. This is because the school facilities has not only made it easier for the smooth running of the school but has also contributed immensely in the act of teaching and learning.

It should be known that the importance of the school infrastructural facilities can only be felt in a place where things are properly organized, thereby ensuring that teaching and learning takes place. It should also appreciate that is not enough to have a school facilities but efforts should be made to maintain the school facilities, as failure to do this will, lead to the failure of achieving aims and objectives of the rationale behind having school plant. Also in a school infrastructural facilities there are considerations to be made to ensure a proper placement of structures in order not to disrupt the teaching and learning process (Ayeni and Atanda, 2004).

The school infrastructural facilities play vital role in the transfer of knowledge and as such should be given due consideration. It should also acknowledge that not all facilities stated here can be found in all schools due to financial constraints and attitude of some school administrators. But people suppose to know that all standard schools do have all that has been discussed above.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents the methods and procedure the researcher will employ in the study under the following headings. The headings to be discussed in this chapter will include the Research Design, Population, Sample and Sampling Techniques, Instrumentation, Validity of the Instrument, Reliability of the Instrument, Pilot Study, Administration of the Instrument and Methods of Data Analyses.

3.2 Research Design

The study is a descriptive survey research. Survey research design according to Agber (2003) and Yabo (2007) is concerned with finding, describing and interpreting an existing phenomenon, condition or relationship between or among people or items considered to be representative of the entire group. This research design is found to be appropriate because the study is on a small group considered to be representative of the entire population. The approach used is what Nworgu (1991) described as a sample survey in which a sample data in survey research are usually collected through questionnaire to collect the data the researcher decided to use the survey research method because only a part of the population is studied and findings from this can be generalized to the entire population.

3.3 Population

The population in this study comprised all principals and teachers of public and private boarding secondary schools in Yola metropolis Adamawa State, which consists of Yola North and Yola South Local Government Areas. There are fourteen

(14) boarding secondary schools in Yola metropolis. Eleven (11) are public schools and three (3) are registered private boarding secondary schools. The study population is therefore made up of principles, teachers, non-teaching staff and officials of ministry of education. There are 14 principles, 791 teachers, 225 non-teaching staff, while that of the ministry of education officials are 60 making a total of 1090.

3.4 Sample and Sampling Techniques

Since the population under study is relatively high, which include all boarding secondary schools in Yola metropolis, a portion of this population called sample, is investigated.

Simple random sampling technique was adopted for the purpose of the study. Ten (10) boarding secondary school were randomly selected from the sample for the study. The rationale for selecting the random techniques is to give equal opportunities to all the boarding secondary schools in the metropolis.

Table 1: Summary of Distribution of the Population of Respondents in the study

S/No.	Respondent	Population	Sample
1	Principals	14	10
2	Teachers	971	250
3	Non-teaching staff	225	50
4	Ministry of Education	60	10`
	Total	1090	320

Purposive sample technique was used to select 320 respondents which represent 10 principals, 250 teachers, 50 non-teaching staff and 10 ministry of education officials. According to Awotunde and Ugudulunwa (2004) purposive sampling technique is known as judgmental sampling technique. It is a non-probability sampling technique in which the researcher attempts to select a sample that appears to him as being representative of the population defined by his research problem. Table 2 shows the schools visited and their students environment/staff strength.

Table 2: Enrolment and Staff Strength of sampled schools

S/No.	Names of Schools	Students			Non-Teaching
		Enrolment	Principals	Teachers	Staff
1	Govt. Girls' Sec. Sch.	1,750	1	63	22
2	General Murtala Muh'd College	1,420	1	69	25
3	Fed. Govt. Girls' College	1,511	1	59	25
4	ABTI Academy	480	1	50	20
5	St. Peter's Seminary, Yola	469	1	17	3
6	General Murtala Muh'd JSS	1,058	1	57	6
7	Govt. Girls' JSS	1,607	1	48	24
8	Sanda Govt. Girls Sec. Sch.	911	1	49	12
9	Aliyu Mustafa Sec. Sch.	1,780	1	105	25
10	Aliyu Mustafa JSS	958	1	61	7
Total					

Source: Adamawa State Post Primary School Management Board (2013).

3.5 Instrumentation

A self resigned structure questionnaire filled, evaluation of provision and maintenance of infrastructural facilities questionnaire used as an instrument of data collection.

Section 1 of the questionnaire explores the background information of the respondents such as name of school, designation of respondents, age, gender,

qualification and working experience of the respondents. Sections 2 – 7 of the instrument contains the main items designed to assess the provision and maintenance of infrastructural facilities in boarding secondary schools in Yola metropolis which were generated from the literature.

Section 2 contains items on the provision and maintenance of classroom facilities. Section 3 contains items on the provision and maintenance of the laboratories / workshop facilities. Section 4 contains items on the provision and maintenance of library facilities. Section 5 contains items on the provision and maintenance of accommodation facilities. Section 6 contains items on the provision and maintenance of games facilities and in section 7 it contains items on the provision and maintenance of water and electricity facilities. Section 2 – 7 of the instrument contains sixty (60) items structured on a five (5) point Likert scale. The scale ranges from strongly agreed, agreed, disagreed, strongly disagreed and undecided options.

3.6 Validity of the Instrument

Validity is that quality of data gathering instrument or procedure that enable it to measure what it is supposed to measure (Abbas, 2009). The instrument was given to specialists in educational administration and planning for face and criterion validation. The experts scrutinized the instrument in terms of items relevance, items clarity and the extent to which covers the evaluation of provision and maintenance of infrastructural facilities in boarding secondary schools in Yola metropolis. Based on the experts' scrutiny, criticisms and suggestions, amendments were made on the instrument before the final copy was produced.

3.7 Pilot Study

A pilot study was conducted on two (2) boarding secondary schools in Adamawa State. A test re-test method was used in the administration of the instrument at an interval of two weeks. The PPMC 0.05 level of significance was used to test the level of significance of the calculated alpha.

3.8 Reliability of the Instrument

This is the degree of consistency that the instrument of procedure demonstrates (Abbas, 2009). To ensure the reliability of the instrument, Pearson Product Moment Correlation Coefficient was used during the pilot study. This yielded a reliability coefficient of 0.87 and significance level of 0.05, the instrument is therefore reliable for use. This is in line with Abbas (2009) statement that a correlation that is close to one (1) is reliable.

3.9 Administration of the Instrument

The researcher decided to use on the spot questionnaire administration technique. This was easier and the response from the respondents was relatively high. Nworgu, (1991) confirmed that the percentage returns of such questionnaire can sometimes be as high as one hundred percent. The researcher administered the questionnaires with the help of the research assistants. The questionnaire was designed in such a way that the group respondents indicate their response with a simple (✓) tick.

3.10 Method of Data Analysis

Information collected through the questionnaire was analyzed using the Statistical Package for Social Sciences (SPSS) which was used to generate the frequency and percentage of the scores whiles the six (6) hypotheses were analyzed to identify the mean difference using one way Analysis of Variance (ANOVA).

CHAPTER FOUR

ANALYSIS, PRESENTATION AND DISCUSSION OF DATA

4.1 Introduction

This chapter presents analysis, presentation and discussion of data collected from respondents in respect of provision and maintenance of classroom facilities, provision and maintenance of laboratories/workshop facilities, provision and maintenance of library facilities, provision and maintenance of accommodation facilities, provision and maintenance of games facilities, and provision and maintenance of water and electricity facilities in boarding secondary schools in Yola metropolis. The data collected were first analysed and presented in a tabular form using frequency and simple percentage. This is to give the general description of the data collected. The hypothesis were tested by using one way analysis of variance at 0.05 percent level of significance.

4.2 Presentation of Tables and Interpretation

This section deals with presentation of data frequencies and percentages of respondent's opinions in respect of the items on the questionnaire.

4.2.1 Opinions of Respondents on the Provision and Maintenance of Classroom Facilities in Boarding Secondary Schools in Yola Metropolis

This section presents the analysis and discussion of data collected on the provision and maintenance of classroom facilities in boarding secondary schools in Yola Metropolis. Items one to ten in the questionnaire relate to this section. Items one, two and three, are attempt to find out if chairs and tables were adequately

provided, adequately maintain and if blackboards were provided, respectively. Item four, was attempt to find out if blackboards were well managed.

While item five, was attempt to find out if teaching aids were provided, item six was to find out if they are well managed. Items seven and eight were attempt to find out if supply of light was constant and if all electrical fittings were all maintain. Items nine and to solicited the opinions of respondents on whether the floor and windows were well constructed and maintain. Responses of all respondents were collected, analyzed and presented in a table. Thus, table 4.1 gives the details.

Table 3: Opinions of Respondents on the Provision and Maintenance of Classroom Facilities in Boarding Secondary Schools in Yola Metropolis

S/N	Items Statement	Categories of Respondents	Responses			
			Agreed		Disagreed	
			F	%	F	%
1.	Chairs and tables are adequately provided	Principals	6	70.0%	3	30.0%
		Teachers	169	80.0%	29	30.0%
		Non-teaching staff	29	80.0%	10	20.0%
		Officials of M.O.E	5	50.0%	5	50.0%
2.	Chairs and tables are adequately maintained	Principals	6	70.0%	3	30.0%
		Teachers	153	70.0%	70	30.0%
		Non-teaching staff	25	70.0%	14	40.0%
		Officials of M.O.E	6	60.0%	4	40.0%
3.	Blackboard is provided	Principals	6	70.0%	3	30.0%
		Teachers	179	80.0%	44	20.0%
		Non-teaching staff	30	80.0%	9	20.0%
		Officials of M.O.E	7	70.0%	3	30.0%
4.	The blackboard is well Managed	Principals	6	70.0%	3	30.0%
		Teachers	149	70.0%	74	30.0%
		Non-teaching staff	27	70.0%	12	30.0%
		Officials of M.O.E	5	50.0%	5	50.0%
5.	Teaching aids are provided	Principals	2	20.0%	7	80.0%
		Teachers	110	50.0%	113	50.0%
		Non-teaching staff	22	60.0%	17	40.0%
		Officials of M.O.E	6	60.0%	4	40.0%
6.	Teaching aids are well managed	Principals	2	20.0%	7	80.0%
		Teachers	102	50.0%	121	50.0%
		Non-teaching staff	20	50.0%	19	50.0%
		Officials of M.O.E	5	50.0%	5	50.0%
7.	The supply of light is constant in the classrooms	Principals	2	20.0%	7	80.0%
		Teachers	70	30.0%	153	67.0%
		Non-teaching staff	12	30.0%	27	66.0%
		Officials of M.O.E	4	40.0%	6	60.0%
8.	All electrical fittings in classrooms are well maintained	Principals	5	60.0%	4	40.0%
		Teachers	85	40.0%	138	60.0%
		Non-teaching staff	15	40.0%	24	60.0%
		Officials of M.O.E	4	40.0%	6	60.0%
9.	The floor and the windows of the classrooms are well constructed	Principals	6	70.0%	3	30.0%
		Teachers	134	60.0%	89	40.0%
		Non-teaching staff	27	70.0%	12	30.0%
		Officials of M.O.E	3	30.0%	7	70.0%
10.	The floors and windows are well maintained	Principals	4	40.0%	5	60.0%
		Teachers	127	60.0%	96	40.0%
		Non-teaching staff	25	60.0%	14	40.0%
		Officials of M.O.E	4	40.0%	6	60.0%

It is evident from table 3 that chairs and tables were adequately provided in boarding secondary schools in Yola metropolis. This is the result from the responses of 70.0% of principals, 80.0% of teachers, 80.0% of non-Teaching staff and 50.0% of officials of M.O.E, who responded in agreement of item (1). It was also Agreed by 70.0% of principals, 70.0% of teachers, 70.0% of non-teaching staff and 60.0% of officials of M.O.E that chairs and tables were adequately maintain with these revelations one expect affective teaching and learning to take place effectively in boarding secondary schools in Yola metropolis.

Blackboards were adequately provided from the responses of 70.0% of principals, 80.0% of teachers, 80.0% of non – teaching staff 70.0% of officials of M.O.E who agreed on item (3) from the responses of 70.0% of principals, 70.0% of teachers, 70.0% of non-teaching staff, 50.0% of officials of M.O.E in agreement with the item (4), one could conclude that the blackboard that were provided are well managed.

Majority of the principals represented by 80.0% did not agree that teaching aid were provided. This is in contrast with the opinions of majority of teachers represented by 60.0%, non-teaching staff 60.0%, and 60.0% officials of M.O.E represented who agreed that teaching aid were provided. Majority of the principals represented by 80.0% and teachers 50.0% did not agreed that teaching aids were well managed. However, 50.0% of non-teaching staff and 50.0% of officials of M.O.E agreed that teaching aid were well managed. The revelations of majority of principals and teachers point to the fact that teaching aid were not provided and well managed. This is a big problem because if teaching aid were not provided and well managed there would be no effective teaching and learning. These is a challenged to the managers of education in Yola metropolis.

Supply of electricity to classrooms was not constant in boarding secondary schools in Yola Metropolis. These is the opinions of 80.0% of principals, 70.0% of teachers, 70.0% of non-teaching staff, and 60.0% of officials of M.O.E when they responded in disagreement of item (7). In response to item 8, 60.0% of teachers 60.0% of non-teaching staff and 60.0% of officials of M.O.E believed that electrical fittings are not well maintained in the classrooms, the students cannot learn well. This is because for students to be taught and learn effectively there must be adequate supply of electricity and maintenance of all electrical fittings.

The floors and windows of most classrooms in boarding secondary schools in Yola metropolis were well constructed. This view was made by 70.0% of principals 60.0% of teachers, 70.0% of non-teaching staff agreed that floors and windows were well maintained, 60.0% of principals and 60.0% of officials of M.O.E did not agree that floors and windows were maintained. If a revelation should come from a greater number of principals and the officials of M.O.E that floors and windows were not well maintain then it raises serious question on the maintenance of these in boarding secondary schools in Yola Metropolis.

4.2.2 Opinions of Respondents on the Provision and Maintenance of Laboratories/Workshop Facilities in Boarding Secondary Schools in Yola Metropolis

This section presents the analysis and discussion of data collected on the provision and maintenance of laboratories and workshops facilities in boarding secondary schools in Yola metropolis. The section is made up of ten items from the questionnaire. Items 1 and 2 were attempt to find out if there is adequate provision if science laboratories in the schools and whether the science laboratories are well

managed. Items 3, 4 and 5, are attempt to find out if Apparatus for science practical lesson were adequately provided, adequately maintain and if instructional facilities are adequately provided in the laboratories. Items 6, was attempt to find out if instructional facilities in the laboratories are well maintained. While items 7 and 8 was an attempt to find out if the Home economic laboratory is provided and well maintained respectively. In items 9 and 10, was an attempt to find out from the respondents if functional workshop facilities are adequately provided and well managed. Details of the respondents opinion are presented in the table below:

Table 4: Opinions of Respondents on the Provision and Maintenance of Laboratories/Workshop Facilities in Boarding Secondary Schools in Yola Metropolis

S/N	Items Statement	Categories of Respondents	Responses			
			Agreed		Disagreed	
			F	%	F	%
1.	There is adequate provision of science laboratory	Principals	5	60.0%	4	40.0%
		Teachers	120	50.0%	103	50.0%
		Non-teaching staff	20	50.0%	19	50.0%
		Officials of M.O.E	5	50.0%	5	50.0%
2.	Science laboratories are well managed	Principals	4	40.0%	5	60.0%
		Teachers	113	50.0%	110	50.0%
		Non-teaching staff	20	70.0%	19	30.0%
		Officials of M.O.E	4	40.0%	6	60.0%
3.	Apparatus for science practical lesson are provided	Principals	3	30.0%	6	70.0%
		Teachers	104	1.0%	119	100.0%
		Non-teaching staff	17	50.0%	22	50.0%
		Officials of M.O.E	3	30.0%	7	70.0%
4.	Apparatus for science practical lesson are provided	Principals	3	30.0%	6	70.0%
		Teachers	104	30.0%	119	70.0%
		Non-teaching staff	17	50.0%	22	50.0%
		Officials of M.O.E	3	30.0%	7	70.0%
5.	Instructional facilities are adequately provided in the laboratories	Principals	5	60.0%	4	40.0%
		Teachers	101	80.0%	122	20.0%
		Non-teaching staff	18	50.0%	21	50.0%
		Officials of M.O.E	6	60.0%	4	40%
6.	Instructional facilities are well maintained in the laboratories	Principals	3	30.0%	6	70.0%
		Teachers	107	50.0%	116	50.0%
		Non-teaching staff	18	50.0%	21	50.0%
		Officials of M.O.E	4	40.0%	6	60.0%
7.	Home economic laboratory is provided	Principals	5	60.0%	4	40.0%
		Teachers	108	80.0%	115	20.0%
		Non-teaching staff	22	60.0%	17	40.0%
		Officials of M.O.E	6	60.0%	4	40.0%
8.	Home economics laboratories are well maintained	Principals	4	40.0%	5	60.0%
		Teachers	98	40.0%	125	60.0%
		Non-teaching staff	19	50.0%	20	50.0%
		Officials of M.O.E	5	50.0%	5	50.0%
9.	There are adequate and functional workshop facilities	Principals	4	40.0%	5	60.0%
		Teachers	91	40.0%	132	60.0%
		Non-teaching staff	17	40.0%	22	60.0%
		Officials of M.O.E	5	50.0%	5	50.0%
10.	Workshop facilities are well managed	Principals	3	30.0%	6	70.0%
		Teachers	95	40.0%	128	60.0%
		Non-teaching staff	18	50.0%	21	50.0%
		Officials of M.O.E	3	30.0%	7	70.0%

From the responses in table 4 above, there is adequately provision of science laboratories in boarding secondary schools in Yola metropolis. These are responses of principals (60.0%), Teachers (50.0%), non – teaching staff (50.0%) and officials of M.O.E (50.0%) who respondent in agreement of item (1). (60.0%) of principals and (60.0%) of officials of M.O.E disagreed that science laboratories are well managed. This is in contrast with the opinions of (50.0%) of teachers and (70.0%) of non-teaching staff who agreed that science laboratories are well managed. It is evident from the responses of (70.0%) of principles, (100.0%) of teachers, (50.0%) of non-teaching staff and (70.0%) of officials of M.O.E represented who disagree that apparatus for science practical lesson are not adequately provided in the schools. Also in respect to item 4, (70.0%) of principals, (70.0%) of teachers, (50.0%) of non-teaching staff and (70.0%) of officials of M.O.E did not agree that Apparatus for science practical lesson are well maintained. (60.0%) of principals, (80.0%) of teachers, (50.0%) of non-teaching staff, and (60.0%) of officials of M.O.E agree that the instructional facilities are adequately provided in the laboratories.

Instructional facilities are not well maintained in the laboratories of boarding secondary schools in Yola metropolis. This is the opinion of (70.0%) of principals, (50.0%) of teachers, (50.0%) of non-teaching staff and (60.0%) of officials of M.O.E.

Home Economics laboratories are provided in most of the boarding secondary schools in Yola metropolis. This view was made by (60.0%) of principals, (80.0%) of teachers, (60.0%) and (60.0%) of officials of M.O.E, but the problem is the maintenance of the Home economics laboratories, it is evident in item 8, from the responses of (60.0%) of principals (56.1%) of teachers, (50.0%) of non-teaching staff and (50.0%) of officials of M.O.E disagreed that the Home economic laboratories are not well maintained in the schools.

The majority view of all the respondents show that there is no adequate and functional workshop facilities in boarding secondary schools in Yola metropolis. This view was made by (60.0%) of principals, (60.0) of teachers, (60.0%) of non-teaching staff and (50.0%) of official of M.O.E in item 10, it also revealed that, the workshop facilities are not officials of M.O.E whom they responded in disagreement of item 10.

The responses of the responded in these section revealed that is no adequate provision and maintenance of laboratories/workshop facilities in most of the boarding secondary schools in Yola metropolis. This is a very big problem, because if science laboratories are not provided and workshops are not provided in the schools, there would be no effective teaching and learning of principal lessons in the boarding secondary schools. These is a challenge to the managers of education in Yola metropolis. The managers of boarding secondary schools education in Yola metropolis most create more means of providing and maintaining laboratories and workshop facilities for effective productivity in schools.

4.2.3 Opinions of Respondents on the Provision and Maintenance of Library Facilities in Boarding Secondary Schools in Yola Metropolis

The section contained the opinion of respondents on the provision and maintenance of library facilities in boarding secondary schools in Yola metropolis. The section contains ten (10) items from the questionnaire. Items 1 and 2 were attempt to find out if library is provided and well managed in the schools. Items 3 and 4 was an attempt to find out if current library materials were adequately provided and if these materials were well maintained.

While item 5 was an attempt to find out from the respondents whether there is adequate provision of tables and chairs in the library and item 6 tried to find out if the

tables and chairs were well maintained in the library. Items 7 and 8 were attempt to find out if supply of light was constant and if all electrical fittings were all maintain. Items 9 and 10 solicited the opinions of respondents on whether computers with internet facilities are provided and maintained. Details are presented on table 4.3:

Table 5: Opinions of Respondents on the Provision and Maintenance of Library Facilities in Boarding Secondary Schools in Yola Metropolis.

S/N	Items Statement	Categories of Respondents	Responses			
			Agreed		Disagreed	
			F	%	F	%
1.	Library is provided	Principals	5	60.0%	4	40.0%
		Teachers	125	60.0%	98	40.0%
		Non-teaching staff	21	50.0%	18	50.0%
		Officials of M.O.E	7	70.0%	3	30.0%
2.	Library is well managed	Principals	4	40.0%	5	60.0%
		Teachers	83	40.0%	140	60.0%
		Non-teaching staff	10	30.0%	29	70.0%
		Officials of M.O.E	3	30.0%	7	70.0%
3.	Adequate and current library materials are provided	Principals	5	60.0%	4	40.0%
		Teachers	86	40.0%	143	60.0%
		Non-teaching staff	143	50.0%	24	50.0%
		Officials of M.O.E	4	40.0%	6	60.0%
4.	Library materials are well maintained	Principals	4	40.0%	5	60.0%
		Teachers	90	50.0%	133	50.0%
		Non-teaching staff	16	40.0%	23	60.0%
		Officials of M.O.E	5	50.0%	5	50.0%
5.	Chairs/tables are adequately provided in the library	Principals	6	70.0%	3	30.0%
		Teachers	127	60.0%	96	40.0%
		Non-teaching staff	23	60.0%	16	40.0%
		Officials of M.O.E	7	70.0%	3	30.0%
6.	Chairs/tables are well maintained in the library	Principals	3	30.0%	6	70.0%
		Teachers	129	60.0%	94	40.0%
		Non-teaching staff	20	50.0%	19	50.0%
		Officials of M.O.E	3	30.0%	7	70.0%
7.	The supply of light is constant in the library	Principals	3	30.0%	6	70.0%
		Teachers	89	40.0%	134	60.0%
		Non-teaching staff	16	40.0%	23	60.0%
		Officials of M.O.E	2	20.0%	8	80.0%
8.	All electrical fittings in the library are well maintained	Principals	6	70.0%	3	30.0%
		Teachers	89	40.0%	134	60.0%
		Non-teaching staff	16	60.0%	23	40.0%
		Officials of M.O.E	3	30.0%	7	70.0%
9.	Computers with internet facilities are provided	Principals	4	40.0%	5	60.0%
		Teachers	95	40.0%	128	60.0%
		Non-teaching staff	15	40.0%	24	60.0%
		Officials of M.O.E	3	30.0%	7	70.0%
10.	Computers with internet are well maintained	Principals	7	80.0%	2	20.0%
		Teachers	130	60.0%	93	02%
		Non-teaching staff	25	60.0%	14	30.0%
		Officials of M.O.E	5	50.0%	5	50.0%

From table 5 item 1 shows that library is provided in boarding secondary schools in Yola metropolis. This could be seen from the responses of the respondents where 60.0% of principals, 60.0% of teachers, 50.0% of non-teaching staff and 70.0% of officials of M.O.E agreed that library is provided. It is evident in item 2 that the libraries are not well managed, from the responses of (60.0%) of principals, (60.0%) of teachers, (70.0%) of non-teaching staff and (70.0%) of officials of M.O.E disagreed that there is no proper maintenance of the libraries.

In respect to item 3, majority of the teachers represented by (60.0%) percent, (50.0%) of non-teaching staff and (60%) of officials of M.O.E disagree that adequate and current library materials were not provided in the schools. This is in contrast with the opinion of principals represented by (60.0%) that adequate and current library materials are provided in the schools. These revelations of the majority of the respondents point to the fact that libraries are not well managed and there is no adequate and current library materials in boarding secondary schools in Yola Metropolis. This is a big problem and is a challenge to the managers of education in Yola because, even those that are in charge of proving these materials admit that, they were not provided in the schools. There is need for managers of boarding secondary schools in Yola metropolis to provide current library materials for teachers and the students in order to enhance productivity in the schools.

Library materials are not well maintained in the schools. It is evident from responses of (60.0%) of principals (50.0%) of teachers, (60.0%) of non-teaching staff and (50.0%) of officials of M.O.E. in disagreement with the item 4, one could conclude that library materials were not well managed.

Chairs and tables were adequately provided in the libraries. This is the result from the responses of (70.0%) of principals, (60.0%) of teachers, (60.0%) of non-

teaching staff and (70.0%) of officials of M.O.E, who responded in agreement of item 5. It was also agreed by (60.0%) of teachers and (50.0%) of non-teaching staff that chairs and tables were well maintained, but the opinions is different, from the responses of principals and officials of M.O.E, where (70.0%) of principals and 70.0% of officials of M.O.E disagreed that, chairs and tables were not maintained in the schools. If a such revelation should come from a greater number of principals and the officials of M.O.E then it raises a serious question on the maintenance of these facilities in boarding secondary schools in Yola Metropolis.

In item 7, supply of electricity in the libraries was not constant in boarding secondary schools in Yola metropolis. These is the opinions of (70.0%) of principals, (60.0%) and (80.0%) of officials of M.O.E when they responded in disagreement of item 7. In response to item 8, (70.0%) of principals and (60.0%) of non-teaching staff responded in agreement that all electricity fittings in the library were well maintained. While (60.0%) of teachers and (70.0%) of officials of M.O.E disagreed that electrical, fittings were not maintained. In views of the fact that the principals and non-teaching staff are in charge of the maintenance the responses of the teachers and officials of M.O.E are more reliable.

In item 9 and 10, solicited the opinions of the respondents on whether computers with internet facilities are provided and well maintained in boarding secondary schools in Yola metropolis. There was a consensus of opinions between the respondents in disagreement of the provision of computers with internet facilities, where (60.0.0%) of principals, 60.0% of teachers, 60.0% of non-teaching staff and 70.0% of officials of M.O.E disagreed that they are not provided. In respect of item 10, 80.0% principals, 60.0% of teachers, 70% of non-teaching staff and 50% of officials of M.O.E agreed that if the computers with internet facilities were provided,

it would have been well maintained. This is a challenge for education authorities to make sure that computers with internet facilities should be provided in boarding secondary schools in Yola metropolis. Because lack of these facilities could make teaching and learning difficult for both the teachers and the students, therefore it become mandatory to managers of boarding secondary schools in Yola metropolis to put more effort in providing computer with internet facilities in schools, in order to simplify teaching and learning.

4.2.4 Opinions of Respondents on the Provision and Maintenance of Accommodation Facilities in Boarding Secondary Schools in Yola Metropolis.

This section contained the opinions of the respondents of the provision and maintenance of accommodation facilities in boarding secondary schools in Yola metropolis. The section is made up of Ten items from the questionnaire items 1 and 2 were attempt to find out if there is adequate provision of good and enough accommodation for students, and if the accommodation is well maintained.

Items 3 and 4 was an attempt of find out if Beds were adequately provided for the students, and also if the Beds were well maintained. Item 5 attempted to find out whether the floor and windows are well constructed. While item 6 tried to find out if the floors are well maintained. Items 7 and 8 was an attempt to find out from the respondents if the rooms are overpopulated and whether overpopulation can leads to the spread of communicable diseases. Items 9 and 10 tried to find out if staff quarters are provided and if there is good maintenance of staff quarters. Responses of all respondents were collected, analyst and presented in a table.

Table 6: Opinion of Respondents on the Provision and Maintenance of Accommodation Facilities in Boarding Secondary Schools in Yola Metropolis.

S/N	Items Statement	Categories of Respondents	Responses			
			Agreed		Disagreed	
			F	%	F	%
1.	There is adequate provision of good and enough accommodation for students	Principals	2	20.0%	7	80.0%
		Teachers	89	40.0%	134	60.0%
		Non-teaching staff	15	40.0%	24	60.0%
		Officials of M.O.E	2	20.0%	8	80.0%
2.	The accommodation is well maintained	Principals	7	20.0%	2	20.0%
		Teachers	145	70.0%	78	40.0%
		Non-teaching staff	30	80.0%	9	25%
		Officials of M.O.E	7	70.0%	3	30%
3.	Beds are adequately provided for students	Principals	3	33.3%	9	66.7%
		Teachers	20	9.2%	203	90.0%
		Non-teaching staff	12	29.1%	27	70.0%
		Officials of M.O.E	7	70%	3	30.0%
4.	Beds are well maintained	Principals	6	70.0%	3	30.0%
		Teachers	109	50.0%	114	50.0%
		Non-teaching staff	22	60.0%	17	50.0%
		Officials of M.O.E	3	30.0%	7	70.0%
5.	The floor and windows are well constructed	Principals	7	80.0%	2	22.7%
		Teachers	134	70.0%	89	33.4%
		Non-teaching staff	35	90.0%	4	10.0%
		Officials of M.O.E	6	60.0%	3	40.0%
6.	The floor and windows are well maintained	Principals	9	100%	-	-
		Teachers	173	80.0%	50	20.0%
		Non-teaching staff	31	80.0%	8	20.0%
		Officials of M.O.E	6	60.0%	4	40.0%
7.	The rooms are not overpopulated	Principals	1	10.0%	8	90.0%
		Teachers	20/47	20.0%	176/20	80.0%
		Non-teaching staff	6	20.0%	3	80.0%
		Officials of M.O.E	4	40.0%	33	60.0%
8.	Overpopulation leads to the spread of communicable diseases	Principals	9	90.0%	6	70.0%
		Teachers	212	100.0%	11	50.0%
		Non-teaching staff	35	90.0%	4	20.0%
		Officials of M.O.E	9	90.0%	1	10.0%
9.	Staff quarters are provided	Principals	6	70.0%	3	30.0%
		Teachers	69	20.0%	154	80.0%
		Non-teaching staff	8	30.0%	31	70.0%
		Officials of M.O.E	7	70.0%	3	30.0%
10.	There is good maintenance of staff quarters	Principals	2	22.7%	7	80.0%
		Teachers	21	92%	202	90.0%
		Non-teaching staff	5	14.4%	34	90.0%
		Officials of M.O.E	4	40%	6	60.0%

It is evident from table 6, that there is no adequate provision of good and enough accommodation for students. This could be seen from the responses of 80.0% of principals 60.0% of teachers, 60.0% of non-teaching staff, and 80.0% of officials of M.O.E who disagreed on item 1. This is a very sad revelation, because it shows that education authorize in charge of the boarding secondary schools are aware of the students accommodation problems, since they majority of the officials of M.O.E where were represented by 80.0% and majority of principals who were represented by 80% are all aware of the accommodation problems, then it becomes necessary for them to provide more accommodation in order to ease boarding secondary schools students learning process.

From the responses to item 2, it is evident that the accommodation is well maintained. 80.0% of principles, 70.0% of teachers, 80.0% of non-teaching staff and 70.0% of officials of M.O.E in agreement with item 2, one could concluded that the accommodation is well maintained.

The responses to item 3, the opinions of the respondents were different. The majority of the officials of M.O.E represented by 70.0% agreed that Beds were adequately provided for the students. This is contrast with the opinions of majority of principals who represented by 70.0%, 60.0% of teachers, 70.0% of non-teaching staff did not agreed that Beds were adequately provided for students. In response to item 4, 70.0% of principals, 50.0% of teachers, 60.0% of non-teaching staff agreed that Beds were well maintained. However 70.0% of officials of M.O.E did not agreed that beds were well maintained in boarding secondary schools in Yola Metropolis. The revelations of the Responded shows that officials of M.O.E are not aware of the beds problem in the boarding secondary schools.

The floors and windows of most of the accommodation were well constructed. This view was made by 80.0% of principals, 70.0% of teachers, 90.0% of non-teaching staff and 90.0% of officials of M.O.E in agreement to item 5. It was also agreed by the respondents that the floors and windows are well maintained. This could be seen from the responses of 100% of principals, 80.0% of teachers 80.0% of non-teaching staff and 60.0% of officials of M.O.E agreed with item 6 if all the respondents agreed upon all stated in item 5 and 6 of this section, then it suggested that managers of boarding secondary schools in Yola metropolis should continue to maintained that in order to yield good productiveness in the schools.

The responses to item 7, it is evident that the rooms are overpopulated, 90.0% of principals, 80.0% of teachers, 80.0% of non-teaching staff and 60.0% of officials of M.O.E agreed that the rooms are overpopulated. In item 8, it is shows that over population can leads to the spread of communicable diseases among students. This could be seen from the responses of 90.0% of principals, 100.0% of teachers, 90.0% of non-teaching staff and 90.0% of officials of M.O.E agreed that over population in the rooms can leads to the spread of communicable diseases among students, then it become necessary for managers of boarding secondary schools in Yola metropolis to create more and enough accommodation for students to avoid overpopulation in the rooms.

From responses to items 9 and 10 in this section the opinions are significantly different, from the responses of the respondents. Where 70.0% of principals and 70.0% of officials of M.O.E agreed that staff quarters were provided, and 70.0% of teachers and 80.0% of non-teaching staff disagreed that there is no adequate provision of staff quarters. This is evident that principals are being given accommodation and teachers and non-teaching staff are not. From the response to item 10, it shows that

there were no good maintenance of staff quarters. This could be seen from the responses of 80.0% of principals, 90.0% of teachers, 90.0% of non-teaching staff and 60.0% of officials of M.O.E disagreed that there is no good maintenance of staff quarters. If there is no provision and maintenance of staff quarters in boarding secondary schools in Yola metropolis, then it become necessary for managers of education to adequately provide and maintain them for the staff. Since it is a boarding schools, there is need for all the staff in the schools to leave within the school premises in order to monitor and take good care of the students.

4.2.5 Opinions of Respondents on the Provision and Maintenance of Games Facilities in Boarding Secondary Schools in Yola Metropolis.

This section presents the analysis and discussion of data collected on the provision and maintenance of Games Facilities in boarding secondary schools in Yola metropolis. Items 1 to 10 in the questionnaire relate to this section. Items 1 and 2, are attempt to find out if Games field is provided and well maintained. Items 3 and 4 was an attempt to find out if sporting equipment are adequately provided and if the sporting equipment were well maintained. While items 5 and 6 attempted to find out if there is provision of indoors sport hall and if the indoor sport halls were well managed items 7 and 8 were attempt to find out if Games store were provided and if the games store were well maintained. Items 9 and 10 solicited the opinions of the respondents on whether facilities for track event were provided and if the facilities for track event were well managed. Responses of all respondents were collected, analyst and presented in a table.

Table 7: Opinions of Respondents on the Provision and Maintenance of Games Facilities in Boarding Secondary Schools in Yola Metropolis.

S/N	Items Statement	Categories of Respondents	Responses			
			Agreed		Disagreed	
			F	%	F	%
1.	Games field is provided	Principals	9	100%	-	-
		Teachers	202	90.0%	21	90%
		Non-teaching staff	37	90.0%	2	5.0%
		Officials of M.O.E	10	100%	-	-
2.	Games field is well maintained	Principals	8	90.0%	1	10.0%
		Teachers	156	70.0%	67	30.0%
		Non-teaching staff	25	70.0%	14	40.0%
		Officials of M.O.E	6	60.0%	4	40.0%
3.	Sporting equipment are adequately provided	Principals	2	20.0%	7	80.0%
		Teachers	18	10.0%	205	50.0%
		Non-teaching staff	12	30.0%	27	60.0%
		Officials of M.O.E	4	40.0%	6	70.0%
4.	Sporting equipment are well maintained	Principals	2	20.0%	2	80.0%
		Teachers	115	50.0%	108	50.0%
		Non-teaching staff	21	50.0%	18	60.0%
		Officials of M.O.E	3	30.0%	3	70.0%
5.	There is provision of indoor sport hall	Principals	2	20.0%	7	80.0%
		Teachers	11	50.0%	212	50.0%
		Non-teaching staff	11	50.0%	28	60.0%
		Officials of M.O.E	3	30.0%	7	70.0%
6.	The indoor sport hall is well maintained	Principals	3	30.0%	6	70.0%
		Teachers	52	20.0%	171	80.0%
		Non-teaching staff	17	40.0%	22	60.0%
		Officials of M.O.E	4	40.0%	6	60.0%
7.	Games store is provided	Principals	6	70.0%	3	30.0%
		Teachers	133	60.0%	90	40.0%
		Non-teaching staff	23	60.0%	16	40.0%
		Officials of M.O.E	7	70.0%	4	30.0%
8.	The game store are well maintained	Principals	8	90.0%	1	10.0%
		Teachers	125	60.0%	98	40.0%
		Non-teaching staff	31	80.0%	8	20.0%
		Officials of M.O.E	5	50.0%	5	50.0%
9.	There are facilities for track event	Principals	1	10.0%	8	90.0%
		Teachers	88	40.0%	135	60.0%
		Non-teaching staff	19	50.0%	20	50.0%
		Officials of M.O.E	4	50.0%	5	50.0%
10.	The facilities for track events are well managed	Principals	1	10.0%	8	90.0%
		Teachers	110	50.0%	113	50.0%
		Non-teaching staff	16	40.0%	23	60.0%
		Officials of M.O.E	4	40.0%	6	60.0%

From table 7, it is evident that Games field is provided. This is seen from the responses of 100% of principals, 90.0% of teachers, 100% of non-teaching staff and 100% of officials of M.O.E who responded in agreement of Item 1. It was also agreed upon the maintenance of the games field by the majority of the respondents, where 90.0% of principals, 70.0% of teachers, 70.0% of non-teaching staff and 60.0% of officials of M.O.E in agreement with item 2, one could conclude that the games field were provided and well maintained.

Item 3, about eighty percent 80.0% of principals, also about ninety two percent 90.0% of teachers, 70.0% of non-teaching staff and 60.0% of officials of M.O.E disagreed that there is no adequate provision of sporting equipments in boarding secondary schools in Yola metropolis majority of the principals represented by 80.0%, and 70.0% of officials did not agreed that sporting equipment are well maintained. However 50.0% of teachers and 50.0% of non-teaching, staff agreed that sporting equipment were well maintained. The revelation of majority of principals and officials of M.O.E point to the fact that sporting equipments were not maintained in the schools.

From the response to item 5, there were no provision of indoors sport hall in boarding secondary schools in Yole metropolis. This could be seen from 80.0% of principals, 100.0% of teachers, 70.0% of non-teaching staff and 70.0% of officials of M.O.E. Also in respect of item 6, 70.0% of principals, 80.0% of teachers, 60.07% of non-teaching staff and 60.0% of officials of M.O.E disagreed that the indoor sport halls were well maintained.

Games store is provided in most of the boarding secondary schools in Yola metropolis. This view was made by 70.0% of principals, 60.0% of teachers, 60.0% of non-teaching staff and 70.0% of officials of M.O.E who agreed that Games store were

provided. It is evident that Games store were well maintained in most of the schools. Where in item 8, 90.0% of principals 60.0% of teachers, 80.0% of non-teaching staff and 50.0% of officials of M.O.E agreed that Games stores were well maintained.

Items 9 and 10, are rectification that there no adequate provision and management of facilities for track events in boarding secondary schools in Yola metropolis. There are evident from the responses of principals, teachers, non-teaching staff and officials of M.O.E respectively. Where in item 9, 90.0% of principals, 60.0% of teachers, 50.0% of non-teaching staff and 50.0% of officials of M.O.E disagreed that there is no adequate provision of facilities for track event. Item 10, 90.0% of principals, 50.0% of teachers, 60.0% of non-teaching staff and 60.0% of officials of M.O.E disagreed that facilities for track event were not well managed.

If there is no adequate provision and maintenance of sporting equipments, no adequate provision and maintenance of indoor sport halls, no adequate provision and maintenance of facilities for track events. It has become mandatory for education managers and proprietors of boarding secondary schools to adequately provide sporting equipments, indoor sport halls and track events facilities. And those that are in charge of the maintenance of the facilities should properly managed the facilities in order to improve teaching and learning physical and Health Education in boarding secondary schools in Yola metropolis. Sports and games are in educational institutions to make students use their leisure time judiciously, develop in them a competitive spirit, Fair play and good citizenship.

4.2.6 Opinions of Respondents on the Provision and Maintenance of Electricity and Water Supply in Boarding Secondary Schools in Yola Metropolis.

This section contained the opinion of respondents on the opinions of respondent on the provision and maintenance of electricity and water supply in boarding secondary schools in Yola metropolis. The section is made up of 10 items from the questionnaire. Items 1 and 2 were attempt to find out if there is adequate supply of electricity in the schools and if all the electrical fittings in the schools were well maintained. Item3 and 4, was an attempt to find out if there is a functional alternative of power supply to the schools and if the alternative electricity source is well maintained. Item 5 solicited the opinions of the respondents whether there is provision for lighting points in all the appropriate locations. While items 6 and 7 was an attempt to find out if there is provision of water supply in the schools and if water supply is constant.

Items 8, 9 and 10 are attempt to find out if sources of potable water were well maintained, Taps and sinks are appropriately provided and if plumbing works were well maintained respectively. Details of the respondents opinion are presented in table 7.

Table 8: Opinions of Respondents on the Provision and Maintenance of Electricity and water Supply in Boarding Secondary Schools in Yola Metropolis

S/N	Items Statement	Categories of Respondents	Responses			
			Agreed		Disagreed	
			F	%	F	%
1.	There is adequate supply of electricity in the school	Principals	3	30.0%	6	70.0%
		Teachers	25	40.0%	198	90.0%
		Non-teaching staff	9	20.0%	30	80.0%
		Officials of M.O.E	4	40.0%	6	60.0%
2.	All the electrical fittings in the school are well maintained	Principals	3	30.0%	6	70.0%
		Teachers	98	40.0%	125	60.0%
		Non-teaching staff	12	30.0%	27	70.0%
		Officials of M.O.E	4	40.0%	6	60.0%
3.	There is a functional alternative power supply to the school	Principals	2	20.0%	7	80.0%
		Teachers	90	40.0%	133	60.0%
		Non-teaching staff	14	30.0%	25	70.0%
		Officials of M.O.E	4	40.0%	6	60.0%
4.	The alternative power supply is well maintained	Principals	3	30.0%	6	70.0%
		Teachers	95	40.0%	128	60.0%
		Non-teaching staff	10	20.0%	29	80.0%
		Officials of M.O.E	4	40.0%	6	60.0%
5.	There is provision for lighting points in an appropriate location	Principals	2	20.0%	7	80.0%
		Teachers	101	40.0%	122	60.0%
		Non-teaching staff	12	30.0%	27	70.0%
		Officials of M.O.E	4	40.0%	6	60.0%
6.	There is provision of water supply in the schools	Principals	7	80.0%	2	20.0%
		Teachers	135	60.0%	88	50.0%
		Non-teaching staff	27	70.0%	12	30.0%
		Officials of M.O.E	6	60.0%	4	40.0%
7.	Water supply is constant	Principals	6	70.0%	3	30.0%
		Teachers	110	50.0%	113	50.0%
		Non-teaching staff	14	30.0%	25	70.0%
		Officials of M.O.E	5	50.0%	5	50.0%
8.	Sources of potable water is well maintained	Principals	3	30.0%	6	70.0%
		Teachers	99	40.0%	124	50.0%
		Non-teaching staff	12	30.0%	27	70.0%
		Officials of M.O.E	5	50.0%	5	40.0%
9.	Taps and sinks are appropriately provided	Principals	1	10.0%	8	90.0%
		Teachers	99	50.0%	113	5007%
		Non-teaching staff	14	40.0%	25	60.0%
		Officials of M.O.E	6	60.0%	4	40.0%
10.	Plumbing works are well maintained	Principals	8	90.0%	1	10.0%
		Teachers	135	60.0%	88	40.0%
		Non-teaching staff	9	20.0%	9	80.0%
		Officials of M.O.E	2	20.0%	8	80.0%

From the responses in table 8, above, it is clear that all items 1 to 5 are not adequately provided and maintained in boarding secondary schools in Yola metropolis. No adequate supply of electricity in the schools, most of the electrical fittings in the schools were not well maintained, there as no functional alternative of power supply in the schools, the alternative of electricity were not well maintained, and also there is no provision for lightly points in an appropriate locations in the schools.

These are evident from the responses of principals, teachers, non-teaching staff and officials of M.O.E where in item 1, 70.0% of principals 90.0% of teachers, 80.0% of non-teaching staff and 60.0% of officials of M.O.E disagreed that there is no adequate supply of electricity in the schools. In item 2, 70.0% of principals, 60.0% of teachers, 70.0% of non-teaching staff and 60.0% of officials of M.O.E disagreed the electrical fittings in the schools were not well maintained. Item 3, 80.0% of principals, 60.0% of teachers, 70.0% of non-teaching staff, and 60.0% of officials of M.O.E disagreed that there is no functional alternative of power supply in the schools. Item 4, 70.0% of principals, 60.0% of teachers, 80.0% of non-teaching staff and 60.0% of officials of M.O.E disagreed that the alternative electricity source is not well maintained. While in item 5, 80.0% of principals, 60.0% of teachers, 70.0% of non-teaching staff and 60.0% of officials of M.O.E disagreed that there is no provision for lighting points in an appropriate location.

If these facilities mentioned above are not adequately provided and maintained. This shows that the managers of boarding secondary schools in Yola metropolis most create more means of providing and maintaining these electrical facilities for teaching and learning to be effective in the schools, being it a boarding schools, it become necessary for the provision of constant electricity to enable the

students form their prep-classes, especially in the night. Efforts should be made to see that electricity is supply at any time.

There is provision of water supply in the schools. These are evident from responses of 80.0% of principals, 60.0% of teachers, 70.0% of non-teaching staff and 60.0% of officials of M.O.E who agreed with item 6, item 7, the opinion of the respondents differs, where 50.0% of officials of M.O.E and 70.0% of principals agreed that water supply is constant, while 50.0% of teachers and 70.0% of non-teaching staff disagreed that supply of water in the boarding secondary schools is not constant. This shows that the principals and the officials of M.O.E were not aware of the water scarcity in the schools. Since the schools in question are boarding secondary schools, it is mandatory for the managers of such schools to provide constant water supply for the schools.

Sources of potable water were not maintained. This is the view of the respondents where 70.0% of principals, 60.0% of teachers, 70.0% of non-teaching staff and 50.0% of officials of M.O.E who did not agreed that sources of potable water are well maintained. Item 9, 90.0% of principals, 50.0% of teacher and 60.0% of non-teaching staff disagreed that taps and sinks are appropriately provided, while 60.0% of officials of M.O.E are in agreement that Taps and sinks were appropriately provided.

Finally, on this section, responses to item 10 shows differences in opinion, this could be seen from the responses of 90.0% of principals, and 60.0% of teachers who are in agreement that plumbing works were well maintained. While 80.0% of non-teaching staff and 80.0% of officials of M.O.E did not agreed that plumbing works were well maintained. Whatever the sources of water supply whether through wells, boreholes, or water board, they should be enough and constant water supply in the

schools proper water storage is called for through the use of reservoirs water storage tanks.

4.3 Hypothesis Testing

This section deals with the hypothesis testing. The hypothesis relates to issues identified in the objectives. These issues are classrooms, laboratories and workshop facilities, accommodation, library, games facilities and water and electricity. These six (6) hypothesis were formulated and tested using one way analysis of variance (ANOVA) at 0.05 level of significance were significance difference existed, Scheffer test was employed to a certain the extend of the differences. Hypothesis is rejected if the p-value is less than the level of significance set by the study.

4.3.1 Hypothesis 1

There is no significant difference in the opinions of principals, teachers, non-teaching staff, and officials of M.O.E on the provision and maintenance of classroom facilities. This hypothesis relates to items 1 – 10 in the questionnaire. To test this hypothesis, responses of all respondents were collected, analyzed and presented in a table using one way analysis of variance (ANOVA). This table 9 gives the details.

Table 9: Summary of one way Analysis of Variance (ANOVA) on the Opinions of the Respondents on Provision and Maintenance of Classroom Facilities in Boarding Secondary Schools in Yola Metropolis.

Groups	Sum of Squares	Df	Mean Square	F	Sig
Between groups	30.273	3	10.091		
Within groups	9616.005	277	34.715	0291	0.832
Total	9646.278	280			

From table 4.7, the F-value is 0.21 and the P-value is 0.832 at 0.05 level of significance. Since the P-value is greater than the level of significance set for the study, the hypothesis is therefore retained, Thus, there is no significance difference in the opinions of principals, teachers, non-teaching staff and the officials of M.O.E in their perceptions on the provision and maintenance of classrooms facilities in boarding secondary schools in Yola Metropolis.

4.3.2 Hypothesis 2

There is no significant difference on the opinions of principals, teachers, non-teaching staff and officials of M.O.E on the provision and maintenance of laboratories facilities. This hypothesis relates to item 1 – 10 in the questionnaire. To test this hypothesis, responses of all respondents were collected, analyzed and presented in a table using (ANOVA) table 10 give the details.

Table 10: Summary of one way analysis of variance (ANOVA) on the opinions of respondents on provision and maintenance of laboratory facilities in boarding secondary schools in Yola Metropolis.

Groups	Sum of Squares	df	Mean Square	F	Sig
Between groups	59.282	3	19.761		
Within groups	15661.999	277	56.542	0.349	0.790
Total	15721.281	280			

From table 10, the F-value is 0.349 and the P-value is 0.790 at 0.05 level of significance. Since the P-value is greater than the level of significance set for study, the hypothesis is therefore retained. Thus, there is no significance difference in the opinion of principals, teachers, non-teaching staff and the officials of M.O.E in their

perceptions on the provision and maintenance of laboratories facilities in boarding secondary schools in Yola Metropolis.

4.3.3 Hypothesis 3

There is no significance difference on the opinions of principals, teachers, non-teaching staff and officials of M.O.E on the provision and maintenance of library facilities. This hypothesis relates to items 1 – 10 in the questionnaire. To test this hypothesis responses of all respondents were collected, analyzed and presented in a table using one way Analysis of variance (ANOVA). This, table 4.9 gives the details.

Table 11: Summary of one way Analysis of Variance (ANOVA) on the opinions of respondents on provision and maintenance of library facilities in Boarding Secondary Schools in Yola Metropolis

Groups	Sum of Squares	Df	Mean Square	F	Sig
Between groups	107.524	3	35.841		
Within groups	8892.333	277	32.102	1.116	0.343
Total	8999.858	280			

From table 11, the F-value is 1.116 and the P-value is 0.343 at 0.05 level of significance. Since the p-value is greater than the level of significance set for study, the hypothesis is therefore retained. Thus, there is no significance difference in the opinions of principals, teachers, non-teaching staff and the officials of M.O.E in their perceptions on the provision and maintenance of library facilities in boarding secondary schools in Yola Metropolis.

4.3.4 Hypothesis 4

There is no significance difference on the opinions of principals, teachers, non-teaching staff and officials of M.O.E on the provision and maintenance of Accommodation facilities. This hypothesis relates to items 1 – 10 in the questionnaire. To test this hypothesis, responses of all respondents were collected, analyzed and presented in table using one way analysis of variance (ANOVA). Thus, table 12 gives the details.

Table 12: Summary of one way analysis of variance (ANOVA) on the opinions of respondents on provision and maintenance of accommodation facilities in Boarding Secondary School in Yola Metropolis

Groups	Sum of Squares	df	Mean Square	F	Sig
Between groups	45.920	3	15.307		
Within groups	16222.564	277	58.565	0.261	0.853
Total	16268.484	280			

From table 12, the F-value is 0.261 and the P-value is 0.853 at 0.05 level of significance since the p-value is greater than the level of significance set for the study, the hypothesis is therefore retained. Thus, there is no significance difference in the opinions of principals, teachers, non-teaching staff and the officials of M.O.E in their perceptions on the provision and maintenance of accommodation facilities in Boarding Secondary Schools in Yola Metropolis.

4.3.5 Hypothesis 5

There is no significance difference on the opinions of principals, teachers, non-teaching staff and the officials of M.O.E on the provision and maintenance of Games facilities. This hypothesis, relates to items 1 – 10 in the questionnaire. To test

this hypothesis, responses of all respondents were collected, analyzed and presented in a table using one way analysis of variance (ANOVA). Thus, table 13 gives the details.

Table 13: Summary of one way analysis of variance (ANOVA) on the opinions of respondents on provision and maintenance of Games facilities in Boarding Secondary School in Yola Metropolis

Groups	Sum of Squares	df	Mean Square	F	Sig
Between groups	20.370	3	6.790		
Within groups	15253.808	277	55.068	0.123	0.946
Total	15274.178	280			

From table 13, the F-value is 0.123 and the P-value is 0.946 at 0.05 level of significance. Since the p-value is greater than the level of significance set for study, the hypothesis is therefore retained. Thus, there is no significance difference in the opinions of principals, teachers, non-teaching staff and the officials of M.O.E are not significantly difference in their perceptions on the provision and maintenance of Games facilities in Boarding Secondary Schools in Yola Metropolis.

4.3.6 Hypothesis 6

There is no significance difference on the opinions of principals, teachers, non-teaching staff and the officials of M.O.E on the provision and maintenance of water and electricity supply. This hypothesis relates to items 1 – 10 in the questionnaire. To test this hypothesis, responses of all respondents were collected, analyzed and presented in a table using one way analysis of variance (ANOVA). Thus, table 14 gives the details.

Table 14: Summary of one way analysis of variance (ANOVA) on the opinions of respondents on provision and maintenance of water and electricity supply in Boarding Secondary Schools in Yola Metropolis

Groups	Sum of Squares	df	Mean Square	F	Sig
Between groups	532.620	3	177.540		
Within groups	15270.276	277	55.127	3.221	0.023
Total	15802.897	280			

Table 14 revealed that there is significant differences in the opinions of the respondents. The F-value is 3.221 and the P-value is 0.023 at 0.05 level of significant. Since the p-value is greater less than the level of significant set for the study, the hypothesis is therefore rejected. In other to ascertain the extend of difference of opinions of principals, teachers, non-teaching staff and the officials of M.O.E Scheffe test was employed. The results are presented in table 14.

4.4 Summary of hypotheses

Table 15: Summary of Scheffe Test on the difference in opinions of Teachers, Principals, Non-teaching Staff and Officials of M.O.E on the Provision and Maintenance of Electricity in Boarding Secondary Schools in Yola Metropolis

Group	Mean Score	Groups							
		1		2		3		4	
Principals (1)	8.1449								
Teachers (2)	4.7248			X					X
Non-teaching staff (3)	8.8939		X				X		X
Officials of M.O.E (4)	10.7845				X				X
			X		X		X		

From Table 15 it is evident that opinions of principals represented by mean score of 8.1449 in respect of the provision and maintenance of electricity are significantly different compared to those of principals, non-teaching staff and officials of MOE. Opinions of non-teaching staff represented by mean score of 8.8939 are different compared to those of teachers and officials of MOE represented by 4.7248 and 10.7848, respectively. Officials of MOE viewed the provision and maintenance of electricity in boarding secondary schools in Yola metropolis different from principals, teachers and non-teaching staff represented by 8.1449, 4.7248 and 8.8939, respectively. It is worthy of note that opinions of principals and non-teaching staff are almost the same considering the mean score of each group. The similarity in the opinions of principals and non-teaching staff could be attribute to the fact that the two

cadres are the one's directly responsible for the provision and maintenance of these facilities.

4.5 Discussion of the Findings

The study was set to determine the following: To determine the provision and maintenance of classroom facilities, to examine the provision and maintenance of laboratory and workshop equipments, to ascertain the provision and maintenance of library facilities, to assess the provision and maintenance of accommodation facilities, to assess the provision and maintenance of games facilities and to evaluate the provision and maintenance of water and electricity supply in boarding secondary schools in Yola Metropolis.

To test the hypothesis formulated for the study, one way analysis of variance (ANOVA) was used. However to give the general description of the respondents on the issues raised, frequencies and simple percentage were used. Six hypothesis were formulated and tested. However, the following are the major finding of the study.

4.5.1 The Opinions of Respondents on Provision and Maintenance of Classroom Facilities

Hypothesis 1, solicited the responses of the respondents on provision and maintenance of classroom facilities. It was revealed that there is no significant difference in the opinions of the respondents. This means that all the respondents agreed that there is provision and maintenance of classroom facilities in boarding secondary schools and most of the facilities stated on the items for this hypothesis are adequately provided and maintained by the school managers. Adesina (1981) observed that the quality of education of our children received bears direct relevance

of the availability or lack of physical facilities and overall atmosphere in which learning takes place. This shows that classrooms are to be equipped with necessary facilities so that it makes students to be proud of their school and will have an impressive influence on their performance at school.

4.5.2 The Opinions of Respondents on the Provision and Maintenance of Laboratories/Workshop Facilities

Hypothesis 2, which solicited the opinions of respondents on the provision and maintenance of laboratories/workshop facilities. There is no significant difference in the opinions of the respondents on this hypothesis. This hypothesis revealed that most laboratories/workshops are not well equipped and maintained, therefore, did not facilitate teaching and learning.

In order to enhance higher productivity in schools good and adequate instructional aids, science laboratories, and workshop equipments should be provided to schools. Lack of these will continue to make students fail in examinations. Adamawa State government should try it's best to provide the boarding secondary schools with facilities necessary for teaching and learning. It will be difficult to achieve educational objectives without adequate facilities. The facilities have impact on both students and teachers.

4.5.3 Opinions of Respondents on the Provision and Maintenance of Library Facilities

Analysis on hypothesis 3, solicited opinions on the provision and maintenance of library facilities. There is no significant difference in the opinions of the respondents on this hypothesis. It reveals that libraries are provided in all the boarding secondary schools in Yola. But it is evident that the libraries are not well managed, adequate and current library materials were not provided in the schools. Supply of

electricity in the libraries was not constant and also computers with internet facilities were not provided. These shows that the objective of teaching and learning will not be effectively achieved.

In order to enhance higher productivity in schools, good and adequate library materials computers with internet facilities and constant electricity supply should be provided to schools. Lack of these will continue to make students fail in examinations. The facilities have significant impact on both teachers and students.

4.5.4 Opinions of Respondents on the Provision and Maintenance of Accommodation Facilities

Hypothesis 4, sought the opinions of respondents on accommodation facilities revealed disagreement of the respondents. This shows that there are no adequate provision of accommodation in boarding secondary schools in Yola Metropolis. Adaralegbe (1983) observed that the contributions of the provision of adequate buildings and instructional facilities to the teaching and learning process are very crucial to the secondary education system. He further stressed that in order for a minimum requirement of secondary education, to be achieved, large, spacious and airy buildings that are aesthetically pleasing are required.

Olutola (1988) maintained that the teacher as well as his students is certainly influenced by their physical environment and such physical environment includes the buildings such as classrooms and Hostel accommodation both for staff and students. These indicate that accommodation facilities are very important to the development and management of boarding secondary schools administration. This hypothesis is an evident which revealed that accommodation facilities in boarding secondary schools are not enough, for both staff and students, then it become necessary for managers of

boarding secondary schools in Yola Metropolis to adequately provide and maintain them for the staff and students. Since it is a boarding school, there is a need for all the staff in the schools to leave within the school premises in order to monitor and take good care of the students.

4.5.5 Opinions of Respondents on the Provision and Maintenance of Games Facilities

Hypothesis 5, sought the opinions of the respondents on Games facilities in boarding secondary schools in Yola Metropolis. In this hypothesis respondents agreed that games facilities are not adequately provided and well maintained. Although all the respondents unanimously agreed that games field are provided in all the boarding secondary schools. But the respondents disagreed that there were no sporting equipments such as indoor sport halls, facilities for track event e.t.c are inadequately provided and not properly maintained by the school managers.

Games and sports is significant in teaching and learning situation. Extracurricular activities assist in learning. If a school is provided with Games field, gymnasium and well equipped with games facilities and is properly maintained, it will provide the learners with the needed physical health activities, relaxation and other extracurricular activities. And such activities apart from enhancing pure practical curricular experience for the students, also help foster intellectual and social development of students. This is to say that sport have positive impact in learning especially in boarding secondary schools.

4.5.6 Opinions of Respondents on the Provision and Maintenance of water and Electricity Supply

Water and electricity are significant in teaching and learning situation. In an attempt to analyze items under hypothesis six, which solicited the responses of the respondents on provision and maintenance of water and electricity supply in boarding secondary schools in Yola Metropolis, it was revealed that there is significant difference in opinions of the respondents. This means that all the respondents disagreed that most of the facilities stated on the items for this hypothesis are inadequately provided and not properly maintained by the school managers.

In view of the above, therefore, there is need for prompt and constant water and electricity supply to the Boarding Secondary Schools. This will help the smooth running of the schools activities. Punctuality at school and class, and contribution to the progress of the school through participation in co-curricular activities such as giving extra lessons to students, conducting night preparatory classes e.t.c all these will not be possible if electricity is not constant. Adequate electric outlets and power should be available in every area in the school compound.

Water supply should be adequate for normal usage. There should be adequate number of drinking water taps. At strategically placed for students use and proper maintenance. Drainage systems should be properly maintained to meet health and safety requirements. Bathrooms and Toilet facilities should be conveniently located for students and teachers usage. Adequate storage water tanks should be provided and other source of water supply should also be provided and well maintain.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

This study has focused on the evaluation of provision and maintenance of infrastructural facilities in Boarding Secondary Schools in Yola Metropolis, Adamawa State. The objective of the study was to determine the provision and maintenance of the following:

- Classroom facilities
- Laboratories and workshop facilities
- Library facilities
- Accommodation facilities
- Games facilities and
- Water and Electricity Supply

In Boarding Secondary Schools in Yola Metropolis a descriptive researcher method was employed for the study. The sample was made up of principals, teachers, non-teaching staff and officials of ministry of education Yola. A questionnaire containing 60 items was designed and validated by expert of educational administration and planning using likert five points rating scale.

The review of literature was based on related literature on the subject. The data collected were analyzed using statistical analysis. The findings are as follows:

1. The opinions of respondents in table 4.1 shows the disagreement with most of the items 1 to 10 listed, this means that classroom facilities were not adequately provided and maintained in boarding secondary schools in Yola Metropolis.

2. In table 4.2 the opinions of the respondents also shows disagreement on the laboratory/workshop facilities, this tells us that there is no adequate provision and maintenance of laboratory equipments and workshop facilities for the practical works in the schools. This means that managers of boarding secondary schools in Yola Metropolis are not producing expected secondary schools graduates on science courses.
3. In table 4.3 the opinions of the respondents on the provision and maintenance of library facilities. The results showed that library facilities were inadequately provided and where some of the materials were provided they were inadequately maintained.
4. The opinions of respondents on accommodation facilities show the disagreement with very high percentages. This means that no adequate provision and maintenance of accommodation facilities for both the students and staff in Boarding Secondary Schools in Yola Metropolis.
5. In table 4.5 the opinions of respondents on Games facilities. The results showed that games facilities were not adequately provided and well managed in the schools.
6. In table 4.6, the respondents also disagreed that electricity and water supply is constant in the boarding secondary schools. No adequate supply of water and electricity in the schools and there is no functional alternative of power and water supply in the schools.

5.2 Conclusion

The findings of the study suggest that, provision and maintenance of infrastructural facilities in Boarding Secondary Schools in Yola Metropolis Adamawa State are grossly inadequate for effective teaching and learning. It was discovered from the study, that most of the schools do not have adequate provision of essential facilities such as laboratories, classrooms, libraries, accommodations, Games and water and electricity supply for effective teaching and learning.

Factors affecting the management of school infrastructural facilities were discovered to be poor maintenance culture of the facilities by the school managers and teachers. So also students are not motivated with facilities such as Hostels, sport, library and science equipments are inadequate, students are not been encourage to attend schools regularly. It was found that, school infrastructural facilities has been described as an effective tool for educational development in general.

The study also identified that it is the government that shows negative attitudes on the adequate provision of school facilities. Schools managers play their parts only when there is adequate provision of these facilities i.e. maintenance and administration.

Finally, from the findings it will also be concluded that, the survival of our boarding secondary schools depends on the adequate provision and maintenance of infrastructural facilities which is very essential in any educational development.

5.3 Recommendations

On the basis of the findings and conclusions of the study the following recommendations are made:

1. Adamawa State government should try to provide the boarding secondary schools with adequate school infrastructural facilities that will facilitate teaching and learning.
2. The schools managers on their part should also try to maintain and manage laboratories and workshop facilities.
3. In order to enhance higher productivity in schools, good and adequate library materials, computers with internet facilities and constant electricity supply should be provided to the school
4. Accommodation are not enough, for both staff and student. It become necessary for managers of boarding secondary schools in Yola metropolis to adequately provide and maintain them for the staff and students. Since it is a boarding school, there is a need for all the staff in the schools to leave within the school premises in order to monitor and take good care of the student.
5. Sport have positive impact in learning especially in boarding schools. The Adamawa State Government should try to provide games field, gymnasium and all the necessary facilities for sporting activities.
6. Water and electricity are significant in teaching and learning situation. There is need for prompt and constant water and electricity supply to the boarding secondary schools.

5.4 Suggestions for Further Research

Base on the findings and conclusion of this study the following recommendations for further studies are made:

1. It is recommended that seminar should be conducted in other states or zones of the country.
2. This study should be repeated in other schools not covered by this study, or in other state of Nigeria in order to confirm or disapprove the findings in this study.
3. Nation wide study of this nature (evaluation of provision and maintenance of infrastructural facilities in boarding secondary schools in Yola metropolis) will help to minimize if not eradicated the problem from school system in Nigeria.
4. Research on maintenance culture as a mean of keeping boarding secondary school facilities in its original state of service.

REFERENCES

- Abdulkareem, A.Y. (1983). School Plant Management Practices: a Case Study of Selected Secondary Schools in Ilorin. Unpublished M.Ed. project University of Ilorin, Nigeria.
- Abdulkareem, A.Y. (1999). Issues in Nigeria Education, Ilorin: Haytee Publishers Nig. Ltd.
- Abdulkareem, A.Y. (2003). An Analysis of the Provision and Management of Facilities in Kwara State Primary Schools. *Abuja Journal of Education* 5(1): 183 – 200.
- Abdulkareem A.Y. (2003). An Analysis of School Plant Maintenance Practice in Kwara State Secondary Schools. *Institute Journal of Studies in Education* 1(5): 1 – 11.
- Adaralegbe, A. (1983). Secondary Education in Nigeria: Trends, Progress, Problems and Issues. Ile-Ife: University Press Ltd.
- Adeboyeje, R.A (1999). A practical approach to effective utilization and maintenance of physical facilities in secondary schools, In J.O. Fadipe and E.F. Oluchukwu (eds), *educational Planning and administration in Nigerian in the 21st Century*. pp 88-103).
- Adesina, S. (1981). Introduction to Educational Planning. Ile-Ife: University of Ife Press Ltd.
- Adesina, S. (1988). The Development of Modern Education in Nigeria. Heineman Educational Books Nig. Ltd.
- Adeyinka, N.A. (2007). Essentials of Foundations of Education (Volume One) Printed by Ya-Byangs Publishers, Jos.
- Afolabi, M. (1998). *Introduction to Research Methods for Writing Proposals*. Zaria: Alpha Publishers.
- Akinsola, A.T. (2005). *Research Methods and Statistics*. Kontagora: Pedro Printing Enterprises.
- Awotude, P.O. & Ugudulunwa, C.A. (eds) (2004). *Research Methods in Education*. Jos: Feb. Anieh (Nigeria) Limited.
- Ayanniyi, R.B. (2006). Management of Primary School Facilities and Cultivation of Maintenance Culture. *Journal of Educational Management and Planning* Volume 12, Number 1.
- Ayeni, A.O. & Atanda, A.I. (2004). Maintaining School Facilities for Achievement of Universal Basic Education (UBE) Objectives in Management of Primary and Secondary Education in Nigeria.
- Bello, S.A (2003). Historical Development of Educational Administration in Nigeria. Lagos: Dedun Educational Books.

- Bower, J.H. & Burkett, C.W. (1999). Effects of Maintenance of School Physical Facilities and Environment on Students' Learning. *Educational Facility Planners*, 27(1): 28-29.
- Castaldi, B. (1977), Educational Facilities Planner, remodeling and management. London: Allyn and Bacon Ltd.
- Cotton.K. (2003).*Principals and Students Achievement*. Melbourne: Hawker Brownlow Education.
- Dare, M.O (2011). School Plant Planning. M.ed lecture Notes for Students of Educational Administration and Planning. A.B.U, Zaria.(Unpublished).
- Dare, M.O. (2009). Educational Administration, Planning and Supervision for Tertiary Institutions in Nigeria, Printed by Afomat Prints, Kano.
- Edem, D.A. (1987). Instruction of Educational Planning in Nigeria, Ibadan: Lidazo press.
- Education Week (2011).Quality Counts 2001: A Better Balance. Retrieved from www.eduweek.org on 25th May, 2012.
- Educational Administration and Planning. Ahmadu Bello University (Unpublished).
- Educational System; <http://www.tall.ortz/education%20system.htm> Retrieved on 15th October 2011.
- Fafunwa, A.B (2004). History of Education in Nigeria. Ibadan: NPS Educational Publishers Ltd.
- Fafunwa, A.B. (1974). *Towards Better Administration and Supervision of Instruction*. Ibadan: Caxtox Press West Africa Limited.
- Federal Ministry of Education (2004).National Policy on Education. Lagos: NERDC Press.
- Halimatu, M.B. (2003). Practical Guideline for Effective Administration and Management of Primary Schools: A Challenge for Democratic Nigeria. *Bakatsina Journal of Education*.
- Ibrahim Y. (2010). Impact of School Plant Provision on the Management of Teaching and Learning in Secondary Schools in Taraba State.Ahmadu Bello University. Unpublished M.Ed Thesis.
- Impact of Infrastructural Facilities on Boarding Secondary Schools.<http://www.google.com>
- Jedo, S.O. (2007). Management in Education Printed and Published by Codat Publications, Ibadan.
- Kerlinger, F.N. (1973). *Foundations of Behavioural Research*. London: Holt-Rine Hard and Witson.
- KochharS.K. (2003). Secondary Administration. Published by Sterling Publishers Pvt Ltd. New Delhi.

- Maina B. (2009). School Plant Administration. M.Ed Lecture Notes For Students of Maintenance of School Facilities: Retrieved from <http://www.google.com> 2nd November, 2011.
- Ministry of Education Yola (2012). Department of Research and Statistics. Yola, Adamawa State.
- Miskel H.E. (1982). Classroom Physical Environment. In Encyclopedia of Educational Research, 5th Ed. Vol 1 Free Press, New York.
- Murfwang, M.M, (2006), Minimum Standards for planning of Basic Education Infrastructure. Department of Planning and Information Management. Universal Basic Education Commission.
- Musa, I.D. (2003). An Overview of the Management of Higher Educational Institution in a Period of Economic Constraints. *Bakatsina Journal of Education*.
- Nanor, U. (2003). Financing and Management of Primary Education. Lagos: Macmillan Nigerian Publishers Ltd.
- Nnaka C.V. & Eyibe C.S. (2000). Harmony in the Work Place: Essay in Personnel Management. Published by Innoson Publications Ltd Onitsha.
- Olaniyi, W.O. (2000). "School-Community Relations in the 21st Century" In J.O. Fadipe and E.E. Oluchukwu (eds) Educational Planning and Administration in Nigeria in the 21st Century, Ibadan.
- Olutola, A.D. (1988) Educational Facilities and Student Performance in WASC Examination. *Journal of Educational Management* 1(1), 17-25
- Onyebueke, E. (2010). Primary Education as a Means of Achieving the Objective of Vision 2020 in Nigeria. *Journal of Education Review, School of Education, F.C.E., Kano*.
- Otu, D.O (2002). The Effects of the Environment on Pupils Learning: A Case Study of Schools in Zaria Metropolis, Kaduna State. *The UBE Forum* 2 (2): pp 11-20.
- Ovwigho Y.M. (2004) Theory and Practice of Educational Planning in Nigeria.
- Oxford New Mini Reference Dictionary (1995). Great Britain.
- Ozigi, A.O. (1977). *A Handbook on School Administration and Management*. London: Macmillan Limited.
- Sadiq H.A. (2007). Fundamental Principles and Practice of Teaching. Published by Central Link Nigeria Ltd. Lagos.
- Sani, D.M. (2007). *Relationship among School Plant Construction, Utilization, Maintenance and School Effectiveness in Kebbi State Secondary Schools, Nigeria*. Unpublished Ph.D. Dissertation, University of Ilorin, Nigeria.

- School Infrastructural Facilities (2011). Retrieved from <http://www.yahoo.com> on 12th October, 2011.
- Shukla, R. (2005). Dictionary of Education's A.P.H. Publishing Corporation New Delhi – 110002.
- Suleiman, H.H. (1997). *Planning and Management of Physical Facilities in Secondary Schools in Adamawa State of Nigeria*. Ahmadu Bello University (Unpublished Ph.D. Thesis).
- Taiwo, B.M. (2000). Maintenance of School Infrastructures for Productivity. In Fagbamiye, E.O. & Durosaro D.O. (Eds.) *Educational Productivity in Nigeria NIEPA*, Ilorin. Haytee Press and Publishing Company.
- Tanimu, I.M. (2007). Essentials of Foundations of Education (Volume One) Printed by Ya-Byangs Publishers, Jos.
- UNESCO (2003). The State of Education in Nigeria. Nigeria UNESCO Lagos Office.
- Universal Basic Education (UBE) Programme. A Monitoring Manual July (2003).
- Wnenburg, F.C. and Ornstein (2008). Educational Administration, Concepts and Practices (Fifth Edition) Printed in the United States of America.
- Yabo, A.M. (2007). *A Student's Guide to Project Writing on Education*. Kano: Gali Graphics.

APPENDIX

Questionnaire on the Evaluation of the Provision and Maintenance of Infrastructural Facilities in Boarding Secondary Schools in Yola Metropolis in Adamawa State, Nigeria

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

Dear Sir/Madam,

REQUEST TO FILL A QUESTIONNAIRE

I wish to solicit for your assistance in collecting necessary data on a research topic: Evaluation of the Provision and Maintenance of Infrastructural Facilities in Boarding Secondary Schools in Yola Metropolis in Adamawa State, Nigeria. This research work is purely an academic exercise and the information gathered in this questionnaire will be treated with confidentiality.

Your honest response will help in improving school infrastructural facilities in Boarding Secondary Schools in Adamawa state.

Thank you.

Yours faithfully,

Rukaiya S. Ahmed (Mrs.)

Section one
Personal data

1. Name of School.....
2. Name of Local Government
3. Designation of respondent (Tick the appropriate).....
 - i. Principal []
 - ii. Teacher []
4. Age of Respondent.....
5. Sex of Respondent..... Male Female
6. Qualification
 - i. NCE []
 - ii) HND []
 - iii) B.A. B.Sc. []
 - iv) B.Ed. []
 - v. M.Ed. []
 - v) Others, Specify.....
7. Working Experience as Secondary School Principal/Teacher
 - i. 1 – 3yrs []
 - ii) 4 – 6yrs []
 - iii) 7 – 9yrs []
 - iv) 10 – 12yrs []
 - v) Above 12yrs (Specify)

Instruction:

Tick [✓] in the appropriate columns that relate to your opinion in sections 2, 3, 4, 5, 6 and 7.

Section Two

Provision and maintenance of classroom facilities in boarding secondary schools in Yola Metropolis

S/No	Items Statement	Strongly Agreed	Agreed	Disagreed	Strongly disagreed	Undecided
1	Chairs / tables are adequately provided					
2	Chairs and tables are adequately maintained					
3	Blackboard is provided					
4	The blackboard is well managed					
5	Teaching aids are provided					
6	Teaching aids are well managed					
7	The supply of light is constant in the classrooms					
8	All electrical fittings in the classrooms are well maintained					
9	The floor and the windows of the classrooms are well constructed					
10	The floors are well maintained					

Section Three**Provision and maintenance of laboratories / workshop facilities in boarding secondary schools in Yola Metropolis**

S/No	Items Statement	Strongly Agreed	Agreed	Disagreed	Strongly disagreed	Undecided
1	There is adequate provision of science laboratories.					
2	Science laboratories are well managed					
3	Apparatus for science practical lesson are adequately provided					
4	Apparatus for science practical lesson are well maintained					
5	Instructional facilities are adequately provided in the laboratories					
6	Instructional facilities are well maintained in the laboratories					
7	The Home Economics laboratory is provided					
8	The Home Economics laboratories is well maintained					
9	There are adequate and functional workshop facilities					
10	Workshop facilities are well managed					

Section Four**Provision and maintenance of library facilities in boarding secondary schools in Yola Metropolis**

S/No	Items Statement	Strongly Agreed	Agreed	Disagreed	Strongly disagreed	Undecided
1	Library is provided					
2	Library is well managed					
3	Adequate and current library materials are provided					
4	Library materials are well maintained					
5	Chairs / tables are adequately provided in the library					
6	Chairs / tables are well maintained in the library					
7	The supply of light is constant in the library					
8	All the electrical fittings in the library are well maintained					
9	Computers with internet facilities are provided					
10	Computers with internet are well managed					

Section Five**Provision and maintenance of accommodation facilities in boarding secondary schools in Yola Metropolis**

S/No	Items Statement	Strongly Agreed	Agreed	Disagreed	Strongly disagreed	Undecided
1	There is adequate provision of good and enough accommodation for students					
2	The accommodation is well maintained					
3	Beds are adequately provided for the students					
4	Bed are well maintained					
5	The floor and the windows of the classrooms are well constructed					
6	the floors are well maintained					
7	The rooms are not overpopulated					
8	Overpopulation lead to the spread of communicable diseases					
9	Staff quarters are provided					
10	There is good maintenance of staff quarters					

Section Six**Provision and maintenance of games facilities in boarding secondary schools in Yola Metropolis**

S/No	Items Statement	Strongly Agreed	Agreed	Disagreed	Strongly disagreed	Undecided
1	Game field is provided					
2	Game field is well maintained					
3	Sporting equipment are adequately provided					
4	Sporting equipment are well managed					
5	There is provision of indoor sport hall					
6	The indoor sport hall is well maintained					
7	Games store is provided					
8	The games store is well maintained					
9	There are facilities for track event					
10	The facilities for track event are well managed					

Section Seven**Provision and maintenance of electricity and water supply in boarding secondary schools in Yola Metropolis**

S/No	Items Statement	Strongly Agreed	Agreed	Disagreed	Strongly disagreed	Undecided
1	There is adequate supply of electricity in the schools					
2	All the electrical fittings in the schools are well maintained					
3	There is a functional alternative power supply to the school					
4	The alternative electricity source is well maintained					
5	There is provision for lighting points in an appropriate location					
6	There is provision of water supply in the school					
7	Water supply is constant					
8	Source of potable water is well maintained					
9	Taps and sinks are appropriately provided					
10	Plumbing works are well maintained					

Thank you.