

**INFLUENCE OF SCHOOL PLANT PLANNING ON STUDENTS' ACADEMIC
PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN KADUNA STATE,
NIGERIA**

BY

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ZARIA, NIGERIA**

AUGUST, 2021

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**A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE
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**DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND CURRICULUM,
FACULTY OF EDUCATION,
AHMADU BELLO UNIVERSITY,
ZARIA, NIGERIA**

AUGUST, 2021

DECLARATION

I hereby declare that this dissertation titled “Influence of School Plant Planning on Students’ Academic Performance in Public Secondary Schools in Kaduna State, Nigeria” has been written by me in the Department of Educational Foundations and Curriculum (Educational Administration and Planning Section) under the supervision of Dr. J. O. Egbebiand Dr. M. M. Ibrahim. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this dissertation was previously presented for another Degree or Diploma in any other University.

UZEMBE GODWIN IWHO

Date

CERTIFICATION

This dissertation titled “Influence of School Plant Planning on Students’ Academic Performance in Public Secondary Schools in Kaduna State, Nigeria” by Uzembe Godwin Iwho meets the regulations governing the award of Masters Degree of Education (Educational Administration and Planning) of the Ahmadu Bello University, Zaria and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This research work is dedicated to my late father PA. UzembeIwhobetiango of the blessed memory

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ABBREVIATIONS

NCE:	Nigeria Certificate in Education
SSCE:	Senior Secondary School Certificate Examination
NPE:	National Policy on Education
Ph.D:	Doctor of Philosophy
M.Ed:	Master of Education
B.Ed:	Bachelor of Education
PGDE:	Post Graduate Diploma in Education
HND:	Higher National Diploma
B.SC:	Bachelor of Science
ANOVA:	Analysis of Variance
PTA:	Parents' Teachers' Association
MOE:	Ministry of Education
I.Q:	Intelligence Quotient
FRN:	Federal Republic of Nigeria
ICTS:	Information and Communication Technology
SDT:	Self Determination Theory
UNESCO:	United Nations Educational, Scientific and Cultural Organization
USDE:	United State Department of Education
UN:	United Nations

OPERATIONAL DEFINITION OF TERMS

- Influence:** A power to control persons or events especially power based on prestige etc. or causing something without any direct or apparent effect. A cognitive factor that tends to have an effect on what one does.
- School:** Is an institution designed for the teaching and learning of students (or pupils) under the direction of teachers.
- School plant:** It refers to everything within the school premises which includes the site, building, equipment and all essential structures, permanent and non-permanent as well as machines and laboratory equipment and others.
- Planning:** Is a process of organizing, constructing and systematic arranging of activities toward achieving a desired goal. In other words, it is a cognitive process of thinking about what one will do in the event of something happening.
- Students:** Learner or someone who attend education institution.
- Academic:** Is a process of learning in school or other higher institution of learning also a scholarly society or organization.
- Performance:** The act of performing or doing something successfully, using knowledge as distinguished from merely possessing it.

ABSTRACT

This study investigated the “Influence of School Plant Planning on Students’ Academic Performance in Public Secondary Schools in Kaduna State, Nigeria”. The study had seven objectives some of which are: Examine the influence of security facilities on students’ academic performance in Public secondary schools in Kaduna State; assess the influence of school physical environment on students’ academic performance in public secondary schools in Kaduna State; find out the influence of classroom positioning on students’ academic performance in public secondary schools in Kaduna State; identify the influence of recreational facilities positioning on students’ academic performance in public secondary schools in Kaduna State. Seven research questions were raised while seven hypotheses were formulated in line with the stated objectives of the study. Descriptive survey research design was used and data were collected through the use of self-structured questionnaire. The population of the study were; 541 Principals, 10,294 Teachers, 3246 PTA Officials and 229 Ministry of Education Officials. Random sampling technique was used to derive sample from the four educational zones. The sample of the study were; 50 principals, 220 Teachers, 75 PTA Officials, 25 MOE Officials. The validity of the instrument was determined by vetting the contents by experts in Educational Administration and planning and English Language. The reliability coefficient obtained was at 0.87. The collected data were presented in frequency, percentage and Analysis of Variance (ANOVA) statistical technique was used at 0.05 significance level. Six hypotheses were rejected and one retained. The findings of the study revealed that adequate provision of security facilities influence students’ academic performance in public secondary schools in Kaduna State; conducive school physical environment influences students’ academic performance in public secondary schools in Kaduna State. It was recommended that Kaduna State Ministry of Education should be sure there is adequate supply of school plant facilities in the schools so as to achieve maximum educational outcomes in Kaduna State.

CHAPTER ONE

INTRODUCTION

1.2 Background to the Study

Quality education is an issue of global concern. As the Nigeria stakeholders' attention is increasingly focused on the outcomes of education. Policy makers have undertaken a wide range of reforms to improve schools and schooling, ranging from setting new standards and tests to redesigning of schools, new curricular and new instructional strategies. Rising expectations about what students should know and be able to do, break-through in research on how students learn, and the increasing diversity of the students' population have all put significant pressure on the knowledge and skill teachers must have to achieve the ambitious goal demanded of public education. That goal is to ensure that students of all backgrounds master a demanding core curriculum and other materials that will prepare them to assume their civic and social responsibilities in a democratic society and be able to compete within the global economy.

School plant planning is conceived in this study to mean security facilities, library facilities, school buildings like classes, administrative space, convenience space, recreational facilities, class positioning, school physical environment and the likes. The extent to which these spaces enhance and impact learning depends on their location within the school compound, the type of structures and accessories, as well as the political atmosphere of the school.

Emphasizing the influence of school plant planning on students' academic performance, Oduchukwu (2000), asserted that school plant planning is an essential aspect of educational planning whereby school issues like setting out of building structures, equipment, space utilization are taken into consideration. In line with this statement, Mark (2002) and Ajayi (2007), maintained that high level of

students' academic performance may not be guaranteed where instructional structures such as libraries, technical workshops and laboratories are structurally defective.

They emphasized structural effectiveness and proper ventilation as necessary school plant indicator for successful teaching and learning atmosphere in secondary schools. Relating this study to international occurrences, are the assertions of Williams, and Tunner (2008) reported that an orderly classroom environment (aspect of instructional space), school facilities (accessories) are significantly related to students' academic performance.

School physical environment like beautification of school premises with flowers, planting of trees, erecting national flag, national symbols, painting, maintenance, watering and cutting of flowers and grasses etc. "The school environment, which include the classrooms, libraries, technical workshop, laboratories, teachers quality, school management, teaching methods, peesetc are variables that affect students' academic achievement". Ajayi, (2007). The school environment remains an important issue that should be situated and well managed to influence the students' academic performance. To crown it up, Nworgu, (2008) says that no matter the strength of manpower resources in the system, educational process must require conducive physical accommodation, libraries, furniture and play ground when these facilities are lacking teachers are hardly effective in their instruction to students.

1.2 Statement of the Problem

Every year thousands of secondary school students are presented for the West African School Certificate Examination, National Examinations Council and the likes. Most times the failure rates are high. This is a regrettable situation as it signifies an enormous wastage of government's huge resources that are pumped into the provision, maintenance and positioning of schools' facilities.

Although there are several factors that cause poor academics performance of public secondary school students in Kaduna State. The most critical and notable factor is that of the School plant planning and management. School structure and infrastructure are not put in place accordingly, acceptable rules and regulations which affect the school setting, movement of students, staff and materials in the school environment. Landscaping, which is supposed to contribute to the beauty of the environment appears to be completely neglected as its contribution to students academic performance is grossly underrated.

Bridget (2013) was of the view that no effective or meaningful School Curriculum activity can exist without infrastructure for teaching and learning. This is because facilities enable the learner to develop problem solving skills and scientific attitudes which are useful in national building. Inadequate provision of instructional facilities hinders and degrades the students performance in Schools. This could be seen in substandard Libraries which has no enough materials as well as low equipped Laboratories and poor use of teaching aids defected the students' academic performance. In reference to this, Uwheraka (2005) said facilities below standard leads to reduction in quality of teaching and learning in Schools and resulting to poor students' academic performance.

United State General Accounting Office (GAO, 1995b) reported "There were about 42 million public school students who attended school in buildings that needed major building repairs". These buildings do not have the future to control thermal environment, good roads, adequate lighting and space necessary for good learning environments, (Earthman). Meanwhile, the United States Department of Education ([USDE] 1999), research studies had been consisted in describing poor conditions of public schools and raising concerns about the effects of school facilities on teaching as well as learning.

The poor conditions of some schools raised serious concern about teachers' and students' safety (USED, 1990.) Inadequate recreational facilities in secondary schools reduce the academic performance as most of the schools in Kaduna State are either recreated or renovated. Nwague (1985) was of the view that no matter the strength of manpower resources in the system, educational process must require conducive physical accommodation, libraries, furniture and play ground when these facilities are lacking teachers are hardly effective in their instruction to students. This implies for manpower to be effective there should be conducive physical accommodation, beautification of the environment, standard and up to date infrastructure, instructional facilities and the likes to improve effective teaching and learning in secondary schools in Kaduna State.

1.3 Objectives of the Study

The objectives of the study are to:

1. examine the influence of security facilities on students' academic performance in public secondary schools in Kaduna State;
2. assess the influence of school physical environment on students' academic performance in publicsecondary schools in Kaduna State;
3. find out the influence of classroom positioning on students' academic performance in publicsecondary schools in Kaduna State;
4. identify the influence of recreational facilities positioning on students' academic performance of publicsecondary schools in Kaduna state;
5. examine the influence of library facilities positioning on students' academic performance of public secondary schools in Kaduna State;
6. assess the influence of convenience space positioning on students' academic performance in publicSecondary Schools in Kaduna State; and

7. determinethe influence of administrative space positioning on students' academic performance in publicsecondary schools in Kaduna State.

1.4 Research Questions

The following research questions were raised to guide the study:

1. In what way do security facilities influence the academic performance of publicsecondary school students' in Kaduna State?
2. What is the influence of school physical environment on the academic performance of public secondary school students' in Kaduna State?
3. To what extent does classroom positioning influence academic performance of public secondary school students' in Kaduna State?
4. How does recreational facilities positioning influence the academic performance of public secondary school students' in Kaduna State?
5. In what way does library facilities positioning influence the academic performance of public secondary school students' in Kaduna State?
6. How does convenience space positioning influence the academic performance of public secondary school students' in Kaduna State.
7. In what way does administrative space positioning influence academic performance of public secondary school students' in Kaduna State?

1.5 Research Hypotheses

- Ho₁ There is no significant difference in the opinions of Principals, Teachers, PTA Officials and Ministry of Education Officials on the influence of security facilities on students' academic performance in public secondary schools in Kaduna State.
- Ho₂ There is no significant difference in the opinions of the respondents on the influence of school physical environment on students' academic performance in public secondary schools in Kaduna State.
- Ho₃ There is no significant difference in the opinions of the respondents on the influence of classroom positioning on students' academic performance of public secondary schools in Kaduna State.
- Ho₄ There is no significant difference in the opinions of the respondents on influence of recreational facilities positioning on students' academic performance in public secondary schools in Kaduna State.
- Ho₅ There is no significant difference in the opinions of the respondents on the influence of library facilities positioning on public secondary school students' academic performance in Kaduna State.
- Ho₆ There is no significant difference in the opinions of the respondents on the influence of convenience space positioning on students' academic performance in public secondary schools in Kaduna State.
- Ho₇ There is no significant difference in the respondents' opinions of the influence of administrative space positioning on students' academic performance in public secondary schools in Kaduna State.

1.6 Basic Assumptions

The following basic assumptions were raised to guide the study:

1. The students' academic performance would be positive or negative if adequate security facilities are improved in public secondary schools in Kaduna State.
2. Friendly school physical environment could improve students' academic performance in public secondary schools in Kaduna State.
3. Effective classroom positioning is assumed to enhance students' academic performance of public secondary schools in Kaduna State.
4. When recreational facilities are adequately provided, the students' academic performance would be improved in secondary schools in Kaduna State.
5. Students' academic performance in public secondary schools in Kaduna State would be influenced when library facilities positioning are up to date and functional.
6. Adequate provision of convenience space positioning will influence students' academic performance in public secondary schools in Kaduna State.
7. Friendly administrative space positioning will influence students' academic performance in public secondary schools in Kaduna State.

1.7 Significance of the Study

The study will be beneficial to the following stakeholders: Ministry of Education, School Administrators, parents, students and researchers.

Ministry of Education: The study will help them in the provision and supervision of the school plant facilities in schools in the state.

School Administrators: The study will help them to know the school plant facilities they need in schools and will as well maintain them when provided by the government to schools.

Parent; it will give parents the idea to choose schools for their children to attend.

Students; the provision of the school plant facilities is for the students benefit so it will enhance their academic performance.

Researcher: The study will serve as reference material for researchers

The study will also serve as reminder to planners of education that planning of education must be in line with the school plant planning norms. By this, educational planners should plan for the provision and maintenance of school facilities in line with school plant planning norms.

1.8 Scope of the Study

The geographical location of the study is Kaduna State in the public secondary schools of the 12 educational zones in the 23 local government areas.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter aims at reviewing the ideas and opinions of other scholars on the Influence of School Plant Planning on Students' Academic Performance in Public Secondary Schools in Kaduna State. The reviews were conducted in line with the formulated objectives of the study, which center on the following areas:

- 2.2 Conceptual Framework;
 - 2.2.1 Influence;
 - 2.2.2 School Plant;
 - 2.2.3 Planning;
 - 2.2.4 Academic Performance;
 - 2.2.5 School Plant Planning;
 - 2.2.6 Security Facilities;
 - 2.2.7 School Physical Environment;
 - 2.2.8 Classroom Positioning;
 - 2.2.9 Recreational Facilities Positioning;
 - 2.2.10 Library Facilities Positioning;
 - 2.2.11 Convenience Space Positioning;
 - 2.2.12 Administrative Space Positioning;
 - 2.2.13 Theoretical Framework;
 - 2.2.14. Empirical Studies; and
 - 2.2.15 Summary.

2.2 Conceptual Framework

For better understanding of the study, the following concepts are define to guide the study:

2.2.1 Concept of Influence

It is a powerful force in the world. It changes things without forcing them. Human beings are uniquely wired to be influenced by their actions and words of others in life. Thinking of the peer pressure in many high schools and middles students faced each day from their peers that influence them to make destructive decisions. Influence itself, however, it truly a good thing but the pressure faced by the peer pressure is the negative manifestation of influence which truly can show how powerful influence can be.

According to Wiktionary on net (n.d) influence is the power to affect, control or manipulate something or someone, the ability to change the development of fluctuating things such as conduct, thoughts or decisions.

- a. Influential Influence Quotes: Influential people use influence to bring about good in the world. Transformational change in any domain is usually brought about by the influence of a person or group of people committed to certain ideas with a vision of something greater.
- b. Influence as Inspiration: There are only two ways to influence human behaviour “you can manipulate it or you can inspire it” Simon, (2003). He is a highly influential writer who has inspired many organizations with his popular leadership book “taps into fundamental truth about leadership and people who follow”.

2.2.2 Concept of School Plant

School plant is an essential aspect of educational planning because unless a school is well sited and according to laid down specifications, effective teaching and learning may not take place as desired. This is because much of the curriculum is designed to produce desirable and expected attributes in learners such that physical structures of the school ought to provide an enabling environment for possible performance of the anticipated school goals. Such possible school anticipated goals include: character formation, acceptable cultural attitude, sound academic performance and the social acceptance by the community members in which the learners live. Adeboye (2002) defined school plant as the physical and spatial that enables teaching and learning which will increase the production of results. This implies that school plants (facilities) are materials resources that facilitate effective teaching and learning in schools. There are: the school buildings, classrooms, furniture, libraries, laboratories, recreational equipment and other instructional aids. Owing to the current population explosion in Nigeria and the resultant astronomic increase in school enrolment at all levels, school facilities have been subjected to over utilization, leading to greater frequency of breakdown.

2.2.3 Concept of Planning

Planning, according to Olubadewo (1992) referred to as the first managerial functions of educational administration. It associated with a set of decisions meant for further action. Planning cannot be carried out in isolation of other elements of administration such as organizing, coordinating, controlling and commanding. In other words, planning as a basic management; involved formulation of one or more detailed plans to achieve optimum balance of needs or demands with the available resources. The process by which an organism solves the problem of determining its

relationship with its environment. Dermer (1977) stressed that it is a process of collecting desired facts or information and making decisions by which the authority enunciated objectives.

Dermer (1977) opined the importance of planning when he postulated that planning encourages innovation, mind stretching and search for more and better alternatives he added that planning reconciles objectives opportunities and capabilities and lends itself as a factor for selecting targets and means of achieving these targets. (www.publishyourarticles.net/knowled).

1. Planning Process:

- a. Identifies the goals or objectives to be achieved.
- b. Formulates strategies to achieve them.
- c. Arrange or creates the means required, and
- d. Implement, directs, and monitors all steps in their proper sequence.

(Koontz, 1976)

In simple words, planning is deciding in advance what is to be done, when, where, how and whom it is to be done, planning bridges the gap from where we are to where we want to go. It includes the selection of objectives, procedure and programmes from among alternative a plan is a predetermined course of action to achieve a specified goal. It is an intellectual process characterized by thinking before doing. It is an attempt on the part of manager to anticipate the future in order to achieve better performance. According to Koontz (1976), “planning is an intellectual process, conscious determination of course of action, the basing of decision on purpose. Facts, and considered estimate.” He further stressed that a plan is a trap laid to capture the future, nature and characteristics of Planning. It is infer from the above definitions that:

- a. **Planning is an Intellectual Process:** Planning is an intellectual of thinking in advance. It is a process deciding the future on the series of events to follow. Planning is the process where a number of steps are to be taken to decide the future course of action, managers or executive have to considered various courses of action, to achieve the decide goals, go in details of the pros and cons of every course of action and then finally desired what course of action may suit them best.
- b. **Planning Contributes to the Objectives:** Planning contributes positively in attaining the objectives of work. Since plans are there from the very first stage of operation. The administrator is able to handle every problem successfully, plan tries to set everything right, a purposeful, sound and effective planning process knows how and when to tackle a problem which leads to success.
- c. **Planning is Primary Function of Management:** Planning precedes other functions in the management process. Certainly, setting of goals to be achieved and lines of action to be followed precedes the organization, direction, supervision and control. No doubt, planning precedes other functions of management it is a primary requirement before other managerial functions step in. But all functions are interconnected. It is mixed in all managerial functions but there too it gets precedence.
- d. **Planning is a Continuous Process:** Planning is a continuous process and a never ending activity of manager in an administration based upon some assumptions which may or may not come true in the future. Therefore, the manager has to go on modifying revising and adjusting plans in the light of changing circumstance. Planning is a continuous process and there is no end to it. It involves continuous collection, evaluation and selection of data and

scientific investigation and analysis of the possible alternative courses of action and selection of the best alternative.

Planning pervades managerial activities from primary planning follows pervasiveness of planning. It is the functions of every managerial personnel, the character, nature and scope of planning may change from personnel to personnel but the planning as an action remains intact. Plans cannot make an enterprise successful action is required, the enterprise must operate managerial planning seek to achieve a consistent, coordinated structure of operations focused on desired trends without plans, action must become merely activity producing nothing but chaos.

2. Importance of Planning

An organization without planning is like a sailboat minus its rudder. Without planning organizations are subject to the winds of organizational change. Planning is one of the most important and crucial functions of management. According to Koontz (1976), without planning business becomes random in nature and decisions become meaningless and adhoc choices. According to George. (2010) planning is the foundation of most successful actions of any enterprise” planning becomes necessary due to the following reasons.

a. Reduction of Uncertainty

Future is always full of uncertainties. An organization has to functions in these uncertainties. It can operate successfully if it is able to predict the uncertainties. Some of the uncertainties can be predicted by undertaking systematic forecasting. Thus planning help in foreseeing uncertainties which maybe caused by changes in technology, fashion and taste of people, government rules and regulations.

b. Better Utilization of Resources

An important advantage of planning is that it makes effective and proper utilization of educational resources. It identifies all such available resources and make optimum use of these resources for the betterment of educational system.

c. Increases Organizational Effectiveness

Planning ensures organizational effectiveness. Effectiveness ensures that the organization is in a position to achieve its set objectives due to increased efficiency of staff in the organizations.

d. Reduces the Cost of Performance

Planning assists in reducing the cost of performance. It include the selection of only one course of action amongst the different course of actions that would yield the best results at minimum cost. It removes hesitancy and protects against improper deviations in the organization.

e. Concentration on Objectives

It is a basic characteristic of planning, it is related to the organizational set objectives. All the operations are planned to achieve the organizational objectives. Planning facilities the achievement of organization set objectives by focusing attention on them. It requires the clear definition of objectives so that most appropriate alternative course of actions are chosen to achieve the set objectives effectively.

f. Helps in Coordination

Good plans unify the interdepartmental activity and clearly lay down the area of freedom in the development of various sub-plans. Various departments' works in accordance with the overall plans of the organization.

Thus, there is harmony in the organization, and duplication of efforts and conflicts of jurisdiction are avoided.

g. Makes Control Effective

Planning and control are inseparable in the sense that unplanned action cannot be controlled involve keeping activities on the predetermined course by rectifying deviations from plans. Planning helps control by furnishing standards of performance.

h. Encouragement to Innovation

Planning helps innovative and creative thinking among the managers because many new ideas come to mind of a manager when he is planning. It create a forward looking attitude among the managers.

i. Increase in Competitive Strengths

Effective planning gives a competitive edge to the programme over other programmes that do not have planning or have ineffective planning, this is because planning may involve expansion of capacity, changes in work methods, changes in quality, anticipation of tastes and technology changes etc.

j. Delegation is Facilitated

A good plan always facilitates delegation of authority in a better way to subordinates.

3. Steps Involved in Planning

Koontz (1976) also stated the following steps involved in planning as:

Planning is a process which embraces a number of steps to be taken. Planning is an intellectual exercise and a conscious determination of course of actions. Therefore, it requires courses of action, the planning process is valid for one organization and for one plan, may not be valid for other organization or for all type of plans, because various tools that can go into planning process

may differ from organization to organization, or from plan to plan. For example, planning process for a large organization may not be the same for a small one. However, the major steps involved in planning process of a major organization according to Koontz (1976) are as follows:

- a. **Establishing Objective:** The first and primary step in planning process is the embellishment of planning objectives or goals. Definite objectives in fact, speak categorically about what is to be done, where to place the initial emphasis and the things to be accomplished by the network of policies, procedures, budgets and programmes, the lack of which would invariably result in either faulty or ineffective planning

It needs mentioning, in this connection that objectives must be understandable and rational to make-planning effective. Because the major objectives in all programme, needs to be translated into derivative objectives, accomplishment of programmes and objectives need a concrete endeavour of all the departments.

- b. **Establishment of Planning Premises:** Planning premises are assumptions about the future understanding of the expected situation. These are the conditions under which planning activities are to be undertaken. These premises may be internal or external.

Internal premises are internal variables that affect the planning. These include organizational policies various resources and the ability of the organization to withstand the environmental pressure. External premises includes all factors in tasks environment like political, social technological, competitors government policies, market conditions.

Both internal and external factors should be considered in formulating plans at the top level mainly external premises are considered. As moves downward, internal premises gain importance.

- c. **Determining Alternative Courses:** The next logical step in planning is to determine and evaluate alternative courses of action. It may be mentioned that there can hardly be any occasion when there are no alternatives. And it is most likely that alternative properly assessed may prove worthy and meaningful. As a matter of fact. It is imperative that alternative courses of action must be develop before deciding upon the exact plan.
- d. **Evaluation of Alternatives:** Having sought out the available alternative along with their strong and weak points, planners are required to evaluate the alternative giving due weight-age to various factors, involved for one alternative may appear to be most profitable involving heavy cash outlay whereas the other less profitable but involve least risk. Likewise, another course of action may be found contributing significantly to the company's long-range objectives although immediate expectation are likely wise to go unfulfilled at a decision. Otherwise, it would be difficult to choose the best course of action in the perspective of company needs and resources as well as objectives laid down.

2.2.4 Students' Academic Performance

- i. **Students:** Wikipedia (2014), the free encyclopedia, defines students as a learner, or someone who attends educational institution for the stages of learning. The word "studerande" plural also "studerande" is used. (Wikipedia.org/wiki/students2014).

- ii. **Performance:** Annie-ward, Howard, Mildred Murray Ward (1996) in California: opined that the achievement of school is measured by the academic performance index individual differences influencing academic performance, individual differences in academic performance has been linked to difference intelligence and personality. VornStumm, et al (2011) are of the view that students with higher mental ability as demonstrated by I. Q, Test and those who are higher in conscientiousness (linked to effort and achievement motivation) tend to achieve highly in academic settings. They also opined that children's semi-structure home learning environment transmission into a more structured learning environment when children start grade early academic achievement enhances later academic achievement (performance) in addition, Magnuson (2007), says "parents academic socialization is a term describing the way parents influence students' academic performance by shaping students' skills, behaviours and attitudes towards school".
- iii. **Academic:** Wikitionary online dictionary defines academic as a process of learning in school or other higher institution of learning also a scholarly society or organization.
- iv. **Academic Performance:** Refers to the degree of a student's accomplishment, his or her tasks and studies. The most well-known indicator of measuring academic performance is grades which reflects the student's 'score' for their subjects and overall tenure. Success is measured by academic performance in most educational institutions. In this case, how well a student meets standards set out by an institution itself or an external examination body either set up by the government or an independent outfit signifies success or good performance. Before standardization teachers' observation made up the bulk of the assessment. Grading system that came into existence in the late

Victorian period and were highly subjectivity as different teachers valued different aspects of learning more high than others. However, standardization function which is fulfilled by establishments outside the schools helped in putting this in check considerably. Academic performance really means three things, the ability to study and remember facts, facts, being able to study effectively and see how facts fit together and form larger patterns of knowledge and being able to think for yourself in relation to facts and thirdly to be able to communicate (Coulson, 2008).

According to Pruett (2010) is the level of achievement attain via the combination of inputs from student motivation and conduct. In views of Adediwura and Tinto (2007) academic performance is generally referred to how well a student is accomplishing his or her tasks and studies, but there are quite a number of factors that determine the level and quality of students' academic performance. This no doubt supports the view of Nicholas (2004) that the most current information on improving academic performance shows that there are three environmental influences linked to level of academic performance among school students.

These influence according to the information includes high quality parenting (the degree to which a young star is provided with an enriched, warm and responsive learning environments which includes appropriate control and discipline over children and are closely associated with both higher, grade reading and mathematics skills, high quality child-care environments (stimulating activity and nurturing as reflected in high quality parenting) and high quality first-grade classrooms with a focus on literacy instruction, evaluative feedback, instructional conversation and encouraging child responsibilities).

Academic performance index (2010) revealed that academic performance is how students deal with their studies and responsibilities given to them by their teachers, Louis (2012) academic performance is ability of students to obtain high grades and standard test scores in school courses, especially courses that are part of the core academic curriculum.

Factors Affecting Students' Academic Performance

The factors include, age, teaching facilities, students parent's guardian, social, economic status, residential area of students' medium of instructions in schools, tuition trend, daily study hours and accommodation as hostels or day schools.

- i. **Social and Economic Status of Students' Parent:** According to Jeiness (2002) among many research studies conducted on students' academic performance "that social economic status is one of the main elements studied while predicting academic performance" Graetz (1995), conducted a study on socio-economic status of the parents of students and concluded that the socio-economic background has a great impact on students' academic performance, that is the main sources of educational imbalance among students and academic success contingent very strongly on parent's socio-economic standard. On the other hand, Pedrosa et al (2006) stated that those students who mostly come from deprived socio-economic and educational background performance relatively better than others coming from higher socio-economic and educational background. It was also pointed out that "due to residential stratification and segregation, the students belonging to low-income background usually attend schools with lower funding levels, and their situation reduced achievement motivation of students and high risk of educational malfunction in future life endeavour".

- ii. **Availability of Teaching Facilities:** Kwesiga (2002) states that. Academic performance of students is also influenced by the school in which they studied, he further stated that the number of instructional facilities in schools, which in turn affects the academic performance and accomplishment of its students.
- iii. **School Environment:** The educational environment of schools one attends set the parameters of students' performance, this view was supported by Zappalal (2002) which showed that school environment and teachers expectation from their students also have strong influence on students' academic performance.
- iv. **Study Levels:** Zappala (2002), states that; parents' income or social status positively affects the students test score in examination. Minnespta (2007) say, the higher education performance is depending upon the academic performance of graduate students'. Study levels: Graetz (1995), suggested "a student education success contingent heavily on social status of students' parents guardians in the society.
- v. **Students Previous Education:** Durden and Ethis (2002) observed that "the measurement of student's previous education outcomes are the most important indicators of students future achievement, they refer that higher previous appearances, better the students' academic performance future endeavours.

2.2.5 School Plant Planning

In the context of the study, school plant planning refers to a process in which a suitable site is selected and instructional space, administrative space, circulation space, and spaces of convenience are designed to facilitate the teaching and learning process in the school system. The place of school plant planning in the development of effective educational programme of the school system could not be under estimated.

Owoeye and Yara (2001) have shown that school plant planning has a relationship between school plant and curriculum and how it affect teaching and learning in terms of the impact of positive physical environment, in which teaching and learning take place, such schools and the impact of learners bring about the following outcomes.

- i. A well planned school improves students' attendance and reduce dropout rate.
In the sense that school plant put up in line with the school planning norms and which is adequately maintained, constitute a very orderly environment which facilitate the control of learners and the materials with minimum obstruction.
- ii. School plant improves students' attitude by given them the physical teaching and learning atmosphere which will give them good morality.
- iii. School plant improves teachers' retention rate.
- iv. It boosts teaching effectiveness.Olayiwola (2007) started that the main objective of school plant planning is to satisfy educational goals which have been pre-determined by educational planners. He emphasized that better planned school plant will enhance better school programmes and the community needs by providing a place for psychological and physical safety for students and teachers and enhancing the good, quality and quantity of instruction.

Other factors of the school plant that affect behaviours and attitude of learning are known as ambient environmental conditions. O'Neill (2000) notes that these factors include temperature, ventilation, lighting, colour and noise level. These elements are known to produce comfort and limitation, either of which can affect the behaviour of school children as the attitude of students is often driven by how they perceive the surrounding of their school especially

the physical environment. Students dissatisfied with the school environment often become disciplinary problem, for example: Earthman and Lemasters (1996) found that the thermal environment of classrooms can be very important to the well-being of children, as such conditions have a sufficient impact upon attention span of student.

Importance of School Plant Planning

The quality of education given by any institution can be attributed to the provision of adequate educational facilities which included well planned and purposeful educational facilities. In other words, students' academic performance is affected by the school plant planning. The results reported in American school board journal (1963), showed that students in control classroom situated with adequate teaching and learning facilities, can perform better than students in the uncontrolled situations. Proper planning is therefore required for every face of the school plant planning.

It is gratifying that the Federal Government of Nigeria (2004) has embarked on a forceful policy towards ensuring even adequate distribution of educational facilities at all levels of education system in the country. The report of the Bagauda Lake seminar showed that enrolment in primary school in Nigeria would increase to 15.9m in 1985 then 18.4m in 1990 20.4m in 1995 and 23.1 in the year 2000. At the junior secondary level, it was calculated that at 100 percent transitional rate from primary to junior secondary level, the nation would have to provide for 7.1m, 8.2m, 9.1m and 10.3m students in forms 1.2 and 3 for the years 1985, 1990, 1995 and 2000 respectively.

The report has great implication for proper and efficient planning for school facilities which would cater for the projection made. The government awareness of

the importance of planning for the school plant was further emphasized in the guideline the 4th National Development Plan, 1981-85 when it said: Deliberate attempt will be made to expand secondary school facilities across the nation so as to contain the expected enrolment pressure which is building up already necessary emphasis will be placed on the provision of basic teaching facilities such as classrooms, laboratories, libraries and administrative buildings. This calls for a new planning strategy of school plant planning to facilitate expected educational development in order that the desired objectives of education might be achieved effectively.

Characteristics of School Plant Planning

Any school plant planning must first and foremost meet the objectives which the educational institution is established and the aspiration of the users. An efficient school plant planning should therefore take care of the physical, emotional and education needs of the learner in planning the school plant to influence students' academic performance in secondary schools. According to Oyesola (2009) certain characteristics or equalities are worthy of consideration. Thus:

- a. The School Plant Must be Functional:** This says that the set school plant must satisfy the aspiration or the set objectives of the school. It must be capable of allowing varying and flexible instructional activities which are consistent with the implementation of the instructional programmes.
- b. It must provide easy access for the users and easy access for maintenance purpose:** It must be of such simple structure as to make its maintenance economically reasonable.
- c. It must be safe, school plant should be located in such away as to provide ready and easy access for students, teachers and community:** Situation where students have to cross railway, constructed buildings in terms of using poor

quality materials or non-adherence to specified the school plant must be helpful to the learners, staff and other users.

- d. **The school building and facilities must help in facilitating school programmes as well as community:** Each component that is in each building must be designed to meet some specific purpose and must not be planned in such a way that its use does not constitute a nuisance to others. For instance, the school workshop or football pitch should not be constructed in such a place that the community could use the facilities without interference with other components in the schools.
- e. **The physical environment of the school should influence the creation of a feeling of pride in staff and students:** School plant should therefore be attractive and psychologically helpful in other words, the school plant must be aesthetically appealing thereby making learning easier. With the above, one will infer that if school plant planning rules and norms are followed effectively in setting a school, it will translate into having a conducive school learning environment and students' academic performance will improve immensely.

2.2.6 Security Facilities

School Plant Planning Security is the state of being free from danger or threats, freedom from doubt, anxiety or fear. Security according to Dwyer and Osher (2000) is something that gives or assure safety. Security incorporates measures taken by an organization or government to prevent espionage, sabotage or attack. It can be measure, adopted by a business or income owner to prevent crime, assault and to prevent an escape.

According to Rogers (2009), security can broadly be defined as a means of providing effective levels of protection against pure risk. It is a process used to create

a relatively crime free area. The aim of security is to assess the vulnerability to risk and thereafter to employ techniques and measures in order to reduce that vulnerability to reasonable level.

Security will therefore assist in creating a stable, fairly predictable environment in which individuals may move freely with reduced or without any disturbance or injury. Security means different things to different fields of life. In Economics, it is described as a certificate or creditor ship or property carrying the right to receive interest. Furthermore, it is a measure taken by a military unit, activity, or installation to protect itself against all acts designed to or when may impair its effectiveness, it is a condition that result from the establishment and maintenance of protective measures that ensure a state of inviolability from hostile acts or influences; security can also be explained as a state of care of mind, freedom from doubt and absence of worry.

Marshall (2002) stated that educators and parents have multiple options which are to enhance school climate and students overall educational experience. These are: Increased parents and community involvement, implementation of character education or the promotion of fundamental moral values in children, use of violence prevention and conflict resolution curriculum, peer mutation and prevention of acts of building. From the above, it is understood that creating a positive school climate will go far to guarantee school safety and security. A safe school environment that promotes pro-social student behaviour, has high expectation and standard for academic achievement and behaviour and engaged students in positive relationship with adults. This support successful learning and reduces negative, anti-social behaviours which disrupt school safety. The security facilities are thus:

1. Security office
2. Flash light

3. Patrol stick
4. School fence
5. Security lights
6. Metal detectors
7. Surveillance cameras
8. Locking system (for doors and windows)
9. Fire alarms
10. Fire extinguishers
11. Automatic sprinklers

Security Personnel

1. Chief security
2. Supervisors
3. Team leaders
4. Security operatives on duty. According to Marshall (2002).

Security Facilities on Students' Academic Performance

Due to the current security threats in the state, the country at large and even attack on schools and students, security has a vital role in the students' academic performance because if the schools are not adequately secured, being safe and calm learning will not be effective and this will in turn mar the students' academic performance in public secondary schools in Kaduna State.

So, this is a wakeup call on the stakeholders to inculcate security facilities in Kaduna State secondary schools plant to improve students' academic performance.

2.2.7 School Physical Environment

A school environment is a thread that connects the multitude of activities in the schoolsystem. In many aspects, this thread is almost invisible, yet every one

experience it. A safe, clean and well-maintained school with positive psychological climate and culture can foster school connectedness, which in turn boosts students and staff health as well as students educational achievement.

A school physical environment include the school building surroundings, grounds, such as noise, temperature, and lighting as well as physical, biological, or chemical agent. In this regards, “O” Neil (2000) notes that these factors include temperature, ventilation, lighting, color and noise level. These elements produce comfort and irritation, either of which can affect behaviour of school students.

Meanwhile, the psychosocial school environment encompasses the attitudes, feelings, and values of students and staff. In response to the above statement, Stockyard and Maybery, (1992) contend that the physical environment has been shown to play a significant role in teaching and learning effectiveness. Physical and psychological safety, positive interpersonal relationships, recognition of the needs and success of the individuals, and support for learning are all part of the psychosocial environment. However, creating healthy school environment requires the involvement of vitally everyone in the school students, administrators, teachers, custodial and maintenance staff, school councillors, school nurse, nutrition service workers. In addition, schools need involvement of families and environment and other community agencies in this regards, a recent study in great Britain by Price Water-Coopers (2001) reveals that good teaching take place in schools with good physical environment.

a. Component of Physical Facilities in Schools

Physical facilities are those components used in school activities, such as school ground, buildings, fences, furniture etc. Olagboye (2004) stated that components of school facilities are:

- i. **Land:** side/land housing all the buildings/structure of any educational enterprises or organization including: institution, school farmland as well as sports and games fields.
- ii. **Buildings:** classroom blocks, library buildings, office blocks, laboratories, workshops, hostel/dormitories, dining halls, staff residential quarters, assembly hall, lecture theatres etc.
- iii. **Furniture and fittings:** classroom furniture, office furniture, hostel/dormitories furniture, staff residential quarters furniture.
- iv. **Equipment:** laboratory and workshop equipment, agricultural science tools and implement, office equipment (e.g typewriters, computers, duplicating machines, photocopies and calculators etc).
- v. **Machinery:** workshop machines and tools, etc.
- b. **Management of Physical Facilities in School**

Investment in school building involves great deals of capital out lay and therefore the proper care of these buildings is a very important, administrative task. Again, the health of students and teachers who occupy them maybe affected by the amount of care that is taken. This should include those routine activities which ensure the daily smooth running of the schools like cleaning the buildings and beautification of the classes with colours, pictures and lands, distributing supplies, locking and unlocking of classrooms, offices and stores. These should also be schedules of work showing what is to be done by whom at what time and under whose supervision.

Physical facilities as the process of planning, construction, utilization of all school physical facilities.

c. Elements of Physical Facilities for Fostering Peace in Classroom

It is cleared that the classroom interaction plays an important role in learning. Scott (2003) clustered these interactions in four broad heading of sportive and inspiring environment, students' participation, classroom discipline and management, and satisfaction.

i. Creating a supportive and inspiring classroom: research on classroom environment such as Reddy (2006) has identified a number of qualities with positive learning out comes. The following are the key areas for improving the learning environment for peace:-

- a. Supportive relationship among teachers and students.
- b. Friendliness and understanding in classroom norms, making decisions and setting goals.
- c. Clear expectation and responsibilities. Opportunities for collaboration adequate time for completing task and for discussions.
- d. Opportunities to work on open-ended task
- e. Interested and meaningful activities.

Many of the classroom factors listed above also influence students' academic performance. For examples, students favorable attitudes towards classroom activities may feel that they are moved in class and perceived a great deal of both academic and personal support from the teacher. These students can also understand the classroom expectations, rules, report friendly and peaceful relationship with their class mates.

ii. Students Participation: Beliefs and theories about how children learn are also changing ideas about what school and classrooms should be like. An Educationist Wubbles (1993) believes that people do not only learn by having information transmitted to them, by creating their own knowledge while some

people are able to do this by listening to a lecture or reading a textbook, many others must have direct experiences and opportunities to talk about their ideas in order to understand what they learn. Constructivist approach is based on the premises that learning is most effective when “the learner is actively engaged in creating his / her own knowledge and understanding by connecting what is being learned with prior knowledge and experiences” (Lopez, 2001).

- iii. **Classroom Control and Discipline:** Teachers need to develop a vision of the peaceful classroom environment with their students’ from the first day of class. The whole group of the students would discuss, negotiate and adopt this vision in order for all students to share and value it. Rule of conduct and expectation will evolve from this collective vision (Scott, 2003). Many teachers worry that allowing students to take on new role and responsibilities means that they will not be able to control the classroom, this is not the purpose or the outcome of encouraging the students to take more active role. Rather than giving up order and discipline or giving students’ free rein, the teacher empowers students to participate in making decision about their behavior, (Henderson et al, 2000).
- iv. **Student Satisfaction:** Another important element of physical facilities is students’ satisfaction. Alausa (2007) studied the element of a classroom as a science environment centered on sharing knowledge and found that students are actively involved in making decision, planning and organizing activities, and establishing classroom norms, this makes it possible for students to become satisfied with lesson, share idea and build on the thinking of others, even when the students feel individual ownership of materials and idea. Students who are accustomed to a competitive environment in the classroom will need time to adjust to a community approach. Teachers should provide a helpful model for

establishing a sense of peace and satisfaction among students. This demands initiating a caring community in the class. In caring community, all members are important, and everyone has significant contribution to make both to learn and to the general well-being, students repeat that sense of being known and of peace with other students which leads to a more congenial learning environment and increased motivation to learn and participation in school.

2.2.8 Classroom Positioning

Class is a group of students in a regularly scheduled meeting with a teacher according to Wiktionary Dictionary on line.

Positioning: According to Wiktionary Dictionary on line is placement of things to get a desired goal.

Frascer (2005) stated that the positioning of a class in the school system has a major role to play in the learning process. He furthered by saying the class cannot be near the market, road, toilets, railway and noisy places because of the peculiarity nature of a classroom to learning activities in school. So it is vital that the positioning of a class should be in a conducive environment for learning to take place effectively and improve the students' academic Performance in Kaduna State secondary schools.

Obi (2003) optioned that classroom is not a residential area and should be positioned in a conducive place. That the plant of the school should be looked into by the major stakeholders for their contributions in positioning the classes so that the goals and objectives of that school programmes will be achieved effectively.

Farombi (1998) is of the option that the positioning of a class will either mar or make a class. By this if a class is mar students' Academic Performance will have a negative effect but when a class is make that means it is well positioned and then will improve students' academic performance.

Factors to Consider in Classroom Positioning

A classroom is used for whole class, group or individualized teaching and learning in general across the subjects of the curriculum. According to Frasca (2005) for learners, the classroom and interior area, the colour scheme of the walls, the layouts of furniture and the classroom arrangements will all influence how students learn. Frasca (2005) further listed the following factors as:

- i. The orientation of classroom and its location is relative to the external environments and must be considered in classroom positioning.
- ii. The age of the students to use the classroom, this will determine the nature and size of the seating materials to be stored, areas needing to be developed for various activities.
- iii. The type of school and programmes for the classroom and students.
- iv. The placement of electrical outlets, windows, doors etc.
- v. Proximity to other facilities in the school such as library, convenience, sporting facilities etc.
- vi. Access to safety muster points in times of emergencies.
- vii. The number of students to use the classroom, this will determine the necessary number of seats, books and materials etc to be stored in the classroom.
- viii. The floor to ceiling height of 3.15m is required taking into account an even distribution of natural light and ventilation across the whole classroom positioning.
- ix. The school administrators and educational managers should contribute their technical know-how to the positioning of the classroom since they are specialists in the area.

Advantages of Classroom Positioning

The classroom is a power house of teaching and learning, hence most of the school programmes and activities take place in the classroom. When the classroom is well positioned it facilitates:

- i. Teaching and learning
- ii. Improve the students' learning abilities
- iii. It becomes a second home for the students while in school
- iv. It inculcates students' minds of going to school.
- v. It reduces students' dropped out from school.
- vi. It improves literacy rate in the state and nation at large.

Challenges of Classroom Positioning

- i. Inadequate involvement of educational specialists in classroom design
- ii. Inadequate funding by government
- iii. Inadequate land
- iv. The geography of the land
- v. Using of sub-standard materials in building classrooms
- vi. Poor maintenance culture in the school system within the state.

Classroom positioning on Students' Academic Performance, inferring from above, it's important to note that classroom positioning in the school system cannot be overemphasized. One would accept, come to terms that if classroom positioning is planned and maintained it will influence students' academic performance in Kaduna State secondary schools.

2.2.9 Recreational Facilities Positioning

Recreational facilities constitute another aspect of school facilities. The availability or otherwise of which has effects on the entire process of teaching-learning. These facilities include spaces, lawns, field, pitches and equipment for sports, games and general recreation. Games and sports, apart from developing specific skills also develop a good learning socio-psychological as well as mental environment for relaxation. It has been noted however that the importance and level of resources committed to the development and provision of recreational facilities must not exceed their values in facilitating the overall goal of educational institution. To most people, these recreational facilities are better referred to as playground. Whether recreation facilities as a general term or playground in particular, it is needed for marching physical education exercise for the physical well-being of the students.

Orobator and Osemwenkhae (2011) stated that there are many activities that come under games as football, athletics, basketball, volley ball, table tennis, handball, etc. A basic assumption of education is that each child has at least one area in which he or she has competence. This is why broadening the academic and other bases of education is so important, if any assessment is to be made. The school playground should be located away from the classroom and offices. And as a matter of precaution, adequate arrangement should be made for care and maintenance of the playground so that weed do not constitute nuisance to the activities on them or defy the beauty of the school compound or serve as abode for dangerous reptiles.

Influence of Recreational Facilities in Secondary Schools

Recreational facilities include; sports, exercises, garden, and place where these recreational activities are carried out. Recreating sport field, game sites and other serve as vital way of influencing the students' academic performance in general and

the students who want to specialize or have interest in these activities. In this regards, Adeboyeje (1994) defines it as the buildings, classrooms, corridors playground and other land recreational room; a recreational room (also known as a recreation, rumpud room, or rukus us room) is a room used for a variety of purpose, such as parties, games and other everyday or casual use. The term is common in some countries. But the preferred is games room. Often students and teenagers entertain their friends in recreational room which is often located in the basement away from the classes usually it is a larger space than entertain moderately large group.

Contents in Recreational Rooms

In view of Adeboyeje (1994), contents in recreational rooms are as following:

- i. Entertainment:** Recreational rooms are normally centered around some form of entertainment, typically/video setup. This can consist of something as elaborate as a projection screen with surround sound or something as simple as base model television.
- ii. Seating:** Couches, pub tables/chairs bar stools, and recliners may all be used in recreational rooms.
- iii. Games:** Table-top games are frequent and recreational rooms. in addition to game played on a normal table, recreational rooms sometimes include custom game tables for table tennis (ping pong), table football, (football) table shuffle board, pinball, air hockey, or billiards (pool), other games can include dart board and arcade games.
- iv. Food and drink:** Fridges, microwaves, wet bars, popcorn machines, ice-creammachines, soda fountains, and classic soda coolers can sometimes be found in recreational rooms.

Importance of Recreational Facilities in Schools

The importance of recreational facilities in schools should not be overemphasized; Dalen (1973) stressed the following as importance of recreational facilities in Schools:

(a) Economic Value:

- i. Recreational facilities improve the local taxes base and increase property values.
- ii. Quality recreational facilities are cited as one of the three reasons that business cite in relocation decisions in a number of studies.
- iii. Recreational facilities generate money for local economy. A (2012) study shows mammoth cave national park generates \$62 million a year for the South-Central Kentucky Area.

(b) Health and Environmental Benefits

Recreational facilities are the places that people go to get healthy and stay fit. According to studies by the centres for disease control and prevention, creating, improving and promoting places to be physical active can improve individual and community health and result in a 25 percent increase of residents who exercise at least three times per week. Also, studies showed correlations to reduction in stress, lowered blood pressure, and perceived physical health to the length of stay in visits to parks.

(c) Social Importance

Recreational facilities are tangible reflection of the quality of life in a community. They provide identity for citizens and are a major factor in the perception of quality of life in a given community. Therefore, the recreational facilities are often cited as one of the most important factors in surveys of how livable communities are. Moreover, recreational facilities provide gathering

place for families and all ages and economic studies regardless of their ability to pay for access.

Factors to Consider in Recreational Facilities Positioning

There is a saying that “all works without play makes Jack a dull boy” recreational facilities cannot be over emphasized in a school setting. Dalen (1973) further listed the following to be considered in recreational facilities positioning;

- i. The land level should be considered to ascertain the positioning of the recreational facilities.
- ii. Consider the closeness to the classrooms
- iii. The type of the school and programmes intended for should also be put into consideration.
- iv. The location of the school should also be considered.

Advantages of Recreational Facilities Positioning

Recreational facilities have the following advantages on the students:

- i. Increasing unity among students.
- ii. Increase students’ interactions with other non-classmates within the school.
- iii. Refreshes students’ minds and healthy living for better learning.
- iv. Assist students learn unity of purpose and team work irrespective of tribe or religion.
- v. Diversify school programmes from learning to other programmes and change of environment from classrooms to the recreational facilities.

Challenges of Recreational Facilities Positioning

Some challenges of recreational facilities positioning are as follow:

- i. Inadequate vision of the school head on the importance of recreational facilities in the school setting.

- ii. Inadequate provision of the recreational facilities in schools.
- iii. Poor maintenance of the once on ground.
- iv. Inadequate funding by government.
- v. Poor competition within the students and other schools.

2.2.10 Library Facilities Positioning

The library is the heart of education enterprise. Library as a platform for sharing knowledge aimed at rejuvenating Nigerian schools through the provision of current books and journals, (FRN, 2004). It is a store house of resources and as such provides many more opportunities to the learner to acquire knowledge, which facilitates greater academic performance. It contributes to the total development of the students and enlarges their knowledge. Edoka (2000) sees library as a resource centre where a collection of books, periodicals, book materials are housed for use by teachers and researchers for learning, study, research, recreational activities and personal interest.

According to Alokun (2007) A school library does not exist for itself. it exists to serve the objectives of the parent's organization. One of the objectives of educational programmes is to equip individuals to be able to play their roles in the society effectively.

It has been observed that there is a strong relationship between school libraries and academic performance. Keith (2000) reports that schools with well equipped library performs higher than schools where libraries are less developed. Libraries provide instructional materials to enrich the curriculum and give unlimited opportunities for students' learning. An effective school library gives foundation for self-education necessary for facing challenges of higher education.

The role of the library is also reflected in the National Policy on Education (FRN, 2004) which states that libraries constitute one of the most important educational services, proprietors of schools shall provide functional libraries in accordance with the established standard. They shall also provide for training of librarians and library assistants for this service. The quality of school library services makes difference in academic achievement, (Library Research Service, 2000). It promotes the growth of knowledge. A well-equipped library is a store house of knowledge. If properly organized and utilized, it encourages students' interest in reading and learning, hence it is said that library is the centre for balanced diet for a learner. Libraries exist only because of books and people's desire to read them. It is in line with this that the National Centre for Education Statistics, (2000) reports that the more students read, the higher they will score on almost any measure in any discipline.

The library users here are students of the school, so certainly this will gear towards their academic performance positively or negatively as the case maybe by this the library facilities are expected to be positioned in the right block or building with the facilities equally stationed properly for the students use. It should not be closed to the classrooms or recreational facilities because of noise.

Factors to Consider in Library Facilities Positioning

Well equip libraries are costly to build as well as to relocate thereby the positioning of library facilities must be carefully considered in the school environment. Alokun (2007) considered the following factors as:

- i. The library and its facilities should be accessible to the users.
- ii. How much noise will it be exposed to?
- iii. Does the proposed position allow for safe and convenient entrance and exist?

- iv. Is the land free of hazardous materials?
- v. Will it be an integral part of other facilities or standalone building?
- vi. The type of school programmes or the students to use the library.
- vii. The type of furniture layout to be use.
- viii. Building a library that will still be useful in the nearest future considering learners growth and technological changes.
- ix. The type of students that the school wishes to attract and retain

Advantages of Library Facilities Positioning

Alokun (2007) further listed the following advantages as:

- i. Improve students learning abilities.
- ii. It helps students to be independent and self-reliant
- iii. It encourages their reading culture.
- iv. It helps the students to key into the growing train of global technological advancement.
- v. It is a starting point for grooming young researchers

Challenges of Library Facilities Positioning

- i. Mantoya (1998) identified the changing environment and issues facing school libraries. The rapid growth of information and communication technologies (ICTS) are said to be changing the way academic libraries operate today. Over the past few years, the web has had a tremendous effect on the growth of information and the speed of transmission. These new means of delivering information over the web places a challenge on the school libraries on how to help students make use of information.
- ii. Hazen (2000) argued that the changes in the nature of information, in research strategies and in structure of education are affecting school libraries. These

changes define much of the shifting context within which school libraries must operate.

- iii. Teaching and learning patterns have been developed towards greater modularization and an emphasis has been laid on self-directed, independent study and students centered learning (Farley, Broady- Preston and Hayward, 1998). This has placed greater demands on school libraries which are increasingly being used for group work.
- iv. Inadequate funding from government to equip the school libraries.
- v. Inadequate train library personnel.
- vi. Inadequate materials and library services in the school libraries
- vii. The problem of school library location positioning (where the library is positioned).

Library facilities on Students' Academic Performance

Library facilities contribute to the total development of the students' and enlarges their knowledge within and outside the school system. Library is the heart of education enterprise, so when well positioned and equipped it will influence students' academic performance in Kaduna State Public Secondary Schools.

2.2.11 Convenience Space Positioning

According to Jumare (2016) spaces for convenience consist of enough space for each person in toilets, cafeterias, kitchens, dormitories, sheds and stores. This implies when designing a school plant the stakeholders should bear in mind creating enough spaces of convenience in toilets, sheds, cafeterias and the likes for the students' on ground and the nearby future population growth in the school system.

Okoh (2009) stated that the convenience spaces should be located away from the classrooms because of their nature. He said that the toilets could smell into the classes and the cafeterias could have noise that will disturb learning activities in the classes. This means the positioning of the convenience space should be well planned from the inception of the school plant so as to not have problems in the nearest future with the spaces of convenience.

Factors to Consider in Convenience Space Positioning

As the students' main duty in school is to learn so is the spaces for convenience important too to them because during and after classes they need these spaces for convenient.

Some of the following are to be considered in convenience space positioning, according to Jumare (2016) these are as follows:

- i. Enough space for each student in toilets.
- ii. The closeness to classrooms (should not be too close and not too far from the classes).
- iii. Does the proposed position allow for safe and convenient entrance and exit.
- iv. Put into consideration the users of the convenience space.

Advantages of Convenience Space Positioning

The following are some advantages of convenience space positioning;

- i. It helps to control students indiscriminate messing of the school compound.
- ii. Inculcates habit of cleanliness among students
- iii. It reduces outbreak of diseases among students in school
- iv. It controls odor and smell in the school compound.

Challenges of Convenience Space Positioning

Some of the challenges are as follow, according to Jumare (2016)

- i. Inadequate provision of convenience spaces
- ii. Wrong positioning of convenience spaces in school setting causing odor and smell within the school.
- iii. Poor maintenance of the convenience spaces on ground in school.
- iv. Poor funding from government to control and maintain convenience spaces in school.
- v. Poor supervision on the cleaning of the convenience spaces on ground in the school by school management.

Convenience Space Positioning on Students' Academic Performance

The effective convenience space positioning in the school system have a vital role to play in influencing or improving students' academic performance in Kaduna State Public Secondary Schools.

2.2.12 Administrative Space Positioning

According to Akije (2005) administrative space positioning can be in any position in the school plan but must provide effective monitoring and supervision of school activities and programmes.

He went further to say that administrative space must also be conducive, that this will enable the managers to work effectively and have total control of the school activities and programmes.

Jumare (2016) stated that administrative spaces comprise of principals or school head office, clerk office, staff room, guidance counsellor's office and health clinic office etc.

In this, as the students have classes to operate from so do the managers also need offices to operate from as to do their work effectively. They need good and conducive offices in the school plant where they carry out their daily functions and duties and all these their functions and duties are to achieve the school objectives and goals which will improve the students' academic performance.

Importance of Administrative Space on Students' Academic Performance

- Its inculcates seriousness in the side of the students.
- It improves the students' academic performance.
- It creates space or office for management staff.
- It improves monitory and supervision in the school system.
- It inculcates division of labour in the school system.
- It brings about respect for school authority
- There will be easy control of students' and even erring staff.

2.3 Theoretical Framework

The Systems theory: Systems theory is an interdisciplinary theory about the nature of complex systems in nature, society, and science, and is a framework by which one can investigate and/or describe any group of objects that work together to produce some result. This could be a single organism, any organization or society, or any electro-mechanical or informational artifact. In the opinion of Bailey (2004), the central focus of systems theory is self-regulating systems, i.e. systems self-correcting through feedback. H.Bánathy (1996) in explaining systems posits that, - Self-regulating systems are found in nature, including the physiological systems of our body, in local and global ecosystems, and in climate-and in human learning processes (from the individual through international organizations like the UN). It can therefore

be deduced that systems can be employed in any form of organization, schools not exempted.

According to Bausch (2001), the systems view is a world-view that is based on the discipline of systems inquiry. Central to systems inquiry is the concept of system. In the most general sense, system means a configuration of parts connected and joined together by a web of relationships. The Primer group defines system as a family of relationships among the members acting as a whole.

Von Bertalanffy in Odia and Omofonwan (2007) defined system as “elements in standing relationship. H. Cliff and Francis (2013) add that contemporary ideas from systems theory have grown within diverse areas, as demonstrated by the work of biologists Ludwig von Bertalanffy, linguist Bela H. Bánáthy, sociologist Talcott Parsons, ecological systems with Howard T. Odum, organizational theory and management with individuals such as Peter Senge, and insights from educators such as Debora Hammond and Alfonso Montuori. Charlton and Andreas (2003) stated: Systems theory was proposed in the 1940’s by the biologist Ludwig von Bertalanffy’, and furthered by Ross Ashby. Von Bertalanffy was both reacting against reductionism and attempting to revive the unity of science. He emphasized that real systems are open to, and interact with, their environments, and that they can acquire qualitatively new properties through emergence, resulting in continual evolution. Rather than reducing an entity (e.g. the human body) to the properties of its parts or elements (e.g. organs or cells), systems theory focuses on the arrangement of and relations between the parts which connect them into a whole. This particular organization determines a system, which is independent of the concrete substance of the elements (e.g. particles, cells, transistors, people, etc). Thus, the same concepts and principles of organization underlie the different disciplines (physics, biology, technology, sociology, etc.), providing a basis for their unification. Systems concepts include: system-environment

boundary, input, output, process, state, hierarchy, goal-directedness, and information. (p.86) A system within the context of school plant provision and maintenance can contain regularly interacting or interrelating groups of activities such as site selection, building plans, construction, fittings and equipping.

The system theory recognizes that schools are complex social systems and that reducing the parts from the whole reduces the overall effectiveness of the organization. This means that rather than basing the provision and maintenance can contain regularly interacting or interrelating group of activities such as site selection, building, plans, construction, fittings and equipping. The system theory recognizes that schools are complex social system and that reducing the parts from whole reduce the overall effectiveness of the organization. This means that rather than basing the provision and maintenance of school plants on individual structures, department or units, separate in part from the whole school administrator should recognize the interdependence between groups of individuals, structures and processes that enable the school organization to function properly.

This study was informed by two theories: *Self-Determination Theory (SDT)* which was developed by psychologists Deci and Ryan (1985), and the Motivational theory developed by Maslow (1940). The motivational theory by Maslow (1940) argues that motivation is a driving force for most of human behavior and its inherent growth and development tendencies. It emphasizes the degree to which an individual's behavior is self-motivated and self-determined. When applied to education, the self-determination theory is concerned with promoting in students an interest in learning, value of education, and confidence in their own capacities and attributes.

According to Abraham Maslow's Hierarchy of Needs motivational model (1940), motivational theories also explain that learners' goals affect the way they

engage with academic tasks. Motivation is concerned with the will that students bring to a task and their level of interest which guide their behavior, and their belief about the causes of their success or failure. Weiner (2004) elaborates that students' beliefs about the causes of academic success or failure affect their emotions and motivations. For example, when students attribute failure with the lack of efforts, and efforts is perceived as controllable, they experience the emotion of guilt and consequently increase their involvement in school activities for improved performance in their examinations and general life, in this study, the researcher determined the relationship that exists between motivation theory and self-determination theory on location of school and academic performance of learners. Individual learners' motivation towards education in community secondary schools should be complemented by schools' friendly environment to attract and motivate students for engage learning in community secondary school. When a school is located far from where the students reside, they would drop from schools due to longer walking distance to and from the school. On the other hand, poor support from parents/guardians marked by lack of follow-up on students would demoralize students as it would be difficult for the parents to diagnose learning trends of their children. Through parents' follow-up on their children's learning progress, it would be easy to realize other needs as exercise books, paying of school fees in time, provision of means of transportation and other needs of a child.

Similar to the emphasis by Maslow (1940), Deci and Ryan (1985) emphasized on learner's motivation. Self-determination theory (SDT) postulates the ability that educators have for moving the learner from a motivation state developed, regulated, and maintained through the teacher or classroom rules to become self-motivated students. These theorists add that through punishment or teacher-imposed incentives, the value of education could be instilled and become valued by students who are

motivated through valuing particularly when such learning is related to their lives. By delivering the content which is of direct relation and use to students, SDT argues that the one's innate needs is satisfied and the fundamentally changes human behavior. It is essential to educational planners and implementer's to note that the motivation cannot be taken for granted without appropriate environmental factors as they can either encourage or thwart the innate tendency to act to satisfy the needs (Deci& Ryan, 2002).

To this study, the two theories are relevant as they all emphasis motivation as a powerful engine to make students and teachers work intensively to achieve the desired goals. In this case school plant is essential since environmental factors attract both students and teachers as key partners in quality education provision.

Functional Curriculum Theory

The theoretical framework of the study is hinged on Obanya's (2004b) functional curriculum theory which posits that for Africa to get to the level at which it can contribute to the world pool of knowledge, ideas, inventions, human and financial capitals and become fully participating member of the global economy, it has to embrace a curriculum that is tripartite in nature and practical. This could be done following these goal-setting:

- a) Developing the deepest sense of pride in being African through a deep understanding of the pride of Africa; the mother tongue or the community language, the African world view, Africa's contribution to world civilization over the ages, the nature and literature of Africa, the creativity of African in various form, great Africans, past and present contemporary Africa's plan for its future In the emerging global community.
- b) Access to a wide world of people, knowledge, techniques, ideas and practices; the official languages and their literatures, mathematics, science, technology,

informatics, tools and methods of social analysis western and orient philosophies and religion.

- c) Personal development for contributions to social transformation: A variety of core skills for lifelong learning, vocational awareness and vocational activities, entrepreneurship, creativity, communication and interpersonal conduct, self-awareness etc.

According to Obanya (2004), these three goals should be pushed simultaneously from the beginning with their horizons broadening in responses to the level of maturity of the learner. Elements from any of the goals can also be utilized to inject functional value to existing programmes. According to him, functional content education simply says that the situation in which the child is growing, and the one he/she is going to live in should determine the way education is carried out, including what is taught and how it is to be taught and learned. Functional education states that the purpose of education is to acquire skills of adapting to it and acting to influence it thereby contributing to its development. The later functions require specific skills which education should seek to inculcate. According to him, the notion of functional skills education has already been applied to the various aspects of education. In basic literacy programs, it refers to the application of reading and writing to solving day-to-day problems, including the improvement of ones living conditions. In the education of people with disabilities, it refers to the skills required to overcome disabilities. In science education, it refers to the abilities required to consolidate the habits of scientific behaviour. In the training of teachers, it means the aptitudes and abilities needed to promote learning to get the best out of learner.

2.2.14 Empirical Studies

Some studies have been conducted by other researchers which have bearing to this study. The subsection is devoted to a review of such studies both at the local and international scenes.

Adesine (2001) conducted a study titled school plant planning as correlate of students' academic performance in south west Nigeria secondary schools with objectives as to find out the correlate of instructional space on students' academic performance in South West Nigeria Secondary Schools, Examine the administrative space correlate on students' academic performance in South West Nigeria secondary school, identify the correlate of circulation space on students' academic performance in South West Nigeria Secondary School, Access the correlate of school plant layout and students' academic performance in South West Nigeria Secondary schools and find out the correlate of class-size on students' academic performance in south west Nigeria secondary schools.

Descriptive survey design was used with the population of 1650 respondents comprising 150 schools principals and 1500 teachers. Multistage, stratified and sample random sampling techniques were used to select the sample, frequency counts, percentages, mean and Pearson's products moment correlation were also used.

The researcher came up with the following findings that school plant planning and students' academic performance significantly relate to instructional space planning, Administrative space planning, circulation space planning and planning for accessories. The study is relevant to mine in the following ways; its research on school plant, it serves as a guide material to my study and even though it is focused on South West Nigeria but it is a pointer to factors in school plant that will improve the students' academic performance in Nigeria schools generally.

Udosen (2012) carried out the study titled: Influence of School Physical Environment on the Academic Performance of Secondary School Students in Agege Local Government Area, Lagos State, Nigeria. The objectives of the study was to examine the relationship between school environment and students' academic performance, the impact of school facilities on academic performance of students, the extent to which school location affects the students' academic performance.

Descriptive survey design was employed in the study that covers all secondary schools in Agege Local Government Area in Lagos State, Nigeria. Ten Schools were randomly selected, while the respondents include 200 teachers, 10 principals and 20 staff from the Ministry of Education. The researcher came up with the following findings in his study; that a conducive school environment promote students learning, as well as class size also promote students academic performance. The study is relevant to my study thus: it is a research guide to my study.

Similarly, Nkwalla (2014) studied the effects of library services on the academic performance of students in English Language in Kenya District Schools. The study has the following objectives; find out schools with good library services in Kenya District Schools, Access effects of poor library services on students' academic performance in English language in Kenya District schools, Examines the schools without library services and its effects on English language students' academic performance in Kenya District Schools and Assess the usage of library services by students and its effects on English Language students' academic performance in Kenya District schools.

Descriptive survey design was used with 300 respondents 150 students from schools with good library services and 150 students from schools without library services, systematic random sampling was used for the sample while Pearson's

product correlation was used as the statistical tool. The researcher's findings include; the significant relationship between numbers of hour students spent in the library and how it affects students' academic performance in English language; in the schools with good library services, the students perform better than those without good library services and that the more hours the students spend in the library the more they improve their academic performance in English language. The research is relevant to my study in the following ways; it serves as a research guide to my study, hence it has a correlation with students' academic performance.

However, a research was carried out by Odoh (2012) on the state of school plant and its impact on performance of senior high schools in Ezza-South Local Government Area of Ebonyi State. The objectives of the study are to examine the influence of infrastructural facilities, manpower facilities, instructional facilities and recreational facilities. The researcher used a survey research design with 306 teachers of the 17 secondary schools in the area. 170 teachers were selected as respondents using satisfied random sampling, simple percentage and Chi-square statistics.

The findings in the study are: Poor funding, inadequate infrastructure, poor record-keeping and inadequate manpower are the problems inhibiting effective implementation of school plant planning in Ezza-South Local Government Area of Ebonyi State.

The research is relevant to mine with the following; it is a guide to my study, have correlation and relevance of school plant and its impact on students' performance.

Swason (2014) worked on the effects of school plant on students' readiness to learn in Tanzania Central District Schools. The objectives of the study was to examine how the availability of school plant like classroom, buildings, adequate playground, recreational facilities, toilets and games facilities motivate learners to learn in

Tanzania Central District Schools. The researcher used descriptive survey design with 350 respondents consisting of 10 principals, 40 teachers and 300 students drawn from 10 high grade schools in Tanzania Central District using satisfied random sampling. He used simple percentage and Chi-square statistics.

The findings in the study are thus: That in schools where school plant is readily available and accessible students are eager to learn whether in rural or urban areas, the good condition of school facilities affect students interest in learning and schools whose facilities are in good state or condition were seen to attract more learners and retention was very high. The research is relevant to mine with the followings; it is a research guide to my study even though school plant on students, readiness to learn. It is still having correlation on showing the relevance of school plant on students academic performance in schools.

Okafor (2003) worked on evaluation of school plant in terms of adequacy, usage and maintenance in secondary schools in Idemili North Local Government Education Area with objective as: To find out adequacy of school plant in Idemili North schools, the usage of school plant facilities in Idemili North schools and its maintenance. The researcher used descriptive survey design, the population of the study comprised all the principals and the teachers in post primary schools in Idemili Education Zone, he used T-test and mean score as the statistical tool. The findings of the study include the following; There should be supply of physical school plant facilities in the schools, the students should not be charged for repairing of school plant facilities and the post primary school management board should employ store officers to manned the facilities.

The study is relevant to mine with the following; it is a guide to my study and gives more correlation to evaluation, adequacy, usage and maintenance of school plant.

Similarly, Alimi (2012) studied school types and facilities on students' academic performance in secondary schools in Ondo State. The objective of the study is to find out the influence of school types (based on ownership) on academic performance of senior secondary school students in Ondo State. The study also examined whether public and private schools differ in term of facilities availability. Descriptive survey design was used. The population consists of all senior secondary school teachers and principal in public and private secondary schools in Ondo State. Proportionate random sampling technique was used to select 50 schools in Ondo state. Two set of research instruments named School Facility Descriptive and Students' Academic Performance Questionnaire (SFDAPQ) for principals; and School Facility Descriptive Questionnaire (SFDQ) for the teachers were used for the study. T- test was used to analyze the data. The study revealed a significant difference in facilities available in public and private schools in Ondo State. However, it revealed no significant difference in academic performance of students in the two types of secondary schools. The Government of Ondo State was observed not to be interested in the facilities available in the public School. The author examined that public and private school are different in terms of facilities available but never consider the academic performance of such school. The relevance of previous study sort to address certain subjects in the study while the present study influence facilities the previous study relates to this study in the aspect of school facilities.

Nwokike (2012) management of school plant by principals in Nsukka education zone of Enugu state. Ascertain the principals' roles in the procurement of school plant facilities, determine school plant maintenance activities of the principals

and Determine safety measures put in place by principals for school plant items. The study adopted a descriptive survey design. The population comprised 59 principals and 1988 teachers in both urban and rural secondary schools from the zone. The sample size for the study was 600 respondents. A structured questionnaire by the researcher was used as the instrument for data collection. A mean and standard deviation were used to analyze the research questions while t-test statistic was used in testing the formulated hypotheses. The findings revealed that principals played significant roles in the procurement, maintenance, safe guarding, as well as ensuring adequate utilization of school plant facilities. The study also found that there was no significant difference in the mean ratings of principals and teachers with regard to principals' roles in all the investigated variables. The study having gathered its population from the urban and rural secondary school from the zones did not consider an objective to help the urban and rural zones. All its objectives are principal centered. Its relevance to the present study is that it determines the school plant provision, activities of principals. This will help us to know how much principals partake in school facilities provision. The previous study was basically considering management activities and safety measures of school plant without an insight to students' academic performance.

Ekwoom (2015) availability and utilization of library facilities by students with visual impairment in universities in Enugu State. The objectives among others are to determine the availability of library facilities by students with visual impairment in universities in Enugu State and to ascertain the extent of the use of library facilities by students with visual impairment in universities in Enugu state. The design of the study was a descriptive survey while the population comprised of 32 students with visual impairment and 68 librarians in the sampled institutions in Enugu state. The sample size was 100 including students with visual impairment and librarians, purposive

random sampling technique was used to select the institutions that admit students with visual impairment and also to select the respondent for the study. A structured questionnaire titled Library Facilities Observation Schedule (LFOS) and Utilization Questionnaire (UQ) for collection of data from respondents were used. The data was analyzed using percentage, mean and standard deviation while two null hypotheses raised for the study were analyzed through use of chi-square and t-test statistics. Findings showed that students with visual impairment do not utilize library facilities because of inadequacy and poor orientation on the available library facilities by the librarian because of inadequate specialized personnel to handle the library facilities. The previous study taken by (Ekwom, 2015) on availability of library facilities by students in visual impairment Universities in Enugu State does not consider students' academic performance. While the present study worked on influence of school plant on students academic performance.

Finally, Tadesse (2014) *The Availability of School Facilities and Their Effects on the Quality of Education in Government Primary Schools of Harari Regional State and East Hararghe Zone, Ethiopia* Its major objective was to study the availability of school facilities, the influence school facilities on quality of education and the effect of quality school facilities on government schools. The research design adopted was descriptive survey. The study population comprised of 34 School principals, 6 district and 2 regional education bureau heads were the sample of the research the study sample was selected through simple random sampling technique and available sampling techniques. The instrument for data collection were questionnaire, interview and observation. The data analysis was done using statistical tools such as percentages, frequencies, means and grand means. Research result showed that the availability of school facilities and instructional materials were unavailable, less in quantity and quality that created a great challenge on teaching and learning activities

that in turn had a negative influence on the improvement of the quality of education. The study observed that the previous research topic evaluates availability and quality of school facilities while the present study considers the influence of students' academic performance.

2.2.15 Summary

The chapter has dealt on review of related literature to the topic under study. Many scholars assessed the significance of school plant and its influence on the students' Academic Performance. The theoretical framework on school plant has been reviewed in relation to its parameter on students' academic performance in secondary schools in Kaduna State.

Variables like security facilities, school physical environment, classroom positioning, recreational facilities positioning, library facilities positioning, convenience space positioning were reviewed in line with the formulated objectives of the study. The review observed opinions of principals, teachers, PTA officials and ministry of education officials. The study also examined some factors to be considered when planning school plant in Kaduna State secondary schools. It is worldly to note that security facilities like school fence, surveillance cameras, fire alarms, metal detectors and the likes play vital role in influencing students' academic performance as supported by Dwyer and Osher (2000) among others.

The review also ascertained that school physical environment has great influence on students' academic performance and interest to learning in conjunction with the views of O'Neil (2002), Olagboye (2004) Maybery (1992) and Scott (2003) who said that schools with attractive physical environment and ventilation engage students in learning activities.

Frascer (2005) findings shown that classroom positioning near noisy areas has a negative influence on the students' academic performance Adeboyeje (1994) and

Dermer (1977) stated that recreational facilities has economic, health and environment benefits and influence the students' academic performance in Schools.

The review also considered library facilities positioning, convenience space positioning and administrative space positioning and they influence on students' academic performance in Kaduna State Secondary Schools.

The theoretical framework examined: the Systems theory, Self-Determination theory and Functional Curriculum theory and they influence on school plant in schools.

Finally, the study reviewed some empirical studies which have bearing with the present. The studies include both local and foreign studies. On local scene, the study reviewed Adesine (2001) who studied school plant planning as correlate of students' academic performance in southwest Nigeria secondary schools and Udosen (2012). On the topic influence of physical environment on the academic performance of secondary school in Agege Local Government Area, Lagos and others. On the foreign scene, the study of Nkwalla (2014) which centered on the effect of library services on the academic performance of students in English language in Kenya district school. Swason (2014) worked on the effect of school plant on students' readiness to learn.

Odoh (2012) worked on the state of school plant and its impact on performance of senior high schools in Ezza-South Local Government Area of Ebonyi State and finally Okafor (2003) evaluation of school plant in terms of adequacy, usage and maintenance in secondary schools in Idemili North Local Government Education Area and others

From the reviewed studies, it is clear that a lot of literature exists on school plant. However, there is paucity of evidences regarding the influence of school plant

on students' academic performance in Kaduna State. This is the unique gap the study intends to fill in the literature review.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter discussed the research methodology and procedure for data collection, Research Design, Population of the Study, Sample and Sampling Procedures, Instrumentation, Validation of Instrument, Pilot Study, Reliability of Instrument; Method of Data Collection; and Methods of Data Analysis.

3.2 Research Design

The study used descriptive survey research design, for it seeks to solicit opinions of respondents in the area of study in which structured questionnaire was used to collect relevant data (opinions) from selected samples (Principals, Teachers, PTA Officials and Ministry of Education Officials) within the population. This design is used because in the opinion of Anyanwu (2003), who stated that descriptive survey research possesses great relevance for adoption when a researcher intends to describe conditions that already exist in the target area of the study. The results eventually used in the final analysis and making generalizations on the whole population.

3.3. Population of the Study

Apart from non-human population, the study comprised of all Public Government Secondary Schools principals, teachers, PTA Officials and Ministry of Education Officials within the twelve (12) Zones of Educational Inspectorate Divisions in Kaduna State. The total number of the population for the study is 541 Principals, 10,294 Teachers, 3246 PTA Officials and 229 Ministry of Education Officials. Totally 14,850 representing the population of the study.

Table 3.1: Population of the Study

S/N	Zone	No. of School	No. of Principal	No. of Teacher	No. of PTA Official	No. of MOE Official	TOTAL
1.	Anchau	67	67	858	402	18	1412
2.	BirninGwari	21	21	178	126	11	357
3.	Giwa	33	33	628	198	13	905
4.	Gwado- Gwado	36	36	477	216	19	784
5.	Kachia	56	56	573	336	11	1032
6.	Kaduna	37	37	1762	222	32	2090
7.	Kafanchan	52	52	1256	312	18	1690
8.	Lere	44	44	479	264	11	842
9.	Riga-Chukun	30	30	435	180	19	694
10.	Sabon Tasha	66	66	1446	396	34	2008
11.	Zaria	51	51	1524	306	19	1951
12.	Zonkwa	48	48	678	288	23	1085
Total		541	541	10,294	3,246	229	14850

Source:Ministry of Education, Science and Technology. Kaduna State(2017)

3.4 Sample and Sampling Technique

The sample size for this study is determined by the use of Research Advisors (2006). Based on the research advisor sample size table, a population of 10,000 or little above 10,000 has a corresponding sample size of 370. Considering the population of this study, which is 14,850 and within the region of recommendation; 370 sample size was used for the study.

According to Olayiwola (2007) 10-30% of a population can be used as sample to represent the entire population. Four (4) educational zones were chosen from the 12 educational zones in Kaduna State by using simple random technique, which represent 30% of the 12 zones.

The distribution of the sample size is therefore presented on table 3.2.

Table 3.2: Sample of the Study

	Senatorial Zone	Educational Zone	Principal	Teacher	PTA Officials	MOE Officials	TOTAL
1.	Zone I	Zaria	13	55	20	5	93
2.	Zone II	Kaduna	8	60	10	8	86
3.	Zone II	Sabon Tasha	15	55	25	8	103
4.	Zone III	Kafanchan	14	50	20	4	88
Total			50	220	75	25	370

3.5 Instrumentation

The instrument used for data collection in this study was a self-structured questionnaire. The five (5) Likert scale options was used which included Strongly Agree, Agree, Undecided, Strongly Disagree and Disagree. The questionnaire consisted; request letter; personal data of the respondent; and opinion statements for testing the hypotheses.

3.5.1 Validity of the Instrument

The content validity was determined by giving to experts in Educational Administration and Planning and English Language to make meaningful comments and observations. All the observations raised were effected before the final copy was produced for the study. Kerlinger (1986) holds the view that, the validation of the content of the research instruments by experts is an important and acceptable technique.

3.5.2 Pilot Study

A pilot study was conducted in Kachia Education Zone to ascertain whether the instrument measured what it was to measure. Fifty copies of the questionnaire was distributed as follows: 10 copies for principals, 20 copies for teachers, 15 copies for PTA officials and 5 copies for MOE officials. The questionnaire consisted of section such as the request letter; bio data; and statement section to test the opinions of the respondents based on the hypotheses of the research. The data collected was subjected to the statistical test of coefficient correlation reliability.

3.5.3 Reliability

The reliability of instrument was determined by proving the ability of the instruments in providing consistent result when several tests have been made. The reliability coefficient of the instrument was determined using Cronbach's Alpha technique at 0.87. This shown that, the research instrument is valid because the closer it is to 1 the valid it is. Thus, Ajayi (1991) stressed that "the instruments are reliable as long as they consistently measured what they are expected to measure".

3.6 Method of Data Collection

The researcher visited the Ministry of Education with and introductory letter from Department of Educational Foundations and Curriculum, Faculty of Education, Ahmadu Bello University, Zaria and the sampled schools in the respective zones. The questionnaire structured for data collection from Principals, Teachers, PTA Officilas and Ministry of Education Officials within Kaduna State Ministry of Education. The questionnaire consists of seventy (70) items; the items were drawn based on the hypotheses. A research assistant was employed and trained on how to distribute and collect the filled questionnaire.

3.7 Methods of Data Analysis

The data collected from the respondents was compiled and tabulated in chapter four using frequency and percentage. Interpretation of data analysis was made for each table. The raw scores from the frequency was converted to percentages through the descriptive statistical techniques. At the end, to test the postulated hypotheses of the research questions, inferential statistics of Analysis of Variance (ANOVA) was employed to analyze the data base on the reasons that: it is a concrete data and the research uses more than two respondents. While the hypotheses was tested at 0.05 significant level.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

4.1 Introduction

This chapter presents the analysis and discussions of data collected for the study. The presentation is of two sections: section “A” consisted bio-data of respondents which involved: Status, Gender, Qualification, type of school, Location of school, Age-range and Year of working experience. While section “B” consisted of data presentation, analysis and discussions which include 1-70, item statements as well as the opinions of respondents based on the formulated hypotheses.

A total of 50 copies of the questionnaire were distributed to principals and all the 50 copies were retrieved, 220 copies of the questionnaire were distributed to teachers but only 215 copies were returned, 75 copies of the questionnaire were distributed to PTA officials but 73 were retrieved and 25 copies of the questionnaire were distributed to Ministry of Education Officials (MOE) but only 22 copies were retrieved. Thereby, there were 370 copies of the questionnaire distributed to the respondents but only 360 copies were retrieved.

The analysis was therefore based on the data gathered from the above mentioned number of copies of the questionnaire retrieved. The bio-data of the respondents were presented in simple percentage and frequencies in tabular form. The research questions were answered using weighted mean of 3.0. Moreover, the research hypotheses were tested using One Way Analysis of Variance (ANOVA). Major findings and the general discussions of the findings were presented based on the results of the data analyzed.

4.2 Analysis of Personal Data (Bio-data) of the Respondents

Table 2 presents the distribution of personal data of the respondents in frequency and percentages.

Table 4.1: Bio-Data of Respondents

S/N	Bio-Data	Category	Frequency	Percentage %	Cumulative Percentage
1	Status	Principal	50	13.1	13.1
		Teacher	215	59.7	72.8
		PTA Officials	73	20.2	93.0
		M E O Officials	22	6.9	100
2	Gender	Male	238	66.1	66.1
		Female	122	33.1	100
3	Qualification	Diploma	10	2.7	2.7
		NCE	182	50	52.7
		B.ED	120	33.3	68
		M.ED	33	9.2	95.2
		Others	15	4.2	100

Table 4.1 shows that 50 principals, 215 teachers, 73 PTA officials and 22 M E O Officials representing 13.1%,59.7%, 20.2%, and 6.9% respectively took part in the study. A total of 238 respondents representing 66.1% were males while 122 representing 33.1% were females. On qualification 10 had diploma,182 had NCE, 120 had B.ED,33 had M.ED and 15 had other qualifications with respective percentages as 2.7%, 50%, 33.3%, 9.2% and 4.2 %.

4.3 Answers to Research Questions

The researcher used 3.0 as the mean (weighted mean) otherwise known as decision mean since the instrument was structured along a modified five point Likert scale to take decision on whether to accept or reject the research questions. Therefore, a mean score of 3.0 and above indicate positive responses to the research question and showing acceptance; while a mean score below 3.0 indicate negative answer to the research question implying rejection. This is shown below.SA = 5 points, A= 4 points, UD= 3 points, D= 2 points, SD= 1 point.

$$\frac{5+4+3+2+1}{5} = \frac{15}{5} = 3.0$$

4.3.1 Research Question One: In what way do security facilities influence the academic performance of public secondary school students in Kaduna State?

To answer this research question opinions of the respondents related to items 1 to 10 in the questionnaire were collected and analyzed and discussed using frequency and percentage while raw scores from frequency was converted to percentages through the descriptive statistical techniques and to test the postulated hypotheses of the research questions, inferential, statistics of analysis of variance ANOVA was used.

Table 4.2: Opinions of Respondents on the Influence of Security Facilities on Students' Academic Performance.

S/N	Item statement	Respondents	SA	A	UD	D	SD	N	Mean
1	Security personnel are effective in their work in this school, this increase students' academic performance.	Principals	36	10	-	2	2	50	4.5
		Teachers	105	110	-	-	-	215	4.5
		PTA	10	58	-	3	2	73	3.9
		MOE	5	16	-	-	1	22	4.1
2	As you enter this school there are security personnel at the gate and it promote students' academic performance.	Principals	26	10	-	10	4	50	3.9
		Teachers	125	80	-	10	-	215	4.5
		PTA	43	20	-	6	4	73	4.2
		MOE	8	7	-	4	3	22	3.5
3	This school is fully fenced and enhances students' academic performance.	Principals	5	10	1	1	1	50	1.9
		Teachers	39	160	-	10	6	215	4.0
		PTA	19	45	-	9	-	73	4.0
		MOE	4	8	-	5	5	22	3.0
4	There are exist doors in this school in case of emergency, this increase students' academic performance.	Principals	3	37	3	4	3	50	3.7
		Teachers	28	158	5	20	4	215	3.9
		PTA	10	33	-	16	14	73	3.1
		MOE	4	10	-	8	-	22	3.5
5	There are adequate bulbs and lighting in classrooms and school environment of the school, thereby increase students' academic performance.	Principals	10	15	3	19	2	50	3.2
		Teachers	15	108	5	42	45	215	3.0
		PTA	9	21	6	33	4	73	2.9
		MOE	4	7	-	9	2	22	3.1
6	Availability of security office complement safety matters in this school and promote students' academic performance.	Principals	16	22	-	7	10	50	3.8
		Teachers	154	38	-	23	-	215	4.5
		PTA	30	14	3	7	19	73	3.4
		MOE	4	12	-	5	1	22	3.6
7	They are locking system for doors and windows in this school, this increase students' academic performance.	Principals	22	17	1	10	-	50	4.0
		Teachers	37	159	7	8	-	215	3.9
		PTA	14	58	-	1	-	73	4.2
		MOE	2	16	-	2	2	22	3.6
8	In this school there are surveillance cameras which enhance students' academic performance.	Principals	11	26	-	10	3	50	3.6
		Teachers	9	10	1	170	25	215	2.1
		PTA	1	8	2	55	7	73	2.2
		MOE	1	3	-	12	8	22	2.2
9	There is training and retraining of security personnel in this school, thereby increase students' academic performance.	Principals	10	6	-	30	4	50	2.8
		Teachers	2	19	-	190	4	215	2.2
		PTA	10	20	-	3	1	73	1.8
		MOE	3	5	-	14	-	22	2.9
10	Stakeholder's cooperative attitudes on security matter in this school promote students' academic performance.	Principals	20	18	-	10	2	50	3.9
		Teachers	63	91	1	35	25	215	3.6
		PTA	25	10	-	34	4	73	3.2
		MOE	6	4	-	14	2	22	3.5

Cumulative Mean = 3.4

Table 4.4 revealed the view of principals, teachers, PTA Official and MOE officials on the influence of security facilities on the academic performance of public secondary school students in Kaduna state. Item 1 shows the responses of respondents on whether Security personnel are effective in their work in the school, which increase students' academic performance. From the responses of the respondents, the item statement was accepted by all the respondents with the mean score of 4.5, 4.5, 3.9 and 4.1 respectively. i.e students academic performance is increased due to effective security personnel. Item 2 shows the responses of respondents on whether the presence of security personnel at the gate increase students' academic performance, the mean scores of the respondents show that the item was accepted by all the respondents with the mean scores of 3.9, 4.5, 4.2, and 3.5 for principals, teachers, PTA and MOE Officials respectively. Item 3 was to find out if fencing of the school enhances students' academic performance, the responses of the respondents show that three out of four respondents decision mean were accepted i.e. Teachers 4.0, PTA 4.0 and MOE 3.0, implying that fencing of school enhances students' academic performance.

While the decision mean for principals was rejected at 1.9. Item 4 was on whether there are exist doors in the school in case of emergency, which increase students' academic performance. The mean scores of 3.7, 3.9, 3.1 and 3.5 were obtained from the responses of the respondents, implying that all the respondents accepted the item statement. Item 5 is on whether there are adequate bulbs and lighting in classrooms and school environment of the school, thereby increase students' academic performance. The item was also accepted by the respondents with the mean scores of 3.2, 3.0, 2.9 and 3.1 for principals, teachers, PTA and MOE respectively. Similarly, item 6 was accepted by the respondents with the mean scores of 3.8, 4.5, 3.4 and 3.6 for principals, teachers, PTA and MOE officials respectively. This implies that Availability of security office complement safety matters in the school and promote students' academic performance. Item 7 was to find out whether there

are locking system for doors and windows in the school, which increases students' academic performance.

The mean score showed that the item was accepted by all the respondents; With the decision mean of 4.0, 3.9, 4.2 and 3.6 for principals, teachers, PTA and MOE accordingly. Item 8 was on whether in the school there are surveillance cameras which enhance students' academic performance and was rejected by three of the respondents and accepted by one with the mean scores of 3.6, 2.1, 2.2 and 2.2 accordingly. From item 9, the decision mean of the respondents were found to be 2.8, 2.2, 1.8 and 2.9, meaning it was rejected that there was no training and retraining of security personnel in the school. Item 10 was on whetherStakeholder's cooperative attitudes on security matter in the school promote students' academic performance; the item was accepted with the mean score of 3.9, 3.6, 3.2 and 3.5 respectively.

By this analysis, it was revealed that security facilities influence the academic performance of public secondary school students in Kaduna State, even though there are no surveillance cameras mounted in the schools.

4.3.2 Research Question Two: What is the influence of school physical environment on the academic performance of public secondary school students in Kaduna State?

To answer this research question opinions of the respondents related to items 11 to 20 in the questionnaire were collected and analyzed and discussed using frequency and percentage while raw scores from frequency was converted to percentages through the descriptive statistical techniques and to test the postulated hypotheses of the research questions, inferential, statistics of analysis of variance ANOVA was used.

Table 4.3: Opinions of Respondents on the Influence of School Physical Environment on Students' Academic Performance.

S/N	Item statement	Respondents	SA	A	UD	D	SD	N	MEAN
11	The school environment is always neat, thereby increase students' academic performance.	Principals	10	30	3	4	3	50	3.8
		Teachers	33	158	-	20	4	215	3.9
		PTA	10	33	-	16	14	73	3.1
		MOE	4	10	-	8	-	22	3.4
12	This school is beautified with flowers which enhance students' academic performance.	Principals	11	26	-	10	3	50	3.6
		Teachers	10	10	-	175	20	215	2.0
		PTA	1	8	2	55	7	73	2.2
		MOE	4	-	-	12	8	22	1.8
13	There is good road network in this school and it enhances students' academic performance.	Principals	28	10	-	10	2	50	4.0
		Teachers	63	91	1	35	25	215	3.6
		PTA	20	15	-	30	8	73	3.1
		MOE	6	4	-	14	2	22	3.5
14	This school has good water supply and it promote clean environment, thereby increase students' academic performance.	Principals	36	10	-	2	2	50	4.5
		Teachers	105	110	-	-	-	215	4.5
		PTA	10	58	-	3	2	73	3.9
		MOE	5	16	-	-	1	22	4.1
15	There are playground facilities in this school which promotes students' academic performance.	Principals	26	10	-	10	4	50	3.9
		Teachers	110	95	-	8	2	215	4.4
		PTA	43	20	-	6	4	73	4.2
		MOE	8	7	-	4	3	22	3.6
16	This school is painted regularly and the walls are kept neat always, thereby increase students' academic performance.	Principals	16	22	-	7	10	50	3.8
		Teachers	54	38	-	23	100	215	2.6
		PTA	30	4	3	17	19	73	3.3
		MOE	4	12	-	5	1	22	3.6
17	The surroundings of this school are well landscaped, this increase students' academic performance.	Principals	22	17	1	10	-	50	4.0
		Teachers	37	150	7	8	9	215	3.9
		PTA	14	52	-	1	6	73	3.9
		MOE	2	16	-	2	2	22	3.6
18	This school has friendly environment and makes students like coming to school, thereby promote students' academic performance.	Principals	11	26	-	10	3	50	3.6
		Teachers	79	10	1	100	25	215	3.0
		PTA	6	8	2	50	7	73	2.4
		MOE	3	3	-	10	6	22	2.4
19	Trees are planted in this school and make the environment cool, thereby increase students' academic performance.	Principals	10	6	-	30	4	50	2.8
		Teachers	52	19	-	140	4	215	2.9
		PTA	10	15	-	8	1	73	1.7
		MOE	3	5	-	14	-	22	2.9
20	National symbols are erected in this school which increases students' academic performance.	Principals	20	18	-	10	2	50	3.8
		Teachers	61	93	1	31	29	215	3.6
		PTA	25	10	-	31	7	73	3.2
		MOE	16	4	-	4	2	22	4.8

Cumulative Mean = 3.2

Table 4.5 revealed the view of principals, teachers, PTA Official and MOE officials on the influence of school physical environment on the academic performance of public secondary school students in Kaduna state. Item 11 show the responses of respondents on whether the school environment is always neat, thereby increasing students' academic performance. From the responses of the respondents, the item statement was accepted by all the respondents with the mean score of 3.8, 3.9, 3.1 and 3.4 respectively.

Students academic performance is increased due to the neatness of the school environment. Item 12 shows the responses of respondents on whether the school is beautified with flowers to enhance students' academic performance, the mean scores of the respondent show that three of the items were rejected while one was accepted with the mean scores of 3.6, 2.0, 2.2, and 1.8 for principals, teachers, PTA and MOE Officials respectively. Item 13 was to findout whetherthere is good road network in the school and it enhances students' academic performance,the responses of the respondents' shows that all the respondentsaccepted the item statement i.e. Principal 4.0, Teachers 3.6, PTA3.1 and MOE 3.5,implying thatthere is good road network in the school. Item 14 was on whether the school has good water supply which help to promote clean environment, thereby increase students' academic performance.The mean scores of 4.5, 4.5, 3.9 and 4.1 were obtained from the responses of the respondents, implying that all the respondents accepted the item statement. Item 15 is on whether there are playground facilities in this school which promotes students' academic performance.

The item was also accepted by the respondents with the mean scores of 3.9, 4.4,4.2 and 3.6 for principals, teachers, PTA and MOE respectively. Similarly, item 16 was accepted by three respondents and rejected by one with the mean scores of 3.8, 2.6, 3.3 and 3.6 for principals, teachers, PTA and MOEofficials respectively. Item 17 was to find out whetherthe surroundings of the school are well landscaped to increase students' academic

performance. The mean score showed that the item was accepted by all the respondents; with the decision mean of 4.0, 3.9, 3.9, and 3.6 for principals, teachers, PTA and MOE accordingly. Item 18 was on whether the school has friendly environment that makes students like coming to school. The item was rejected by two and accepted by the other two with the mean scores of 3.6, 3.0, 2.4 and 2.4 accordingly. From item 19, the decision mean of the respondents were found to be 2.8, 2.9, 1.7 and 2.9, meaning it was rejected that trees were not planted in the school to make the environment cool. Item 20 was on whether national symbols were erected in the school to increase students' academic performance. The item was accepted with the mean score of 3.8, 3.6, 3.2 and 4.8 respectively.

By this analysis, it was revealed that school physical environment influence the academic performance of public secondary school students in Kaduna State, even though trees are not planted in most of the schools.

4.3.3 Research Question Three: To what extent does classroom positioning influence academic performance of public secondary school students in Kaduna State?

To answer this research question opinions of the respondents related to items 21 to 30 in the questionnaire were collected and analyzed and discussed using frequency and percentage while raw scores from frequency was converted to percentages through the descriptive statistical techniques and to test the postulated hypotheses of the research questions, inferential, statistics of analysis of variance ANOVA was used.

Table 4.4: Opinions of Respondents on the Influence of Classroom Positioning on Students' Academic Performance.

S/N	Item statement	Respondents	SA	A	UD	D	SD	N	Mean
21	There are spacious positioned classrooms with ventilation in this school and it promote students' academic performance.	Principals	11	26	-	10	3	50	3.6
		Teachers	70	109	-	15	20	215	3.9
		PTA	50	8	2	-	7	73	4.0
		MOE	14	-	-	-	8	22	3.5
22	There is conducive positioned classroom's atmosphere with fresh air whenever it is hot, thereby increase students' academic performance.	Principals	28	10	-	10	2	50	4.0
		Teachers	63	91	1	35	25	215	3.6
		PTA	25	10	-	30	8	73	3.2
		MOE	6	4	-	14	2	22	3.5
23	In this school the chalkboards are positioned in front where everybody can see what is written on it, thereby increase students' academic performance.	Principals	36	10	-	2	2	50	4.5
		Teachers	110	105	-	-	-	215	4.5
		PTA	30	38	-	3	2	73	4.2
		MOE	11	10	-	-	1	22	4.4
24	There are functional fans positioned in classrooms of this school, thereby increase students' academic performance.	Principals	22	17	1	10	-	50	3.8
		Teachers	56	40	7	80	28	215	3.0
		PTA	14	58	-	1	-	73	4.2
		MOE	12	6	-	2	2	22	4.1
25	Seats are well positioned in classrooms of this school, thereby promote students' academic performance.	Principals	21	16	-	10	3	50	3.8
		Teachers	59	60	1	70	25	215	3.3
		PTA	1	8	2	55	7	73	1.2
		MOE	1	3	-	12	8	22	2.2
26	This school has safety muster points positioned in the classrooms, thereby increase students' academic performance.	Principals	10	6	-	30	4	50	2.8
		Teachers	2	15	-	194	4	215	2.1
		PTA	8	22	-	35	8	73	2.8
		MOE	3	5	-	14	-	22	2.8
27	There are adequate bulbs and lighting well positioned in each classroom in this school, which promote students' academic performance.	Principals	20	18	-	10	2	50	3.9
		Teachers	63	91	1	35	25	215	3.6
		PTA	25	10	-	34	4	73	3.2
		MOE	6	4	-	14	2	22	3.4
28	The classrooms of this school are always maintained which keep them alive, thereby increase students' academic performance.	Principals	10	6	-	30	4	50	2.8
		Teachers	62	9	-	140	4	215	2.9
		PTA	20	5	-	8	1	73	1.9
		MOE	13	5	-	1	3	22	4.1
29	The students like coming to school because the classrooms are always attractive and enhance students' academic performance.	Principals	20	18	-	10	2	50	3.9
		Teachers	31	63	1	61	59	215	2.7
		PTA	15	10	-	41	7	73	2.8
		MOE	6	4	-	14	2	22	3.5
30	The classrooms are well positioned in this school, thereby promote students' academic performance.	Principals	22	17	1	10	-	50	4.0
		Teachers	37	145	7	15	17	215	3.9
		PTA	14	52	-	1	6	73	3.9
		MOE	2	16	-	2	2	22	3.6

Cumulative Mean = 3.3

Table 4.6 revealed the view of principals, teachers, PTA Official and MOE officials on the influence of classroom positioning on the academic performance of public secondary school students in Kaduna state. Item 21 shows the responses of respondents on whether there are spacious positioned classrooms with ventilation in the school to promote students' academic performance. From the responses of the respondents, the item statement was accepted by all the respondents with the mean score of 3.6, 3.9, 4.0 and 3.5 respectively. Item 22 shows the responses of respondents on whether there is conducive positioned classrooms with fresh air whenever it is hot, the mean scores of the respondents show that all the respondents accepted the item statement with the mean scores of 4.0, 3.6, 3.2, and 3.5 for principals, teachers, PTA and MOE Officials respectively.

Item 23 was to find out whether chalkboards are positioned in front where everybody can see what is written on it, the responses of the respondents' shows that all the respondents accepted the item statement i.e. Principal 4.5, Teachers 4.5, PTA 4.2 and MOE 4.4. Item 24 was on whether there are functional fans positioned in classrooms of the school, thereby increase students' academic performance. The mean scores of 3.8, 3.0, 4.2 and 4.1 were obtained from the responses of the respondents, implying that all the respondents accepted the item statement. Item 25 is on whether seats are well positioned in classrooms of the school, thereby promoting students' academic performance. The item was accepted by two of the respondents and rejected by the other two with the mean scores of 3.8, 3.3, 1.2 and 2.2 for principals, teachers, PTA and MOE respectively. However, item 26 was rejected by all the respondents with the mean scores of 2.8, 2.1, 2.8 and 2.8 for principals, teachers, PTA and MOE officials respectively. Item 27 was to find out whether there are adequate bulbs and lighting well positioned in each classroom in the school, which promote students' academic performance.

The mean score showed that the item was accepted by all the respondents; with the decision mean of 3.9, 3.6, 3.2, and 3.4 for principals, teachers, PTA and MOE accordingly. Item 28 was on whether classrooms of the school are always maintained to keep them alive, thereby increase students' academic performance. The item was rejected by three and accepted by one with the mean scores of 2.8, 2.9, 1.9 and 4.1 accordingly. From item 29, the decision mean of the respondents were found to be 3.9, 2.7, 2.8 and 3.5, meaning it was rejected by two and accepted by the other two implying that their opinions were divided. Item 20 was on whether the classrooms are well positioned in the school; thereby promote students' academic performance. The item was accepted with the mean score of 4.0, 3.9, 3.9 and 3.6 respectively.

By this analysis, it was revealed that classroom positioning influence the academic performance of public secondary school students in Kaduna State, even though the classrooms are not always maintained.

4.3.4 Research Question Four: How do recreational facilities positioning influence the academic performance of public secondary school students in Kaduna State?

To answer this research question opinions of the respondents related to items 31 to 40 in the questionnaire were collected and analyzed and discussed using frequency and percentage while raw scores from frequency was converted to percentages through the descriptive statistical techniques and to test the postulated hypotheses of the research questions, inferential, statistics of analysis of variance ANOVA was used.

Table 4.5: Opinions of Respondents on the Influence of Recreational Facilities Positioning on Students' Academic Performance.

S/N	Item statement	Respondents	SA	A	UD	D	SD	N	MEAN
31	There are in-door games in this school and it increase students' academic performance.	Principals	6	10	-	30	4	50	2.7
		Teachers	25	80	-	60	50	215	2.8
		PTA	43	20	-	6	4	73	4.3
		MOE	8	7	-	4	3	22	3.6
32	There are school shops in this school, this increase students' academic performance.	Principals	35	10	1	3	1	50	4.5
		Teachers	39	160	-	10	6	215	4.0
		PTA	24	45	-	5	-	73	4.2
		MOE	4	8	-	5	5	22	3.0
33	Students participate in sporting activities in this school, thereby it enhance students' academic performance.	Principals	3	37	3	4	3	50	3.7
		Teachers	36	150	5	20	4	215	3.9
		PTA	10	33	-	16	14	73	3.1
		MOE	4	10	-	8	-	22	3.5
34	This school has school field and it help in controlling students' activities, thereby enhance students' academic performance.	Principals	10	15	3	19	2	50	3.2
		Teachers	20	108	-	42	45	215	3.1
		PTA	14	17	6	33	4	73	3.1
		MOE	4	7	-	9	2	22	3.1
35	This school has well equipped common rooms for students' social activities, thereby increase students' academic performance.	Principals	11	26	-	10	3	50	3.6
		Teachers	79	110	1	10	15	215	4.1
		PTA	26	38	2	-	7	73	4.0
		MOE	3	3	10	10	6	22	2.3
36	This school sports and games enhance students' academic performance.	Principals	10	6	-	30	4	50	2.7
		Teachers	52	19	-	14	4	215	2.9
		PTA	10	15	-	0	1	73	4.2
		MOE	3	5	-	8	-	22	2.9
37	The school clubs function effectively and thereby enhance students' academic performance.	Principals	20	18	-	10	2	50	3.9
		Teachers	61	93	1	31	29	215	3.6
		PTA	25	10	-	31	7	73	3.2
		MOE	16	4	-	4	2	22	4.8
38	Inter-school competitions in this school build confidence in students, thereby increase students' academic performance.	Principals	36	10	-	2	2	50	4.5
		Teachers	110	105	-	-	-	215	4.5
		PTA	30	38	-	3	2	73	4.2
		MOE	11	10	-	-	1	22	4.4
39	Students' participation in creative arts in this school promote students' academic performance.	Principals	22	17	1	10	-	50	4.2
		Teachers	56	40	7	80	28	215	3.0
		PTA	14	58	-	1	-	73	4.2
		MOE	12	6	-	2	2	22	4.1
40	There is music room in this school, thereby increase students' academic performance.	Principals	10	6	-	30	4	50	2.8
		Teachers	52	19	-	14	4	215	2.7
		PTA	10	15	-	0	1	73	2.4
		MOE	3	5	-	8	-	22	2.8

Cumulative Mean = 4.0

Table 4.7 revealed the view of principals, teachers, PTA Official and MOE officials on the influence of recreational facilities positioning on the academic performance of public secondary school students in Kaduna state. Item 31 shows the responses of respondents on whether there are in-door games in this school and it increase students' academic performance. From the responses of the respondents, the item statement was accepted by two of the respondents and rejected by the other two with the mean score of 2.7, 2.8, 4.3 and 3.6 respectively. Item 32 shows the responses of respondents on whether there are school shops in this school, the mean scores of the respondent show that all the respondents accepted the item statement with the mean scores of 4.5, 4.0, 4.2, and 3.0 for principals, teachers, PTA and MOE Officials respectively.

Item 33 was to find out whether students participate in sporting activities in the school, thereby it enhance students' academic performance. The responses of the respondents' shows that all the respondents accepted the item statement i.e. Principal 3.7, Teachers 3.9, PTA 3.1 and MOE 3.5. Item 34 was on whether the school has school field to help in controlling students' activities, thereby enhance students' academic performance. The mean scores of 3.2, 3.1, 3.1 and 3.1 were obtained from the responses of the respondents, implying that all the respondents accepted the item statement. Item 35 is on whether this school has well equipped common rooms for students' social activities; thereby increase students' academic performance. The item was accepted by all the respondents with the mean scores of 3.6, 4.1, 4.0 and 2.3 for principals, teachers, PTA and MOE respectively. However, item 36 was rejected by three respondents and accepted by one with the mean scores of 2.7, 2.9, 4.2 and 2.9 for principals, teachers, PTA and MOE officials respectively. Item 37 was to find out whether the school clubs function effectively and thereby enhance students' academic performance.

The mean score showed that the item was accepted by all the respondents; with the decision mean of 3.9, 3.6, 3.2, and 4.8 for principals, teachers, PTA and MOE accordingly. Item 38 was on whether inter-school competitions in the school build confidence in students, thereby increase students' academic performance. The item was accepted by all with the mean scores of 4.5, 4.5, 4.2 and 4.4 accordingly. From item 39, the decision mean of the respondents were found to be 4.2, 3.0, 4.2 and 4.1, meaning it was accepted by all the respondents. Item 40 was on whether there is music room in the school, thereby increase students' academic performance. The item was rejected with the mean score of 2.8, 2.7, 2.4 and 2.8 respectively.

By this analysis, it was revealed that recreational facilities positioning influence the academic performance of public secondary school students in Kaduna State, even though games and sports does not enhance their academic performance.

4.3.5 Research Question Five: In what way do Library Facilities Positioning Influence the Academic Performance of Public Secondary School Students in Kaduna State?

To answer this research question opinions of the respondents related to items 41 to 50 in the questionnaire were collected and analyzed and discussed using frequency and percentage while raw scores from frequency was converted to percentages through the descriptive statistical techniques and to test the postulated hypotheses of the research questions, inferential, statistics of analysis of variance ANOVA was used.

Table 4.6: Opinions of Respondents on the Influence of Library Facilities Positioning on Students' Academic Performance.

S/N	Item statement	Respondents	SA	A	UD	D	SD	N	MEAN
41	This school library is properly positioned and well equipped, thereby increase students' academic performance.	Principals	10	27	-	-	13	50	3.4
		Teachers	70	90	-	35	20	215	3.7
		PTA	50	8	2	10	7	73	3.8
		MOE	14	-	-	-	8	22	3.5
42	The computers in this library are well positioned and provide unique and authentic data, thereby increase students' academic performance.	Principals	28	10	-	10	2	50	4.0
		Teachers	63	91	1	35	25	215	3.6
		PTA	25	10	-	30	8	73	3.2
		MOE	6	4	-	14	2	22	3.5
43	The school library bulletin are well positioned with information for users, thereby increase students' academic performance.	Principals	30	10	6	2	2	50	4.3
		Teachers	10	95	13	100	87-	215	3.5
		PTA	30	30	8	3	2	73	4.1
		MOE	11	5	-	5	1	22	3.9
44	The school library positioned instructional materials for teachers' use, thereby increase students' academic performance.	Principals	22	17	1	10	-	50	4.0
		Teachers	56	40	7	80	28	215	3.0
		PTA	14	58	-	1	-	73	4.2
		MOE	12	6	-	2	2	22	4.0
45	The school library cupboards are well positioned and thereby increase students' academic performance.	Principals	21	16	-	10	3	50	3.8
		Teachers	59	60	1	70	25	215	3.3
		PTA	1	8	2	55	7	73	2.2
		MOE	1	3	-	12	8	22	1.9
46	The school library has adequate reference materials and are well positioned, thereby promote students' academic performance.	Principals	10	6	-	30	4	50	2.8
		Teachers	2	15	-	194	4	215	2.1
		PTA	8	22	-	42	1	73	2.9
		MOE	3	5	-	14	-	22	2.8
47	There are well positioned seats in the school library, thereby increase students' academic performance.	Principals	20	18	-	10	2	50	3.9
		Teachers	63	91	1	35	25	215	3.6
		PTA	25	10	-	34	4	73	3.2
		MOE	6	4	-	14	2	22	3.5
48	The library books are well positioned, thereby promote students' academic performance.	Principals	10	6	-	30	4	50	2.2
		Teachers	62	9	-	140	4	215	2.9
		PTA	20	5	-	48	-	73	2.9
		MOE	3	5	-	1	3	22	2.6
49	The library photocopying machines are well positioned, thereby increase students' academic performance.	Principals	10	18	-	20	2	50	3.3
		Teachers	21	63	1	71	59	215	2.6
		PTA	15	10	-	41	7	73	2.8
		MOE	6	4	-	14	2	22	3.5
50	Book shelves in the school library are well positioned, thereby enhance students' academic performance.	Principals	22	17	1	10	-	50	4.0
		Teachers	37	145	7	15	17	215	3.7
		PTA	14	52	-	1	6	73	3.9
		MOE	2	16	-	2	2	22	3.6

Cumulative Mean = 3.0

Table 4.8 revealed the view of principals, teachers, PTA Official and MOE officials on the influence of Library Facilities Positioning on the academic performance of public secondary school students in Kaduna state. Item 41 shows the responses of respondents on whether the school library is properly positioned and well equipped, thereby increase students' academic performance. From the responses of the respondents, the item statement was accepted by all the respondents with the mean score of 3.4, 3.7, 3.4 and 3.5 respectively. Item 42 shows the responses of respondents on whether the computers in the library are well positioned and provide unique and authentic data, thereby increase students' academic performance. The mean scores of respondents show that all the respondents accepted the item statement with the mean scores of 4.0, 3.6, 3.2, and 3.5 for principals, teachers, PTA and MOE Officials respectively.

Item 43 was to find out whether the school library bulletin are well positioned with information for users, thereby increase students' academic performance. The responses of the respondents show that all the respondents accepted the item statement i.e. Principal 4.3, Teachers 3.5, PTA 4.1 and MOE 3.9. Item 44 was on whether the school library positioned instructional materials for teachers' use, thereby increase students' academic performance. The mean scores of 4.0, 3.0, 4.2 and 4.0 were obtained from the responses of the respondents, implying that all the respondents accepted the item statement. Item 45 is on whether the school library cupboards are well positioned and thereby increase students' academic performance.

The item was accepted by two of the respondents and rejected by the other two with the mean scores of 3.8, 3.3, 2.2 and 1.9 for principals, teachers, PTA and MOE respectively. However, item 46 was rejected by all the respondents with the mean scores of 2.8, 2.1, 2.9 and 2.8 for principals, teachers, PTA and MOE officials respectively. Item 47 was to find out whether there are well positioned seats in the school library, thereby increase students'

academic performance. The mean score showed that the item was accepted by all the respondents; with the decision mean of 3.9, 3.6, 3.2, and 3.5 for principals, teachers, PTA and MOE accordingly. Item 48 was on whether the library books are well positioned, thereby promote students' academic performance. The item was rejected by all with the mean scores of 2.2, 2.9, 2.9 and 2.6 accordingly. From item 49, the decision mean of the respondents were found to be 3.3, 2.6, 2.8 and 3.5, meaning it was accepted by two and rejected by two of the respondents. Item 50 was on whether the book shelves in the school library are well positioned, thereby enhance students' academic performance. The item was accepted with the mean score of 4.0, 3.7, 3.9 and 3.6 respectively.

By this analysis, it was revealed that Library Facilities Positioning influence the academic performance of public secondary school students in Kaduna State, however it was revealed that books and seats were not well positioned in the school libraries.

4.3.6 Research Question Six: How does convenience space positioning influence the academic performance of public secondary school students in Kaduna State

To answer this research question opinions of the respondents related to items 51 to 60 in the questionnaire were collected and analyzed and discussed using frequency and percentage while raw scores from frequency was converted to percentages through the descriptive statistical techniques and to test the postulated hypotheses of the research questions, inferential, statistics of analysis of variance ANOVA was used.

Table 4.7: Opinions of Respondents on the Influence of Convenience Space Positioning on Students' Academic Performance.

S/N	Item statement	Respondent	SA	A	UD	D	SD	N	Mean
51	In this school there is enough space positioned for students in the convenience spaces, thereby increase students' academic performance.	Principals	36	10	-	2	2	50	4.5
		Teachers	105	110	-	-	-	215	4.5
		PTA	10	58	-	3	2	73	3.9
		MOE	5	16	-	-	1	22	4.0
52	The school cafeteria has been properly positioned and helps increase students' academic performance.	Principals	26	10	-	10	4	50	3.9
		Teachers	125	80	-	10	-	215	4.5
		PTA	43	20	-	6	4	73	4.2
		MOE	8	7	-	4	3	22	3.6
53	The school toilets are properly positioned and always clean, thereby increase students' academic performance.	Principals	5	1	1	10	1	50	3.8
		Teachers	39	120	-	50	6	215	3.6
		PTA	19	40	-	14	-	73	4.2
		MOE	4	8	-	5	5	22	3.0
54	This school has properly positioned safe and exit doors in the convenience spaces which help increase students' academic performance.	Principals	1	30	3	13	3	50	2.3
		Teachers	33	108	-	30	24	215	3.2
		PTA	10	33	-	16	14	73	3.1
		MOE	4	10	-	8	-	22	3.5
55	There is always water supply in school positioned convenience spaces, thereby promote students' academic performance.	Principals	11	26	-	10	3	50	3.6
		Teachers	138	30	-	27	20	215	4.1
		PTA	1	8	2	55	7	73	2.2
		MOE	4	-	-	12	8	22	2.4
56	The school convenience spaces are properly positioned and always neat, thereby enhance students' academic performance.	Principals	28	10	-	10	2	50	4.0
		Teachers	63	91	1	35	25	215	3.6
		PTA	20	15	-	30	8	73	3.1
		MOE	6	4	-	14	2	22	3.5
57	Conducive convenience spaces positioning in school promote students' academic performance.	Principals	28	10	-	10	2	50	4.0
		Teachers	63	91	1	35	25	215	3.7
		PTA	25	10	-	30	8	73	3.1
		MOE	6	4	-	14	2	22	4.0
58	The school dormitories have been properly positioned and help increase students' academic performance.	Principals	36	10	-	2	2	50	4.3
		Teachers	110	105	-	-	-	215	4.5
		PTA	30	38	-	3	2	73	4.2
		MOE	11	10	-	-	1	22	4.4
59	The school kitchen has been properly positioned, thereby promote students' academic performance.	Principals	22	17	1	10	-	50	4.0
		Teachers	56	40	7	80	28	215	4.3
		PTA	14	58	-	1	-	73	4.1
		MOE	12	6	-	2	2	22	4.0
60	The school shed has been properly positioned, thereby enhances students' academic performance.	Principals	6	10	-	30	4	50	2.7
		Teachers	25	80	-	60	50	215	2.8
		PTA	43	20	-	6	4	73	4.3
		MOE	8	7	-	4	3	22	3.6

Cumulative Mean = 4.0

Table 4.9 revealed the view of principals, teachers, PTA Official and MOE officials on the influence of convenience space positioning on the academic performance of public secondary school students in Kaduna state. Item 51 shows the responses of respondents on whether the school has enough space positioned for students in the convenience spaces, which increase students' academic performance. From the responses of the respondents, the item statement was accepted by all the respondents with the mean score of 4.5, 4.5, 3.9 and 4.0 respectively. Item 52 shows the responses of respondents on whether the school cafeteria has been properly positioned and helps increase students' academic performance.

The mean scores of respondents show that all the respondents accepted the item statement with the mean scores of 3.9, 4.5, 4.2, and 3.6 for principals, teachers, PTA and MOE Officials respectively. Item 53 was to find out whether the school toilets are properly positioned and always clean, thereby increase students' academic performance. The responses of the respondents show that all the respondents accepted the item statement i.e. Principal 3.8, Teachers 3.6, PTA 4.2 and MOE 3.0. Item 54 was on whether the school has properly positioned safe and exit doors in the convenience spaces which help increase students' academic performance. The mean scores of 2.3, 3.2, 3.1 and 3.5 were obtained from the responses of the respondents. Item 55 is on whether there is always water supply in school positioned convenience spaces, thereby promote students' academic performance. The item was accepted by two of the respondents and rejected by the other two with the mean scores of 3.6, 4.1, 2.2 and 2.4 for principals, teachers, PTA and MOE respectively.

However, item 56 was accepted by all the respondents with the mean scores of 4.0, 3.6, 3.1 and 3.5 for principals, teachers, PTA and MOE officials respectively. Item 57 was to find out whether the conducive convenience spaces positioning in school promote students' academic performance. The mean score showed that the item was accepted by all the respondents; with the decision mean of 4.0, 3.7, 3.1, and 4.0 for principals, teachers, PTA and

MOE accordingly. Item 58 was on whether the school dormitories have been properly positioned to help increase students' academic performance. The item was accepted by all with the mean scores of 4.3, 4.5, 4.2 and 4.4 accordingly. From item 59, the decision mean of the respondents were found to be 4.0, 4.3, 4.1 and 4.0, meaning it was accepted by all the respondents. Item 60 was on whether the school shed has been properly positioned, to enhance students' academic performance. The item was accepted with the mean score of 2.7, 2.8, 4.3 and 3.6 respectively.

By this analysis, it was revealed that convenience space positioning influence the academic performance of public secondary school students in Kaduna State.

4.3.7 Research Question Seven: In what way Does Administrative Space Positioning Influence Academic Performance in Public Secondary School Students in Kaduna State?

To answer this research question opinions of the respondents related to items 61 to 70 in the questionnaire were collected and analyzed and discussed using frequency and percentage while raw scores from frequency was converted to percentages through the descriptive statistical techniques and to test the postulated hypotheses of the research questions, inferential, statistics of analysis of variance ANOVA was used.

Table 4.8: Opinions of Respondents on the Influence of Administrative Space Positioning on Students' Academic Performance.

S/N	Item statement	Respondents	SA	A	UD	D	SD	N	MEAN
61	The school principal office has been properly positioned and helps increase students' academic performance.	Principals	20	18	-	10	2	50	3.9
		Teachers	63	91	1	35	25	215	3.6
		PTA	25	10	-	34	4	73	3.2
		MOE	6	4	-	14	2	22	3.6
62	The vice principal administration office is well positioned and thereby promotes students' academic performance	Principals	10	26	-	10	4	50	3.6
		Teachers	62	100	-	40	4	215	3.7
		PTA	20	5	-	8	1	73	3.7
		MOE	13	5	-	1	3	22	4.1
63	The office of the vice principal academics is properly positioned, thereby enhances students' academic performance.	Principals	10	18	-	20	2	50	3.3
		Teachers	51	63	1	71	29	215	3.2
		PTA	15	10	-	41	7	73	2.8
		MOE	6	4	-	14	2	22	3.5
64	The heads of department offices are properly positioned, thereby increase students' academic performance	Principals	22	17	1	10	-	50	4.0
		Teachers	37	145	7	15	17	215	3.9
		PTA	14	52	-	1	6	73	3.9
		MOE	2	16	-	2	2	22	3.6
65	The guidance and counselor office in the school is properly positioned and this promotes students' academic performance.	Principals	20	18	-	10	2	50	3.9
		Teachers	61	93	1	31	29	215	3.4
		PTA	25	10	-	31	7	73	3.2
		MOE	16	4	-	4	2	22	4.8
66	The school health clinic has been properly positioned, thereby increase students' academic performance.	Principals	36	10	-	2	2	50	4.5
		Teachers	110	105	-	-	-	215	4.4
		PTA	30	38	-	3	2	73	3.9
		MOE	11	10	-	-	1	22	4.4
67	This school staff room has been properly positioned, thereby enhance students' academic performance.	Principals	22	17	1	10	-	50	3.9
		Teachers	56	40	7	80	28	215	3.0
		PTA	14	58	-	1	-	73	4.2
		MOE	12	6	-	2	2	22	4.0
68	The security office has been properly positioned, thereby promotes students' academic performance.	Principals	10	6	-	30	4	50	2.8
		Teachers	52	19	-	140	4	215	2.8
		PTA	10	15	-	8	1	73	1.7
		MOE	3	5	-	14	-	22	2.9
69	The school non-teaching staff office has been properly positioned and it enhances students' academic performance.	Principals	10	6	-	30	4	50	2.8
		Teachers	2	15	-	194	4	215	2.1
		PTA	8	22	-	3	1	73	1.8
		MOE	3	5	-	14	-	22	2.8
70	Administrative spaces of the school have been properly positioned, thereby increase students' academic performance.	Principals	20	18	-	10	2	50	3.9
		Teachers	63	91	1	35	25	215	3.6
		PTA	25	10	-	34	4	73	3.2
		MOE	6	4	-	14	2	22	3.5

Cumulative Mean = 3.4

Table 4.10 revealed the view of principals, teachers, PTA Official and MOE officials on the influence of Administrative Space Positioning on the academic performance of public secondary school students in Kaduna state. Item 61 shows the responses of respondents on whether the school principal office has been properly positioned and helps increase students' academic performance. From the responses of the respondents, the item statement was accepted by all the respondents with the mean score of 3.9, 3.6, 3.2 and 3.6 respectively. Item 62 shows the responses of respondents on whether the vice principal administration office is well positioned and thereby promotes students' academic performance. The mean scores of respondents show that all the respondents accepted the item statement with the mean scores of 3.6, 3.7, 3.7, and 4.1 for principals, teachers, PTA and MOE Officials respectively. Item 63 was to find out whether the office of the vice principal academics is properly positioned, thereby enhances students' academic performance.

The responses of the respondents show that all the respondents accepted the item statement i.e. Principal 3.3, Teachers 3.2, PTA 2.8 and MOE 3.5. Item 64 was on whether the heads of department offices are properly positioned, thereby increase students' academic performance. The mean scores of 4.0, 3.9, 3.9 and 3.6 were obtained from the responses of the respondents. Item 65 is on whether the guidance and counselor office in the school is properly positioned and this promotes students' academic performance. The item was accepted by all the respondents with the mean scores of 3.9, 3.4, 3.2 and 4.8 for principals, teachers, PTA and MOE respectively. However, item 66 was accepted by all the respondents with the mean scores of 4.5, 4.4, 3.9 and 4.4 for principals, teachers, PTA and MOE officials respectively. Item 67 was to find out whether the school staff room has been properly positioned thereby enhance students' academic performance. The mean score showed that the item was accepted by all the respondents; with the decision mean of 3.9, 3.0, 4.2, and 4.0 for principals, teachers, PTA and MOE accordingly.

Item 68 was on whether the security office has been properly positioned, thereby promotes students' academic performance. The item was rejected by all respondents with the mean scores of 2.8, 2.8, 1.7 and 2.9 accordingly. From item 69, the decision mean of the respondents were found to be 2.8, 2.1, 1.8 and 2.8, meaning it was rejected by all the respondents. Item 70 was on whether the administrative spaces of the school have been properly positioned thereby increase students' academic performance. The item was accepted with the mean score of 3.9, 3.6, 3.2 and 3.5 respectively.

By this analysis, it was revealed that Administrative Space Positioning influence the academic performance of public secondary school students in Kaduna State. It was also shown that administrative offices have not been properly positioned.

4.5 Hypotheses Testing

In this section, all results and outcome of the null hypotheses raised and tested in line with the objectives of this study were summarized and presented. Data obtained as responses from the respondents (Principals, Teachers, Parents Teacher Association (P.T.A) Officials and Ministry of Education Officials) from the questionnaire administered were tested. The test of hypotheses were tested using one way Analysis of variance (ANOVA). This was determined at 0.05 level of significant and statistical package for social sciences (SPSS) was used to analyze the data. In all, seven hypotheses were tested and acceptability or rejection of the Null Hypothesis was determined by comparing the p-value against the significant set by the study (F-value at 0.05). Hypothesis is therefore rejected if the p-value is less than the level of significance set by the study.

4.5.1 Hypothesis I

Hypothesis I(HO₁):There is no significant difference in the opinions of Principals, Teachers, PTA Officials and Ministry of Education Officials on the influence of security facilities on students' academic performance in public secondary schools in Kaduna State.

Table 4.9: Summary of the One Way Analysis of Variance (ANOVA) on the Influence of Security Facilities on Students' Academic Performance in Public Secondary Schools in Kaduna State.

Security	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	35.587	2	17.793	30.958	0.000
Within Groups	205.189	357	.575		
Total	240.776	359			

From table 4.9, the F-value is 30.958 and the P-value is 0.000 at 0.05 level of significance. Since the P-value is less than the level of significance set for the study, the hypothesis is therefore rejected, thus, there is significant difference in the opinions of Principals, Teachers, PTA Officials and Ministry of Education Officials on the influence of security facilities on students' academic performance in public secondary schools in Kaduna State.

4.5.2Hypothesis II

Hypothesis II (HO₂):There is no significant difference in the opinions of the respondents on the influence of school physical environment on students' academic performance in secondary schools in Kaduna State.

Table 4.10: Summary of the One Way Analysis of Variance (ANOVA) on the Influence of School Physical Environment on Students' Academic Performance in Secondary Schools in Kaduna State.

Physical	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	17.717	s2	8.858	9.574	0.000
Within Groups	330.333	357	.925		
Total	348.050	359			

From table 4.10, the F-value is 9.574 and the P-value is 0.000 at 0.05 level of significance. Since the P-value is less than the level of significance set for the study, the hypothesis is therefore rejected, thus, there is significant difference in the opinions of Principals, Teachers, PTA Officials and Ministry of Education Officials on the influence of school physical environment on students' academic performance in public secondary schools in Kaduna State.

4.5.3 Hypothesis III

Hypothesis III (HO₃): There is no significant difference in the opinions of the respondents on the influence of classroom positioning on students' academic performance in public secondary schools in Kaduna State.

Table 4.11: Summary of the One Way Analysis of Variance (ANOVA) on the Influence of Classroom Positioning on Students' Academic performance in Public Secondary Schools in Kaduna State

Classroom	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	29.257	2	14.629	14.366	0.000
Within Groups	363.539	357	1.018		
Total	392.797	359			

From table 4.11, the F-value is 14.366 and the P-value is 0.000 at 0.05 level of significance. Since the P-value is less than the level of significance set for the study, the hypothesis is therefore rejected, thus, there is significant difference in the opinions of Principals, Teachers, PTA Officials and Ministry of Education Officials on the influence of classroom positioning on students' academic performance in public secondary schools in Kaduna State.

4.5.4 Hypothesis IV

Hypothesis IV (HO₄): There is no significant difference in the opinions of the respondents on influence of recreational facilities positioning on students' academic performance in public secondary schools in Kaduna State.

Table 4.12: Summary of the One Way Analysis of Variance (ANOVA) on the Influence of Recreational Facilities Positioning on Students' Academic Performance in Public Secondary Schools in Kaduna State

Recreational	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20.875	2	10.437	10.992	0.000
Within Groups	338.984	357	.950		
Total	359.859	359			

From table 4.12, the F-value is 10.992 and the P-value is 0.000 at 0.05 level of significance. Since the P-value is less than the level of significance set for the study, the hypothesis is therefore rejected, thus, there is significant difference in the opinions of Principals, Teachers, PTA Officials and Ministry of Education Officials on the influence of recreational facilities positioning on students' academic performance in public secondary schools in Kaduna State.

4.5.5. Hypothesis V

Hypothesis V (HO₅): There is no significant difference in the opinions of the respondents on the influence of library facilities positioning in public secondary school students' academic performance in Kaduna State. Items covering this section were collected from items 41-50 in the questionnaire. Details are captured in table 4.13.

Table 4.13: Summary of the One Way Analysis of Variance (ANOVA) on the Influence of Library Facilities Positioning on Students' Academic Performance in Public Secondary Schools in Kaduna State.

Library facilities	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	30.445	2	15.223	15.726	0.317
Within Groups	345.566	357	.968		
Total	376.011	359			

From table 4.13, the F-value is 15.726 and the P-value is 0.317 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 significant difference in the opinions of Principals,

Teachers, PTA Officials and Ministry of Education Officials on the influence of library facilities positioning on students' academic performance in public secondary schools in Kaduna State.

4.5.6. Hypothesis VI

Hypothesis VI (HO₆): There is no significant difference in the opinions of the respondents on the influence of convenience space positioning on students' academic performance in public secondary schools in Kaduna State.

Table 4.14: Summary of the One Way Analysis of Variance (ANOVA) on the Influence of Convenience Space Positioning on Students' Academic Performance in Public Secondary Schools in Kaduna State.

Convenience	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	21.986	2	10.993	14.780	0.000
Within Groups	265.522	357	.744		
Total	287.508	359			

From table 4.14, the F-value is 14.780 and the P-value is 0.000 at 0.05 level of significance. Since the P-value is less than the level of significance set for the study, the hypothesis is therefore rejected, thus, there is significant difference in the opinions of Principals, Teachers, PTA Officials and Ministry of Education Officials on the influence of convenience space positioning on students' academic performance in public secondary schools in Kaduna State.

4.5.7 Hypothesis VII

Hypothesis VII (HO₇): There is no significant difference in the respondents' opinions of the influence of administrative space positioning on students' academic performance in public secondary schools in Kaduna State.

Table 4.15: Summary of the One Way Analysis of Variance (ANOVA) on the Influence of Administrative Space Positioning on Students' Academic Performance in Public Secondary Schools in Kaduna State.

Administrative	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	32.364	2	16.182	16.724	0.000
Within Groups	345.427	357	.968		
Total	377.792	359			

From table 4.15, the F-value is 16.724 and the P-value is 0.000 at 0.05 level of significance. Since the P-value is less than the level of significance set for the study, the hypothesis is therefore rejected, thus, there is significant difference in the opinions of Principals, Teachers, PTA Officials and Ministry Education Officials on the influence of administrative space positioning on students' academic performance in public secondary schools in Kaduna State.

4.6. Summary of Major Findings

The study revealed that.

1. security facilities influenced the academic performance of public secondary school students in Kaduna State. Although there was no surveillance cameras mounted in the schools. This was supported by the aggregate mean of 3.4 obtained from table 4.2.
2. school physical environment influenced the academic performance of public secondary school students in Kaduna State, even though trees were not planted in most of the schools. This was supported by the aggregate mean of 3.2 obtained from table 4.3.
3. classroom positioning influenced the academic performance of public secondary school students in Kaduna State, although the classrooms are not

always maintained. This was supported by the aggregate mean of 3.3 obtained from table 4.4.

4. recreational facilities positioning influenced the academic performance of public secondary school students in Kaduna State, even though games and sports do not enhance their academic performance. This was supported by the aggregate mean of 4.0 obtained from table 4.5.
5. library facilities positioning influenced the academic performance of public secondary school students in Kaduna State, however it was revealed that books and seats were not well positioned in the school libraries. This was supported by the aggregate mean of 3.3 obtained from table 4.6.
6. convenience space positioning influenced the academic performance of public secondary school students in Kaduna State. This was supported by the aggregate mean of 4.0 obtained from table 4.7.
7. administrative space positioning influenced the academic performance of public secondary school students in Kaduna State. It was also shown that administrative offices have not been properly positioned. This was supported by the aggregate mean of 3.4 obtained from table 4.8.

4.7. Discussions of Major Findings

Based on the results of the major findings presented so far, it could be seen that, from the principals' point of view, Teachers, PTA officials and MOE officials. on the influence of security facilities on the academic performance of public secondary school students in Kaduna State, it shows that security personnel are effective in their work in the schools, which increase students' academic performance. In addition, students academic performance is increased due to effective security personnel. The finding also revealed that security personnel at the gate increase students' academic performance. However, it was

further established that in the school there are no surveillance cameras which enhance students' academic performance; and there is no training and retraining of security personnel in the school. The P-value obtained was 0.000 at 0.05 levels of significance.

It was further shown that school physical environment influence the academic performance of public secondary school students in Kaduna State, even though trees were not planted in most of the schools. In addition, the school environment is always neat, thereby increase students' academic performance. The schools are beautified with flowers to enhance students' academic performance, the findings also shown that there is good road network in some of the schools and it enhances students' academic performance. Most of the schools have good water supply which help to promote clean environment, thereby increase students' academic performance. The P-value obtained was 0.000 at 0.05 levels of significance.

The findings also established that, classroom positioning influenced the academic performance of public secondary of secondary school students in Kaduna State. It also shows that there were spacious classroom with good ventilation, seats were well positioned. The finding also revealed that there are no adequate safety measures put in place in the school. However, the chalkboard properly positioned to aid teaching and learning. Thus, the hypothesis was rejected, meaning that, there was significant difference in the opinions of the respondent on the influence of classroom positioning on students' academic performance in public secondary schools in Kaduna state. The P-value obtained was 0.000 at 0.05 levels of significance.

The findings revealed that recreational facilities positioning influenced the academic performance of public secondary school students in Kaduna state. It shows that, there were no in-door games in the school. Which affects students' academic performance; the presence of school shops increases students' academic performance in the public school. It was revealed that students participate in sporting activities which help to improve their academic performance in the school. In addition, most schools have fields which aid proper control of

students sporting activities in the school. However, it was further established that schools with well-equipped common room aid students' social activities. Thus, the hypothesis was also rejected, implying that there was a significant difference in recreational facility positioning on students' academic performance in public secondary schools in Kaduna state. The P-value obtained was 0.000 at 0.05 levels of significance.

This finding established that library facilities positioning influenced the academic performance of public secondary school students in Kaduna state. It shows that school library were well positioned in the school which aids students' performance, the available computers in the library were well positioned to serve students' needs. In addition, the library bulletins were well positioned to provide information to the user. Most school does not have adequate reference materials. Thus, the hypothesis was retained meaning there was no significant difference in the opinions of the respondents on the influence of library facilities positioning on students' academic performance in public secondary schools in Kaduna state. The P-value obtained was 0.317 at 0.05 levels of significance.

The findings revealed that, conveniences space positioning influenced the academic performance of public secondary school students in Kaduna state. It shows that the space of convenience was well positioned in most schools, the school cafeteria were clean and well positioned to aid students' academic performance. In addition, it was revealed that most toilets were also properly positioned in most secondary schools. Thus, the hypothesis was rejected implying that there was significant difference in the opinions of respondents on the influence of convenience space positioning on students' academic performance in public secondary schools in Kaduna state. The P-value obtained was 0.000 at 0.05 levels of significance.

The findings revealed that administrative space positioning influenced the academic performance of public secondary school students in Kaduna state. The finding showed that school principals offices were strategically positioned in most schools, the vice principals

offices were positioned to compliment the efforts of the principals in most schools. In addition, the offices of guidance and counseling were properly positioned to provide service to students in order to improve their academic performance. Thus, the hypothesis was rejected meaning that there was significant difference in the opinions of respondents on the influence of administrative space positioning on students' academic performance in public secondary schools in Kaduna state. The P-value obtained was 0.000 at 0.05 levels of significance.

4.8 Summary of Hypotheses Testing

The summary of the seven Null Hypotheses tested for this study is hereby presented in table 4.16.

Table 4.16: Summary of Tested Null Hypotheses

S/N	H0 Statement	Statistical Tool Used	Result	Level of Sig.	Decision
1	There is no significant difference in the opinions of Principals, Teachers, PTA Officials and Ministry of Education Officials on the influence of security facilities on students' academic performance in public secondary schools in Kaduna State.	Analysis of variance (ANOVA)	F-ratio is 30.958, While the p-value is 0.000	0.05	H0 ₁ was rejected. this mean that there is significant difference in the opinions of respondents
2	There is no significant difference in the opinions of the respondents on the influence of school physical environment on students' academic performance in public secondary schools in Kaduna State,	Analysis of variance (ANOVA)	F-ratio is 9.574, While the p-value is 0.000	0.05	H0 ₂ was rejected. this mean that there is significant difference in the opinions of respondents
3	There is no significant difference in the opinions of the respondents on the influence of classroom positioning on students' academic performance of public secondary schools in Kaduna State.	Analysis of variance (ANOVA)	F-ratio is 14.366, While the p-value is 0.000	0.05	H0 ₃ was rejected. this mean that there is significant difference in the opinions of respondents
4	There is no significant difference in the opinions of the respondents on influence of recreational facilities positioning on students' academic performance in public secondary schools in Kaduna State.	Analysis of variance (ANOVA)	F-ratio is 10.991 While the p-value is 0.000	0.05	H0 ₄ was rejected. this mean that there is significant difference in the opinions of respondents
5	There is no significant difference in the opinions of the respondents on the influence of library facilities positioning on public secondary school students' academic performance in Kaduna State.	Analysis of variance (ANOVA)	F-ratio is 15.276, While the p-value is 0.317	0.05	H0 ₅ was retained this mean that there is no significant difference in the opinions of respondents
6	There is no significant difference in the opinions of the respondents on the influence of convenience space positioning on students' academic performance in public secondary schools in Kaduna State	Analysis of variance (ANOVA)	F-ratio is 14.780, While the p-value is 0.000	0.05	H0 ₆ was rejected. this mean that there is significant difference in the opinions of respondents
7	There is no significant difference in the respondents' opinions of the influence of administrative space positioning on students' academic performance in public secondary schools in Kaduna State.	Analysis of variance (ANOVA)	F-ratio is 16.724 While the p-value is 0.000	0.05	H0 ₇ was rejected. this mean that there is significant difference in the opinions of respondents

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This study has focused on examining the Influence of School Plant on Students' Academic Performance in Public Secondary Schools in Kaduna State, Nigeria. This chapter will be discussed under the summary of the study, conclusions, recommendations and suggestions for further studies.

5.2 Summary

The study examines the Influence of School Plant Planning on Students' Academic Performance in Kaduna State, Nigeria. In regard to this, the study stressed background to the study, statement of the problem, objectives of the study, research questions and hypotheses, basic assumptions, significance of the study and scope of the study. The study reviewed several related literature in line with the formulated objectives, the study sourced literature from books, magazines, journals, internets etc. the conceptual framework consists the meaning of influence, school plant, planning, performance etc.

The study also reviewed the literature in line with the formulated objectives of the study thus: Influence of Security Facilities on Students' Academic Performance in Public Secondary Schools in Kaduna State; Influence of School Physical Environment on Students' Academic Performance in Public Secondary Schools in Kaduna State; Influence of Classroom Positioning on Students' Academic Performance in Public Secondary Schools in Kaduna State; Influence of Recreational Facilities Positioning on Students' Academic Performance in Public Secondary Schools in Kaduna State; Influence of Library Facilities Positioning on Students' Academic Performance in Public Secondary Schools in Kaduna State; Influence of Convenience Space

Positioning on Students' Academic Performance in Public Secondary Schools in Kaduna State and Influence of Administrative Space Positioning on Students' Academic Performance in Public Secondary Schools in Kaduna State.

The research methodology in the study presented research design, population of the study, sample and sampling techniques, instrumentation, validity of the adopted instrument, pilot study, reliability of the instrumentation, method of data collection and analysis of the collected data from the respondents. The study also presented, analyzed and discussed the data collected from the respondents based on the topic under study using frequency tables and simple percentages in order to measure the significant difference or relationship among the variables of the study.

Analysis of Variance Statistical Technique was used in testing the hypotheses of the study; where six were rejected and one retained. Structured questionnaire was administered on four group of respondents thus: Principals, Teachers, PTA Officials and MOE Officials from the sampled area of the study. The data collected was statistically analyzed and the findings showed that Students' Academic Performance in Public Secondary Schools in Kaduna State can be influenced through adequate provision of Security Facilities, Conducive School Physical Environment, proper Classroom Positioning, Recreational Facilities Positioning, Library Facilities Positioning, Convenience Space Positioning and Administrative Space Positioning.

5.3 Conclusions

The study worked on the Influence of School Plant Planning on Students' Academic Performance in Public Secondary Schools in Kaduna State, Nigeria. The following conclusions were drawn from the findings of the study:

The study concluded that adequate provision of Security Facilities as; security office, metal detectors, locking system, school fence etc. Influence

Students' Academic Performance in Public Secondary Schools in Kaduna State, Nigeria.

Based on the findings, it was also concluded that conducive School Physical Environment with ventilation, road network, friendly environment and landscaping etc. Influence Students' Academic Performance in Public Secondary Schools in Kaduna State.

In line with the respondents' opinions, the researcher made conclusion that proper Classroom Positioning with chalkboards, seats, bulbs and lighting etc. Influence Students' Academic performance in Public Secondary Schools in Kaduna State.

In the same vine, the researcher concluded that proper Recreational Facilities Positioning with common rooms, school clubs and societies, recreative arts, school field etc. Influence Students' Academic Performance in Public Secondary Schools in Kaduna State.

In the findings, the researcher also concluded that proper Library Facilities Positioning with well-equipped reading materials, book shelves, photocopying machines etc. Influence Students' Academic Performance in Public Secondary Schools in Kaduna State.

The work also concluded that proper Convenience Space Positioning with toilets, water supply in the spaces, safe and exit doors in the spaces etc. Influence Students' Academic Performance in Public Secondary Schools in Kaduna State.

Finally, based on the findings a conclusion was made that proper Administrative Space Positioning with principal's office, vice principals, staff rooms, health clinic etc. Influence Students' Academic Performance in Public Secondary Schools in Kaduna State.

5.4 Recommendations

In line with the research findings and conclusions; the following recommendations were made as:

1. The study recommended that Kaduna State Government in conjunction with State Ministry of Education should make adequate provision of security facilities in schools such as cameras, security personals, fence etc to achieve maximum educational outcomes in the state.
2. More so, a recommendation was made by the researcher that Kaduna State Ministry of Education should provide a conducive school environment for effective teaching and learning activities in schools in the state.
3. In the same vine, the researcher also recommended that Kaduna State Ministry of Education should supervise the positioning of classrooms for effective classrooms learning activities in schools in the state.
4. The researcher also recommended that Kaduna State Ministry of Education should equip schools with recreational facilities which will motivate students' interest in learning and harmonize the process of teaching and learning in schools in the state.
5. More so, the researcher recommended that Kaduna State Government should provide adequate library facilities in schools to facilitate teaching and learning in the state.
6. The study also recommended that the Kaduna State Ministry of Education should give advice and supervise the positioning of convenience spaces in schools so as to confirm with school plant planning norms which will in turn promote learning activities in schools in the state.
7. Finally, the study recommended that Kaduna State Ministry of Education should plan and provide offices for school managers in schools for them to be

effective in their duties which will in turn facilitate teaching and learning in schools in the state.

5.5 Contribution to Knowledge

1. This research work is considered useful to knowledge because security personnel are effective in their duties in the schools. This will thereby enhance academic performance of students and give them courage to stay in classes and the school environment to learn without fear of attacks.
2. The study is useful to knowledge as the finding show that there are good road network and water supply within most of the schools in the state, which promote clean environment and enhances students academic performance. By this the students have started learning cleanness right from school and it will became part and parcel of their lives.
3. The work also contribute to knowledge with the finding that school principal offices, vice principal offices are strategically positioned with the vice principal complimenting the efforts of the school principal in schools and this enhances students academic performance. This will help the ministry of education in conjunction with the state government to provide more befitting and well positioned administrative spaces in schools for better students academic performance in the state.

5.6 Suggestions for Further Studies

In view of the findings and conclusions of the study, the following suggestions for further research are thus:

1. There is need to carry out a research on the influence of school plant maintenance on academic performance of secondary school students in Kaduna State, Nigeria.

2. Another research was suggested to be carryout on the influence of school type and location on students' academic performance in secondary schools in Kaduna State, Nigeria.

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APPENDIX “A”

A QUESTIONNAIRE ON THE INFLUENCE OF SCHOOL PLANT ON STUDENTS' ACADEMIC PERFORMANCE IN SECONDARY SCHOOLS IN KADUNA STATE, NIGERIA.

Department of Educational
Foundations and Curriculum
Faculty of Education
Ahmadu Bello University
Zaria.
20th November, 2017.

Dear Respondent,

REQUEST TO PROVIDE RELEVANT DATA FOR A STUDY.

The questionnaire is designed to investigate the influence of school plant on students' academic performance in secondary schools in Kaduna State, Nigeria. Your contributions in bringing out honest opinion as a Principal, Teacher, P. T.A. Official and Ministry of Education Official will help the validity and reliability of this study.

The responses will also aid in developing students' academic performance within the secondary schools in Kaduna State, the country at large and will also help me to the fulfillment of the criteria for the award of the Masters Degree in Educational Administration and Planning.

All your information given will be treated with confidentiality.

Yours sincerely,

Uzembe Godwin Iwho.

SECTION A: BIO DATA

Tick as appropriate please (✓)

1. Status:

(a) Principal [], (b) Teacher [], (c) P. T. A. Official [], (d) M.O.E Official []

2. Gender:

(a) Male [] (b) Female []

3. Qualification:

(a) Diploma [], (b) NCE [], (c) B.ED [], (d) M.ED []

(e) Others []

4. Type of School:

(a) JSS [] (b) SSS []

5. Location of School:

(a) Rural [] (b) Urban []

6. Age – Range:

(a) 21 – 25 [] (b) 26 – 30 [] (c) 31 – 40 []

(d) 41 – 50 [] (e) 51 – 60 []

7. Year of Working Experience:

(a) 1 – 5 [] (b) 6 – 10 [] (c) 11 – 15 []

(d) 16 – 20 [] (e) 21 – 25 [] (f) 26 – 30 []

(g) 31 – 35 []

SECTIONB: Influence of Security Facilities in Students' Academic Performance in Secondary Schools in Kaduna State.

S/n	Item Statement	Strongly Agree	Agree	Undecided	Strongly Disagree	Disagree
1.	Security personnel are effective in their work in this school, this increase students' academic performance.					
2.	As you enter this school there are security personnel at the gate and it promote students' academic performance.					
3.	This school is fully fenced and enhances students' academic performance.					
4.	There are exist doors in this school in case of emergency, this increase students' academic performance.					
5.	There are adequate bulbs and lighting in classrooms and school environment of the school, thereby increase students' academic performance.					
6.	Availability of security office complement safety matters in this school and promote students' academic performance.					
7.	They are locking system for doors and windows in this school, this increase students' academic performance.					
8.	In this school there are surveillance cameras which enhance students' academic performance.					
9.	There is training and retraining of security personnel in this school, thereby increase students' academic performance.					
10.	Stakeholders cooperative attitudes on security matter in this school promote students' academic performance.					

SECTION C: Influence of School Physical Environment on Students Academic Performance in Secondary Schools in Kaduna State.

S/n	Item Statement	Strongly Agree	Agree	Undecided	Strongly Disagree	Disagree
1.	The school environment is always neat, thereby increase students' academic performance.					
2.	This school is beautified with flowers which enhance students' academic performance.					
3.	There is good road network in this school and it enhances students' academic performance.					
4.	This school has good water supply and it promote clean environment, thereby increase students' academic performance.					
5.	There are playground facilities in this school which promotes students' academic performance.					
6.	This school is painted regularly and the walls are kept neat always, thereby increase students' academic performance.					
7.	The surroundings of this school are well landscaped, this increase students' academic performance.					
8.	This school has friendly environment and makes students like coming to school, thereby promote students' academic performance.					
9.	Trees are planted in this school and make the environment cool, thereby increase students' academic performance.					
10.	National symbols are erected in this school which increase students' academic performance.					

**SECTION D: Influence of Classroom Positioning on Students' Academic Performance
in Secondary Schools in Kaduna State.**

S/n	Item Statement	Strongly Agree	Agree	Undecided	Strongly Disagree	Disagree
1.	There are spacious positioned classrooms with ventilation in this school and it promote students' academic performance.					
2.	There is conducive positioned classroom's atmosphere with fresh air whenever it is hot, thereby increase students' academic performance.					
3.	In this school the chalkboards are positioned in front where everybody can see what is written on it, thereby increase students' academic performance.					
4.	There are functional fans positioned in classrooms of this school, thereby increase students' academic performance.					
5.	Seats are well positioned in classrooms of this school, thereby promoted students' academic performance.					
6.	This school has safety muster points positioned in the classrooms, thereby increase students' academic performance.					
7.	There are adequate bulbs and lighting well positioned in each classroom in this school, which promote students' academic performance.					
8.	The classrooms of this school are always maintained which keep them alive, thereby increase students' academic performance.					
9.	The students like coming to school because the classrooms are always attractive and enhance students' academic performance.					
10.	The classrooms are well positioned in this school, thereby promote students' academic performance.					

**SECTION E: Influence of Recreational Facilities on Students' Academic Performance
in Secondary Schools in Kaduna State.**

S/n	Item Statement	Strongly Agree	Agree	Undecided	Strongly Disagree	Disagree
1.	There are in-door games in this school and it increase students' academic performance.					
2.	There are school shops in this school, this increase students' academic performance.					
3.	Students participate in sporting activities in this school, thereby it enhance students' academic performance.					
4.	This school has school field and it help in controlling students' activities, thereby enhance students' academic performance.					
5.	This school has well equipped common rooms for students' social activities, thereby increase students' academic performance.					
6.	This school sports and games enhance students' academic performance.					
7.	The clubs function effectively and thereby enhance students' academic performance.					
8.	Inter-school competitions in this school build confidence in students, thereby increase students' academic performance.					
9.	Students' participation in recreative arts in this school promote students' academic performance.					
10.	There is music room in this school, thereby increase students' academic performance.					

SECTION F: Influence of Library Facilities Positioning on Students' Academic Performance in Secondary Schools in Kaduna State.

S/n	Item Statement	Strongly Agree	Agree	Undecided	Strongly Disagree	Disagree
1.	This school library is properly positioned and well equipped, thereby increase students' academic performance.					
2.	The computers in this library are well positioned and provide unique and authentic data, thereby increase students' academic performance.					
3.	The school library bulletin are well positioned with information for users, thereby increase students' academic performance.					
4.	The school library positioned instructional materials for teachers' use, thereby increase students' academic performance.					
5.	The school library cupboards are well positioned and thereby increase students' academic performance.					
6.	The school library has adequate reference materials and are well positioned, thereby promote students' academic performance.					
7.	There are well positioned seats in the schoollibrary, thereby increase students' academic performance.					
8.	The library books are well positioned, thereby promote students' academic performance.					
9.	The library photocopying machines are well positioned,thereby increase students' academic performance.					
10.	The books shelves in the school library are well positioned, thereby enhance students' academic performance.					

SECTION G: Influence of Convenience Space Positioning on Students' Academic Performance in Secondary Schools in Kaduna.

S/n	Item Statement	Strongly Agree	Agree	Undecided	Strongly Disagree	Disagree
1.	In this school there is enough space positioned for individual student in the toilet, thereby increase students' academic performance.					
2.	The school cafeteria has been properly positioned and helps increase students' academic performance.					
3.	The school toilet are properly positioned and always clean, thereby increase students' academic performance.					
4.	This school has properly positioned safe and exit doors in the convenience spaces which help increase students' academic performance.					
5.	There is always water supply in school positioned convenience spaces, thereby promote students' academic performance.					
6.	The school convenience spaces are properly positioned and always neat, thereby enhance students' academic performance.					
7.	Conducive convenience spaces positioning in school promote students' academic performance.					
8.	The school dormitories have been properly positioned and help increase students' academic performance.					
9.	The school kitchen has been properly positioned, thereby promote students' academic performance.					
10.	The school shed has been properly positioned, thereby enhances students' academic performance.					

SECTION H: Influence of Administrative Space Positioning on Students' Academic performance in Secondary Schools in Kaduna State.

S/n	Item Statement	Strongly Agree	Agree	Undecided	Strongly Disagree	Disagree
1.	The school principal office has been properly positioned and helps increase students' academic performance.					
2.	The vice principal administration office is well positioned and thereby promotes students' academic performance					
3.	The office of the vice principal academics is properly positioned, thereby enhances students' academic performance.					
4.	The heads of department offices are properly positioned, thereby increase students' academic performance					
5.	The guidance and counselor office in the school is properly positioned and this promotes students' academic performance.					
6.	The school health clinic has been properly positioned, thereby increase students' academic performance.					
7.	This school staff room has been properly positioned, thereby enhance students' academic performance.					
8.	The security office has been properly positioned, thereby promotes students' academic performance.					
9.	The school non-teaching staff office has been properly positioned and it enhances students' academic performance.					
10.	Administrative spaces of the school have been properly positioned, thereby increase students' academic performance.					

APPENDIX “B”

RESEARCH ASSISTANT TRAINING MANUAL

Influence of School Plant on Students’ Academic Performance in Secondary Schools in Kaduna State, Nigeria.

Uzembe Godwin Iwho (M.ED/P15EDFC8020) Department of Educational Foundations and Curriculum, Faculty of Education, Ahmadu Bello University, Zaria.

The Senatorial Zones and Educational Zones to Administer the questionnaire are:

1. Zaria (Zone 1)
2. Kaduna (Zone 2)
3. Sabon Tasha (Zone 2)
4. Kafanchan (Zone 3)

Places and people to visit while carrying out the assignment.

1. Educational Zonal Offices (to get acceptance letter to cover the zone and schools within it and copies of questionnaire to be fill for you).
2. Give the officers in the zonal office copies to fill for you.
3. When you are in any secondary school please first of all met the school principal and introduce yourself and the letter from the education zonal office of the area to him or her.
4. After that you give the principal a copy of the questionnaire teachers and PTA officials to fill them for you.
5. Always appreciate them for every work done for you.
6. Collect back all the filled questionnaire as for us to work on the chapter four effectively.
7. Please do well to explain anything that the respondents do not understand in the questionnaire.
8. Make the respondents be aware that all the information given by them will be confidential and only for the purpose of the study.
9. Call me anytime you need more information on anything concerning the study.
10. Give the research assistant opportunity to ask question on training.

Thanks.

Uzembe Godwin Iwho

APPENDIX C



DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND CURRICULUM Faculty of Education AHMADU BELLO UNIVERSITY, ZARIA

Head of Department: Dr. Nissa Idris Harbau, GSE (GCE), NCE, B.A. (Ed), M.Ed. Admin and Planning (BUSA), PhD Admin and Planning (ABU)

Our Ref: DEFC/S.25

Date: 29TH JUNE, 2018.

ZONAL EDUCATION
OFFICE KAFANCHAN,
KADUNA STATE.

Dear Sir,

LETTER OF INTRODUCTION

The bearer, LIZEMBE GOWIN TOSH, with Registration Number M-ED/PISE/DEFC/8020, is a student in this department. He /She is carrying out research, being part of requirement for graduation, in MASTERS DEGREE IN EDUCATION ADMINISTRATION AND PLANNING. He/She needs certain information in your organization. Kindly, allow him/her have access to information in your organization. The information obtained will be used for research purpose only. The topic of his/her research is

INFLUENCE OF SCHOOL PLANT ON STUDENTS'
ACADEMIC PERFORMANCE IN SECONDARY
SCHOOLS IN KADUNA STATE, NIGERIA.

Thanks in anticipation of your kind response.

Yours sincerely,

Dr. M.I. Harbau
Head of Department

Head of Department
Dept. of Educational Foundations &
Curriculum
A. B. U. Zaria

Principal
Above for your
awareness and compliance
2018-06-29
2018-06-29

Zonal Deputy Director
MINISTRY OF EDUCATION
KADUNA STATE
KAFANCHAN

Appendix D

KADUNA STATE
MINISTRY OF EDUCATION
SABON-TASHA ZONE

All Correspondence
to be addressed to
the Zonal Director



ADDRESS:
Zonal Office
Sabon-Tasha
PMB 6003
Kaduna-South

Your Ref:

Our Ref:

MOE/STZ/G.187/VOL.1.

Date: 28/6/2018

The PRINCIPAL
O A C KATCHU
KADUNA.

PERMISSION TO CONDUCT RESEARCH
UZE M.B.E. GODWIN INHO

Reference to the above subject matter, I am directed to introduce the above named student from: AHMADU BELLO UNIVERSITY ZARIA

to conduct research on: INFLUENCE OF SCHOOL PLANT ON
STUDENTS ACADEMIC PERF IN SECON. SCHOOLS
in your school for the award of: M.D/GAP

2. You may wish to offer him/her your maximum cooperation, please.
3. Thank you.

Zonal Director
SABON TASHA ZONE
KADUNA

[Signature]
28/6/18

APPENDIX E



**MINISTRY OF EDUCATION, SCIENCE & TECHNOLOGY
KADUNA STATE OF NIGERIA
ZONAL EDUCATION OFFICE KADUNA**

E-mail: zoneduckad@yahoo.com

DOKA Crescent,
PMB 2169,
Kaduna.

Our Ref: KDZ/GEN/1165/VOL.I Your Ref: Date:

The Principal,

PERMISSION TO CONDUCT RESEARCH IN YOUR SCHOOL

I wish to refer to the above subject matter and the letter No. NCE/STAT.3VOL.II dated 26th June 2008 in the above subject matter.

I am directed to write and request you to permit the bearer of this letter to conduct a research in your school.

Your co-operation and support to the student research will be highly appreciated, please.

.....
Martha James

CPO

For: Director Kaduna Zonal Office.