ANALYSIS OF STUDENTS' PERFORMANCE IN WEST AFRICAN SENIOR CERTIFICATE EXAMINATIONS IN BOARDING AND DAY SECONDARY SCHOOLS IN KANO METROPOLIS, NIGERIA (2005-2011)

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M.ED/EDUC/1061/2009-10

APRIL, 2014.

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A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA.

IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF A MASTER DEGREE IN EDUCATION (ADMINISTRATION AND PLANNING) DEPARTMENT OF EDUCATIONAL FOUNDATION AND CURRICULUM, FACULTY OF EDUCATION, AHMADU BELLO UNIVERSITY, ZARIA, NIGERIA.

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Dr. B. A. Maina

APRIL, 2014.

DECLARATION

I hereby declare that this research entitled 'Analysis of Students' Performance in West African Senior Certificate Examinations in Boarding and Day Secondary Schools in Kano Metropolis, Nigeria (2005-2011)', has been carried out by me in the Department of Educational Foundation and Curriculum, Faculty of Education, Ahmadu Bello University, Zaria. The research was exclusively based on the report of the Analysis of Students' Performance in West African Senior Certificate Examinations in Boarding and Day Secondary Schools of Kano Metropolis, Nigeria (2005-2011)' conducted by me. All sources of information derived from the boarding and day schools' inventory titled Secondary Schools Performance Inventory (SSAPI) have been duly acknowledged in the text and a list of references provided. No part of this work was previously presented for another degree at any university.

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Ogunbanwo, Roseline. Abiola (Rev. Sr.) Date

CERTIFICATION

This research work titled: 'Analysis of Students' Performance in West African Senior Certificate Examinations in Boarding and Day Secondary Schools in Kano Metropolis, Nigeria(2005-2011) by Ogunbanwo, Roseline Abiola (Rev. Sr.) meets the regulation governing the award of the degree of Masters of in Educational Administration and Planning in Ahmadu Bello University, Zaria, and it is approved for its contribution of knowledge and literary presentation.

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Dean, School of Post- Graduate Studies
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DEDICATION

This work is dedicated to my Sweet Mother and Religious family, the Sisters of St. Louis, Nigeria Province, home and abroad for their financial, moral and parental support.

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To my Potter, Supreme and Almighty God, be adoration, praise and abundant glory! In His abundant grace and endowment, He led me through the huddles of shuttling between Zaria and Kano during the period of my course work without hitch. I can never thank God enough.

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Finally, to my community members, both old and new, for their immeasurable patience, encouragements, care and sacrifices. May God grant your hearts' desires.

ABSTRACT

This study examined 'Students' Performance in West African Senior Certificate Examinations in Boarding and Day Secondary Schools of Kano Metropolis, of Kano State Nigeria (2005-2011).It comparatively ascertains the relationship in the performance of Boarding and Day Senior Secondary Schools in Kano Metropolis. As a descriptive research, the study population comprised of all the twelve (12) Boarding Senior Secondary Schools and twenty-six (26) day Senior Secondary Schools in Kano Metropolis, Kano State. The researcher however used WAEC grading of candidates, who scored A1-C6 permissible credit passes, in senior secondary boarding and day schools which have presented candidates for WAEC in the last ten years. The method of sample selection adopted was by random sampling technique from the twenty six day schools. The instrument used to collect data for the study was an inventory titled Secondary Schools Academic Performance Inventory (SSAPI). The data collected were analysed using simple percentages with frequency distribution tables showing the extent of degree to measure students' performance and mean score to estimate the relationships between the variables of the study. It was found that the performance of students in the Day Senior Secondary Schools in West African Senior Secondary Certificate Examinations (WASSCE) with particular reference to English, Mathematics, Sciences, and Home Economics for the years 2005 to 2011 in Kano Metropolis of Kano State was low. There was no year where the performance level of Day Senior Secondary Schools in Kano Metropolis reached 50% in any subject from 2005-2011. The study revealed that there was a significant difference between a student being a boarder and a day student. The low level performance could be attributed to congestion of students in classes, inadequate inspection by the State Ministry of Education, inadequacy of facilities and automatic promotion. The implication of running day system of education in Kano Metropolis therefore is that many students might not be qualified for admission into higher institutions in the country. In the same vein, the implication of running boarding system of education in Kano Metropolis therefore is creating a healthy teaching/learning climate that is conducive to higher students test scores, the procurement and disbursement of instructional materials, provision of adequate and modern equipment and library facilities coupled with enough co-curricular activities. It was recommended that the State Ministry of Education should provide more infrastructural facilities to decongest large classrooms, provide more regular inspection to Schools, and reverse the system of automatic promotion in all state schools in Kano with the view to maintaining quality. Parents are urged to be part and parcel of the school system by lending a helping hand to government.

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ABBREVIATIONS

WASSCE	-	West African Senior School Certificate Examination
WAEC	-	West African Examination Council
SSCE	-	Senior School Certificate Examination
NECO	-	National Examination Council
NPE	-	National Policy on Education
%	-	Percentage
SSAPI		Secondary Schools Academic Performance Inventory
A-L	-	Alphabet representing names of Schools under Study
Science Subjects		Biology, Chemistry and Physics
FRN	-	Federal Republic of Nigeria
MOE	-	Ministry of Education
A1	-	Distinction in Academic Performance
B2	-	Distinction in Academic Performance
B3	-	Distinction in Academic Performance
C4-C6	-	Credit in Academic Performance
D7-E8	-	Ordinary Pass Grade
F9	-	Failure Grade
JAMB	-	Joint Admission Matriculation Board
NTC	-	National Technical Certificate
NBC	-	National Business Certificate
PTA	-	Parents Teachers' Association

OPERATIONAL DEFINITION OF TERMS

The following terms are defined as used by the researcher in this work.

Performance: refers to accomplishment/ achievement and how well students deal with their studies and how they cope with or accomplish different tasks and studies given to them by their teachers.

Boarding School: is a school where some or all students study and live within the premises of the school with their fellow students and possibly teachers and/or administrators during the academic term/year.

Day School: is a school whereby all the students live and study as day students, who reside with their parents or guardians during the academic term/year.

Impact: to have a strong impression or effect on something.

School facilities: Human and physical resources within a school system.

Secondary school: this is the level of school where children go after their primary education and where they spend six years to obtain two different certificates- Junior Secondary Certificate (JSC) after the completion of the first three years and the Senior School Certificate (SSC) after the completion of the second three years.

Management: is the total utilization of men and materials in a co-operative effort to achieve the pre-set objectives of an organization efficiently and effectively through the activities of planning, organizing, commanding, co-ordinating, controlling and evaluating.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Education is the total process of human learning by which knowledge is imparted, faculties trained and skills developed. Secondary schools not only occupy a strategic place in the educational system in Nigeria, it is also the link between the primary and the university levels of education. According to Asikhai (2010), education at secondary school level is supposed to be the bedrock and the foundation towards higher knowledge in tertiary institutions. It is an investment as well as an instrument that can be used to achieve a more rapid economic, social, political, technological, scientific and cultural development in a country. It is rather unfortunate that the secondary schools today are not measuring up to the standards expected of them. There have been public outcries over the persistently poor performance of secondary school students in public examinations.

According to Nwokocha and Amadike (2005), academic performance of students is the yardstick for testing the educational quality of a nation. Hence, it is expedient to maintain a high performance in internal and mostly external examinations. For some years now, reports on the pages of newspapers and research findings have shown the abysmal performance of students of secondary schools in public examinations. Ajayi (2002), Nwokocha and Amadike (2005), WAEC (2007), The Punch newspaper (September 27, 2008), Adeyemi (2008) and Asikhia (2010) have all shown the extent of poor performance of students in public examinations. The persistent

decline in students' performance in public examinations is not only frustrating to the students and the parents, its effects are equally grievous on the society.

One of the most potent barometers so far, if not the strongest, of measuring school performance of students is through public examinations such as Senior School Certificate Examination (S.S.C.E.) in Nigeria. These examinations are externally moderated and enjoy a lot of public confidence. The form of education children receive after primary and before tertiary stage is called secondary education. Without secondary school products, it is obvious that the basis for any future academic study cannot be laid. From the aims and objectives of the setting up of schools, one would expect that day and boarding senior secondary school students' performance in Kano State would greatly improve. Admittedly, no educational system is problem free. However, the decay in Nigerian educational system is becoming embarrassing. Ogunsaju (1990) described it as calamitous. Though, brilliant students can be found even in public schools, the high percentage of failure in WASSCE tends to rubbish the good ones among them.

Initially, Mathematics and English Language were recording poor results, but later this extended to other subjects including the Sciences and Arts. The schools can no longer justify the faith the government and the public have in them or the huge budgetary allocations they consume yearly. Nevertheless, students have not been doing well, and the situation is not improving. For example, in the S.S.C.E of May/June 1992, English Language recorded only 13.8% passes with Distinction and Credit grades, while 59.6% of the total 381,506 candidates failed. For Mathematics, only 9.7% passed in Distinction and Credit grades while 59.4% failed (WAEC, 1994). In the

examinations taken in June 1994 by 618,119 students, 14.2% and 13.7% passed with Distinction and Credit levels in English and Mathematics respectively. The failure rates for the two subjects were 56.3% for English and 67.4% for Mathematics (WAEC, 1994). Results in other core-subjects were equally poor with students doing much worse in subjects with practical work. In WASSCE of December 1996, for example, failure rates were 64.6% for English and Biology 58%.

Therefore, if education is going to continue to hold on to its old image as an instrument par excellence for achieving national development, it has to be salvaged or resuscitated. The popular practices of changing the curriculum or adding more subjects, changing the duration of schooling or voting more money are not yielding the expected results. A lot more has to be done. Nigerians are quick at pointing accusing fingers at poor teaching facilities, inadequate and poorly trained teachers, parental laxity, under funding and so on. While all these are possibilities, there is an urgent need now to reappraise the schools vis-à-vis all these factors since situations are not static. For instance, the government continues to vote more money into the education sector annually without corresponding improvement in the schools.

This research will be carried out in Kano Metropolis which consists of seven Local Government Areas of predominantly Muslim Hausa and Fulani tribes which are Dala, Gwale, Nassarawa, Fagge, Tarauni, Komboso and Kano Municipal. The area is urban, open to lots of vices and it attracts strangers from all over the world, who settle and trade for a living due to the abundance of mass land. Consequently, the area is always congested, especially in the morning and evening hours, when workers and students resume and retire

home respectively. This congestion causes lateness for students who rush to school. The day students are involved in some vices ranging from social and moral decadence. They participate in parents' occupation, which constitutes distraction from their studies. The entire area suffers from insecurity and inadequate infrastructural facilities that could enhance reading and learning in schools such as functional and well-equipped library, science, vocational and language laboratories, mathematical tools and instructional facilities.

One of government's ways of providing for "a land of bright and full opportunities for all citizens" as stated in the FRN (2004) National Policy on Education is the introduction of partial de- boarding in some boarding secondary schools and the establishment of all-day secondary schools in others. The National Policy on Education, as well as, Nigeria constitution (1999) guaranteed equal rights to every Nigerian child to be educated. However, it is argued that government cannot cater for all the educational needs of its populace and simultaneously maintain an expensive and selective boarding system. In an era of economic recession and increasing demand for competing social services, government had to explore ways of providing education to most of its citizens, while at the same time, reduce the cost of financing education to a manageable level. As a result, Kano State government adopted the schooling systems in conjunction with the education policy of the Nigerian government and has designed two secondary schooling systems: Boarding school and Day school.

Although, boarding is expensive to maintain financially, on the side of the government, it reduces the fear of corruption and other vices. The day school was adopted, however because of the high number of students' population in schools. This is to ensure accessibility

of the young persons to secondary education.A boarding education is geared towards good academic performance combined with personal development to produce a well-rounded individual with the qualifications and skills sought by universities and employers alike. One major argument against the day system in Kano Metropolis is that the academic performance is likely to suffer with the introduction of day schools. Some of the reasons advanced by the opponents of day school system include:

(i) That the day students are exposed to different studying environment, the environment being less favourable than for the boarded students.

(ii) Lack of efficient transport system and traffic congestion may be adduced to lateness since most schools are not within walking distance to students' homes.

(iii) Inadequacy of teachers required to cope with increasing number of students, leading to increased student-teacher ratio. This will accelerate the already falling standards of education.

(iv) Lack of supervision by busy parents may give room for laxity of their wards.

It is important to note, however, that in spite of all the fears expressed for or against the de-boarding exercise, there has been little empirical data to justify them. This research is thus intended to analyse students' academic performances of Day and Boarding Senior Secondary Schools in WAEC examinations in Kano Metropolis. It is hoped that the data collected in this research work will throw some light on some of the doubts earlier raised.

1.2 Statement of Problem

The phenomenon of poor external results among Nigerian students, especially those in senior secondary schools is a matter that has become a source of worry to successive governments and major stakeholders in the education sector in the country. Over the years, the majority of students that sat for the May/ June West African Examinations Council (WAEC) and November/ December National Examination Council (NECO) have been recording mass failure, not only in the area of overall performance of the students, but also in the core subjects like English, Mathematics, Sciences (Biology, Physics, Chemistry),Geography, Vocational and Technical Studies and History where the high spate of failures have been a dominant feature of the students' performance both in the boarding and day secondary schools in Kano Metropolis. Characteristically, statistics reeled out by the two examination bodies, the National Examination Council and the West African Examination Council, which is the particular focus of this study, each time the results of West African Examination Council (WAEC) and National Examination Council (NECO) examinations are released, they point to the fact that students drawn from both day and boarding schools have not been performing up to the required standards despite the high investment which the government, both at the federal and state levels, as well as the parents have been making in the sector, though, some still pull their weight.

Consequently, the out-cry on the persistent poor and unpromising performances of many day and boarding senior secondary school students in Kano Metropolis, Nigeria specifically, in the past six years (2005/2006, 2006/2007, 2007/2008, 2008/2009,

2009/2010, 2010/2011) in Senior Secondary School Certificate Examinations (SSCE) conducted by West Africa Examination Council (WAEC) made educationists and the government policy makers and the researcher wonder whether the schools are measuring up to the expectations. However, several factors among the numerous problems confronting Day and Boarding Senior Secondary Schools in Kano Metropolis will without doubt positively or negatively affect students' performance in WAEC examinations. Many of them lack management of school building, facilities and equipment, such as, books, libraries, science, vocational and languages laboratories, maintenance of instructional materials for the teaching and learning process, maintenance of discipline, management and administration of senior secondary schools, inspection and supervision of school curriculum and time table by State Ministry of Education, inter-personal relationship between school and community, time management, teachers' level of commitment, inter-personal relationship between students and teachers and students' welfare support services.

Other factors that may equally affect Day and Boarding students' academic performance in WAEC examinations include: students' indiscipline in schools, inadequate supervision of students' conduct in the house, lack of involvement of students ineffective communication in schools, lack of innovation, lack of students' participation in school decision-making, lack of students' participation in co- curricular activities in schools, inaccurate techniques of evaluating students' academic work, frequent change in state admission and promotion policies by educational administrators and planners for the school systems, students' poor attitude to school work, teachers' qualification and development, students- parents relationships, inaccurate statistical data, retention of unqualified staff, lack of funds

which inhibits proper maintenance of human and material resources in schools, poor morale of parents, government and students in the core- subjects and other major indicators.

The committee on day school observed that home being a natural environment of the child will help to supplement the influence of the school and also involve parents and the community in the education and discipline of their wards. These observations made them to conclude that day students are likely to fit into the society more than their boarded counterparts. Furthermore, Taiwo (1980) encouraged that day schools should not only be a means of reducing cost but of involving parents in the education of their children and making them grow roots in their culture.

The general public opinion of stakeholders and the state government under the Ministry of Education suggest that the Boarding system is a panacea to brilliant and excellent academic performance of students in the senior secondary schools. Boarding system has products regarded by the public as better nurtured, refined and groomed than their day-student counter-parts. This, therefore, has been a source of concern to the researcher; hence the decision to conduct an investigation on students' academic performance of Day and Boarding Senior Secondary Schools in Kano Metropolis. The yardstick for measuring success in WASSCE is for students to have five (5) permissible credit passes related to the course of their study in the university.

1.3 Objectives of the Study

The main objective of this study is to analyse students' performance in senior secondary schools in Kano Metropolis. Specifically, the study seeks to:

(1.) assess the performance of Boarding and Day Senior Secondary School Students' West African Senior School Certificate Examination in English Language in Kano Metropolis;

(2.) examine the performance of Boarding and Day Senior Secondary School Students' ' West African Senior School Certificate Examination in Mathematics in Kano Metropolis;

(3.) determine the performance of Boarding and Day Senior Secondary School Students' West African Senior School Certificate Examination in the Science subjects in Kano Metropolis;

(4.) find out the performance of Boarding and Day Senior Secondary School Students' West African Senior School Certificate Examination in Vocational and Technical Studies in Kano Metropolis;

(5.) examine and ascertain the general performance of Boarding and Day Senior Secondary School Students' in Boarding Senior Schools in West African Senior School Certificate Examination in Kano Metropolis;

1.4 Research Questions

The study seeks to answer the following questions:

(1.) What is the performance of Day and Boarding Senior Secondary School Students in English Language in Kano Metropolis?

(2.) What is the performance of Day and Boarding Senior Secondary School Students in Mathematics in Kano Metropolis?

(3.) What is the performance of Day and Boarding Senior Secondary School Students in Science Subjects in Kano Metropolis?

(4.) What is the performance of Day and Boarding Senior Secondary School Students in Vocational and Technical Studies in Kano Metropolis?

(5.) What is the overall performance of Boarding and Day Senior Secondary School Students' West African Senior School Certificate Examination in Boarding Senior Secondary Schools in Kano Metropolis?

1.5 Basic Assumptions

For the purpose of this study, the following assumptions were made:

1. It is assumed that students' performance in Day and Boarding Senior Secondary Schools in English Language will be comparatively good in Kano Metropolis.
2. It is assumed that students' performance in Day and Boarding Senior Secondary Schools in the main Science subjects will be comparatively good in Kano Metropolis.
3. It is assumed that students' performance in Day and Boarding Senior Secondary Schools students in Mathematics will be comparatively good in Kano Metropolis,

4. It is assumed that students' performance in Day and Boarding Senior Secondary Schools in Vocational studies will be comparatively good in Kano Metropolis.

1.6 Significance of the Study

The findings of this study would significantly form basis to explain some basic truth to the:

State's government and officials of Ministry of Education on taking the right decision on the provision of infrastructural facilities to aid teaching and learning process which will help improve the academic performance of day and boarding senior secondary school students in Kano Metropolis, Nigeria.

It will help the respective school authorities in the state to take corrective measures within their jurisdiction through adequate planning of resources to meet the demands and guide their actions on future projects on the education of day and boarding staff and students for successful teaching and learning process in the schools, especially in Kano Metropolis, Nigeria.

It will stimulate administrators to investigate and formulate constructive strategies with a view to reducing or eliminating students' poor performance through students' welfare support services in the Day and Boarding Senior Secondary Schools in Kano Metropolis, Nigeria.

Parents would give much attention and supervision to the student's work and hence result in improvement of students' performance.

1.7 Scope of the Study

This research work on analysis of students' performance in WAEC examinations in Day and Boarding Senior Secondary Schools is limited to some Day and Boarding Senior Secondary Schools in Kano metropolis. The scope of the study is restricted to the schools within the urban area that have presented students for WASSCE for at least ten years in Kano Metropolis due to the large number of Day and Boarding Senior Secondary Schools in the metropolis: The researcher did not cover all the day senior secondary schools in Kano metropolis, which consists of seven Local Government Areas. Samples were randomly drawn from day and boarding secondary schools:

1) Government Colleges and Private-owned (Voluntary agency) Schools in Kano metropolis.

2) Co-educational and single sex schools in Kano Metropolis.

3) Schools in the urban area of Kano Metropolis.

This selection is to reflect the true character of all the Day and Boarding Senior Secondary Schools in Kano metropolis. For the purpose of this study, the twelve (12) senior secondary boarding schools in the metropolis would be selected while a random sampling of twelve day (12) senior secondary schools in the metropolis would be selected. The institutions selected will give the researcher an insight to schooling systems' problems and prospects, as well as the advantages and disadvantages of boarding and day schools. It will also provide full representations of the target population. The results of the study can be generalized to a larger size of population within Kano Metropolis.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter reviews literature related to the study. The review specifically centres on issues as raised in chapter one:

2.2 Conceptual Framework of the Study

Performance in school is evaluated in a number of ways. For regular grading, students demonstrate their knowledge by taking written and oral tests, performing presentations, turning in homework and participating in class activities and discussions. Teachers evaluate in the form of letter or number grades and side notes, to describe how well a student has done. At the state level, students are evaluated by their performance on standardized tests geared towards specific ages and based on a set of achievements students in each age group are expected to meet.

According to Asikhai (2010), education at secondary school level is supposed to be the bedrock and the foundation towards higher knowledge in tertiary institutions. It is an investment as well as an instrument that can be used to achieve a more rapid economic, social, political, technological, scientific and cultural development in a country. It is rather unfortunate that the secondary schools today are not measuring up to standard expected of them. There has been public outcry over the persistently poor performance of secondary school students in public examinations.

The problem of downward trend in academic performance of students has often been attributed to a number of factors among which are: the principal's leadership style, teacher quality, home factors, government factors and non-provision of educational resources

(human, material, financial physical resources). However, this study was limited to the provision of human and material resources as potent factors for students' performance.

The availability of educational resources (human and material) is very important because of its role in the attainment of educational objectives. Human resources are a unique educational input necessary for the overall development of skill acquisition and literacy of the students. Human resources within the educational system can be classified into teaching and non-teaching staff. Availability of these classes of resources is needed to achieve excellence in the system. However, it has been observed that secondary schools in Kano State do not have the required number of teachers (both in terms of quantity and quality). This is evident in high student-teacher ratio in the schools. Personal observation has also shown that material resources are in short supply in the schools. The poor status of material facilities in the schools is not unconnected with the dearth of fund in the system. A close look at the schools and what goes on there shows that nothing good can come out of most public schools as they do not have facilities and adequate and appropriate human resources to prepare candidates for West African Examination Council (WAEC) examinations (Owoeye & Yara, 2011).

The precarious situation of lack of human and material resources is more evident in public schools than in the private schools and this shows why the private schools tend to perform better than the public schools in public examinations. Ekundayo (2009) in a study conducted in Ekiti State submitted that private secondary schools had educational materials better than the public schools. Studies on the

relationship between availability of human resources and academic performance have shown that human resources enhance academic performance of students. George (1976), Oni (1992), Adedeji (1998), Ayodele (2000), Adewuyi (2002) and Okandeji (2007) had in their various researches submitted that teachers constitute a very significant factor to students' success. In a similar dimension, Adedeji (1998), Owoeye (2000), Ajayi (2002), Akomolafe (2003, 2005) and Owoeye (2011) also submitted a positive relationship between material resources in schools and students' academic performance. According to Hallack (1990), the material resources that contribute to students' performance include: classrooms, accommodation, libraries, furniture, apparatus and other instructional materials. The author emphasised that the availability, relevance and adequacy of these facilities contribute to students' achievement.

In a contrary view, Gamoran in Owoeye (2011) found that facilities, teacher' salaries, books in the library and the presence of science laboratory had little impact on variation in students' achievement. Besides, there have been contradictory findings on whether there is a significant difference in the academic performance of private (Boarding) and public (Day) schools. While Ajayi (2001) found that the public schools had better academic performance than private secondary schools, Oloyede (2003), Nwokocha & Amadike (2005) and Ekundayo & Arogundade (2007) submitted that private (boarding) schools performed better than their public (day) schools counterparts in public examinations.

De-boarding of secondary institutions by the various state governments is a response to the 1976 National Policy on Education which states that the principles behind the policy is an outgrowth of nation's desire to pursue egalitarianism, a policy that gives everybody in the society equal opportunity to develop to the fullest. With this, they envisaged that there would be large number of children aspiring for admission into secondary institutions, especially with the products of the Universal Basic Primary Education (UBE). It was; therefore, felt that schools must be de-boarded in order to allow more intakes. This is usually done without adequate preparation to cater for such large number of students which leads to failure.

The shortage of qualified teachers, inadequate facilities for a large school, lack of good school environments, amongst others are factors for poor results. 'Overcoming Candidates' Poor Performance at the West African Senior School Certificate Examination' will give good consideration to candidate-related factors such as students' inadequate preparation and poor coverage of the syllabuses, failure to adhere to instructions, lack of understanding of the demands of the questions, which is due to the poor reading culture, illegible handwriting and poor spellings, examination malpractice, among others, are responsible for the poor performance of students in examinations.

Some schools of thought hold that day students, which travel from their various homes to school, perform academically better than their counterparts in the boarding houses. This, they claim, is due to the fact that, day students are mostly under the care of their parents and guardians who, in addition to maintaining adequate home discipline, may also help the students with their school work.

The number of candidates in a graduating set, no doubt, is a factor that could mar or make performance level in final examinations in senior secondary schools. On teacher quantity, Fabunmi, Brai-Abu and Adeniji (2007) noted that schools with larger size and high teacher-students ratio recorded poor performance in science subjects whereas schools with small size and lower teacher - student ratio had better academic achievement. According to Hallack (1990), the material resources that contribute to students' performance include: classrooms, accommodation, libraries, furniture, apparatus and other instructional materials. The author emphasised that the availability, relevance and adequacy of these facilities contribute to students' achievement. A close look at the schools and what goes on there shows that nothing good can come out of most public schools as they do not have enough facilities adequate and appropriate human resources to prepare the large size of registered candidates for West African Examination Council (WAEC) examinations.

The shortage of qualified teachers, inadequate facilities for a large school, lack of good school environments, amongst others are factors for poor results. 'Overcoming Candidates' Poor Performance at the West African Senior School Certificate Examination' will give good consideration to candidate-related factors such as students' inadequate preparation and poor coverage of the syllabuses, failure to

adhere to instructions, lack of understanding of the demands of the questions, which is due to the poor reading culture, illegible handwriting and poor spellings, examination malpractice, among others, are responsible for the poor performance of students in examinations.

For instance, Taiwo (1969) observed that, in a boarding school, there will be found opportunities for training and civilizing the youths in various ways which are beyond the scope and power of a day school. Similarly, Orgam (1982) maintained that the current moral decadence among our youths is a consequence of some government policies that have put an end to discipline in schools through the emphasizing of boarding. He further remarked that it was an eye-sore to see students, particularly females in their teens, renting houses in the vicinity of their schools on account of the fact that boarding had been abolished. Most of them, he said, got carried away by the temptation of life and consequently stopped schooling abruptly.

2.3 Students' performance in West African Senior School Certificate Examination in English Language.

2.4 Students' performance in West African Senior School Certificate Examination in Mathematics.

2.5 Students**'** performance in West African Senior School Certificate Examination in the Science Subjects.

2.6 Students' performance in West African Senior School Certificate Examination in Vocational and Technical Studies.

2.7 Students' performance in West African Senior School Certificate Examination in Boarding Senior Secondary Schools.

2.8 Students' performance in West African Senior School Certificate Examination in Day Senior Secondary Schools.

2.9 Theoretical Framework

Students' performance according to Adu, Ojelabi and Adeyanju (2009) can simply be viewed as an outcome of all academic tasks or rigours of a person which could be poorly or successfully stated. As noted by Ijaduola (2008d), performance cannot be gingered in students if they are discouraged. Teachers are expected to meaningfully contribute to student's academic performance. A weighty performance of a student is sometimes attributed to higher teachers' efficiency.

The National Policy on Education (2004) stated that secondary education would be in two stages, Junior and Senior, each stage being of three years duration. Whatever type of secondary school that is in place, the prime function of education officials is to provide a condition within which boys and girls develop socially, mentally, and intellectually. This can be achieved through the learner's association with knowledge, information and environment. Adejumo (1984) asserted that secondary education should be purposeful in order to sustain the students through the years ahead. This position agrees with the purpose for secondary education as contained in the National Policy on Education (NPE) (1977, 1981, 1998 and 2004) inter-alia:-

a. Provide an increasing number of primary school pupils with the opportunity for education of a higher quality irrespective of sex, social, religious or ethnic background;

b. Equip students to live effectively in our modern age of science and technology (NPE 2004; 18).

2. 10 Grading of West African Secondary School Certificate Examination

Examinations in Nigerian schools dated back to the advent of formal education. The 1887 Education Ordinance made provision for public examinations in schools that have attained the requisite percentage of proficiency (Adesina, 1977). Thus, the National Policy of Education 1998) stipulated that all secondary schools should gear their programmes to meet the requirements of examinations being conducted for the Senior School Certificate. The pattern of grading candidates' scores in the examinations was such that the distinction grade was represented by A1 to B3. The credit grade was represented by C4 to C6. The ordinary pass grade was represented by D7 and E8 while the failure grade was represented by F9 (WAEC, 2002). It needs to be mentioned however, that the distinction and credit grades are the only requisite qualifications for admissions into universities in Nigeria and candidates must have at least credit in five subjects including English Language in order to qualify for admission (JAMB, 2002).

Thus, examinations occupy a unique position as a measure of quality within the educational system of Kano State, Nigeria. They are either internal or public. Internal examinations are the examinations that are set by teachers within a school system. These could be in the form of tests and end of term examinations. Public examinations, on the other hand, are examinations that are conducted by recognised examining bodies. As such, the examinations: Senior Secondary Certificate Examinations (SSCE) and the Junior Secondary School Certificate Examination (JSCE) are regarded as external examinations. This is in the sense that the examining boards conducting

these examinations did not themselves organize instructional courses nor prepare students for the examinations. They are designed to evaluate performance at the end of a course of study or programme.

2.2.1 Students' Performance in WASSCE in English Language

The term 'performance' has been described as the scholastic standing of a student at a given moment. It refers to how an individual is able to demonstrate his or her intellectual abilities. English Language is the core of the educational curriculum, at least for now. At all levels of educational system, it occupies a prestigious position both as a discipline and as a medium of instruction. On either side, a speaker of the language is rated as competent or otherwise from the way he performs. Performance and competence in English are complementary issues. The two however differ. Williams (1990) stated that performance is elicited and observed while competence can only be referred to as underlying ability. He further illustrates that competence has to do with the strength or the ability to perform. In this work, good performance is inferred as being competent.

Examiners, Educationists and other stakeholders have continuously rated students in Nigeria as incompetent in English Language. Hamza (1999) lamented on the low level of competence of Nigerian students and in Kano Metropolis particularly. Many critiques felt that the factors impeding the good performance include lack of language skills and the numerous mechanical errors in the examination. Others feel that it is the inadequacy of competent teachers, poor preparation of students for the examinations and the automatic promotion of students' policy that hamper the high performance of the students. Some researchers have agreed with these causes and

suggested among others, recruitment of competent English teachers, good welfare package for teachers and purchase of relevant textbooks.

2.3.1 Students' Performance in English Language and Mathematics in West African Senior School Certificate Examination, Kano

The recurrent poor performance of secondary school students in Senior School Certificate Examination (SSCE) conducted by West African Examination Council (WAEC) in Nigeria is disturbing and embarrassing. For instance, the results released by WAEC in 2010 revealed that about 80% of the candidates that sat for the examination failed because they did not have credit passes in five subjects including English Language and Mathematics. Similarly, about 98% of candidates that sat for Nov/Dec 2009 failed Senior Secondary School Examination (SSCE) of the National Examination Council as they did not have credits in five subjects including English and Mathematics (Falola, 2010). Furthermore, in the year 2008 only 1.8% of the candidates that sat for senior secondary school examination passed (Uwadiae, 2008). These reports are worrisome because secondary school students of today are expected to become leaders tomorrow. In Kano State which is the focus of this study, results for Kano State reveals that in 2005-2010 West African Examinations Council (WAEC) 2005 Kano State had 4.03%, in year 2006 Kano 6.88% ,in 2007 Kano had 4.61%, in 2008 Kano had 2.11%, in 2009 Kano had 5.03%, in 2010 Kano had 5.56%.

(Source: Kano Educational Resource Department - (KERD).

In the SSCE, English Language and Mathematics are compulsory subjects for all candidates; hence much time and attention are devoted to the teaching of these two subjects in both the primary and secondary schools. Nevertheless, the students have not been performing well, and the situation is not improving. For example, in the SSCE of May/June 1992, English Language recorded only 13.8% passes with Distinction and Credit grades while 59.6% of the total 381,506 candidates failed. For Mathematics, only 9.7% passed in Distinction and Credit grades while 59.4% failed (WAEC, 1994). In the examinations taken in June 1994 by 618,119 students, 14.2% and 13.7% passed with Distinction and Credit levels in English and Mathematics respectively.

The failure rates for the two subjects were 56.3% for English and 67.4% for Mathematics (WAEC, 1994). Results in other subjects were equally poor with students doing much worse in subjects with practical work. In SSCE of December 1996, for example, failure rates were 64.6% for English, Biology 58%, Music 75%, and Book-Keeping 67%. Dr. Abdulraham blamed "the mass failure on the falling standards in secondary education". The situation has indeed reached a crisis that cannot be ignored.

The rate of poor performance of students in Nigeria had resulted to economic and social wastage and this has become a great concern to all stakeholders in education. For instance, in 2008, 25.94% of the students had credits pass in English language and Mathematics. Also in year 2009, it was another year of poor result across all states of the federation. According to Okpala (2010) at the national level, the percentage of candidates that had credit in English language between years 2005-2009 in West African Examinations Council (WAEC) is as follows: 27.53% in year 2005, 15.56% in 2006, 22.54% in 2007, 13.78% in 2008 and 24.94% in 2009. He also

stated that candidates who obtained credit passes in five subjects and above including English language and Mathematics between 2005 and 2009 are as follows: 8.53% in year 2005, 13.32% in 2006, 27.74% in 2007, 10.53% in 2008 and 1.80% in 2009.

The break-down of 2009 results in West African Senior School Certificate Examination (WASSCE) indicated a mass failure across the 36 states of the federation. From the analysis in 2009, it was recorded that in Kano State which is the focus of this study less than 5.03% of the candidates who sat for the examination made five credits and above in WASSCE while 0.5% of the candidates made credit passes in English Language and Mathematics. In 2010, less than 5.56% made 5 credits and above, while 18.6% credited Mathematics, while English Language had 14.3% in the State, to talk of Kano Metropolis. In August 2010, WAEC gave the outcome of the May/June 2010 exercise as achieving a 75 percent failure in English Language and Mathematics sitting alone! That report further showed that only 24.95 percent of the candidates who sat for the examinations, made five credits, including English Language and Mathematics, representing 337,071 of the 1,278,843 candidates whose results were released by the examination body.

The Nov. /Dec. 2010 WASSC examination results in English and Mathematics, two subjects widely believed to be the pivot of the major fields of sciences and arts, were also nothing to write home about (Adeiza 2011). The failure was not just intense; it was truly hopeless in the sense of the situation in the post-primary training environment. In this case and as earlier declared on December 23, 2010 by the examinations body, only 20.04 per cent or 62,295 candidates obtained credit pass in English, Mathematics and other three subjects in the Nov. /Dec. 2010 examinations. This is a pointer to the fact that all is not well with the students' attainment in the cognitive domain.

Apart from the general poor performance referred to above, there appeared to be difference in performance from one school to the other. It may be argued that such variation in performance is unavoidable. Although, the incidence of poor performance appears to be more common in public day schools as in Kano Metropolis secondary schools, private schools are not free from the declining trend.

The consequence of mass failure in secondary school examinations is the inability of learners to proceed to higher educational institutions. As a result of this poor performance, stakeholders in education are curious to know the causal factors associated with the problem. Causes of the poor performance could include; ownership of the school and inadequate facilities. Facilities are of everything used directly or indirectly for the benefit of education. Facilities could also be explained as the entire school plant such as; blocks of classrooms, staffrooms, laboratories, workshops, libraries, laboratory equipment, consumables, audio-visual aids, electricity, water, chairs, tables, stationeries, playground, storage spaces and others which each school has. It has always been realized that facilities are very important in the development and improvement of education in Nigeria, especially in Kano Metropolis

A school without facilities, either private or public, day or boarding, may not be able to achieve the stated goals and objectives of the system. When facilities are available and skilfully utilized, they influence learning and make it more meaningful. Facilities in education are very vital because they aid teaching and learning. Bandele (2003) noted that the importance of physical facilities cannot be relegated. Facilities like modern laboratories, libraries and classrooms are to be put in place in all our schools.

Adesola (2005) found out that the level of available resources is indeed a plus to the teachers and goes to show the level of ingenuity and commitment of the teachers toward effective delivery of lesson. There is the need for renovation of old buildings, chairs, desks, cabinets and acquisition of modern classrooms as earlier recommended by Alimi (2007). Akinfolarin (2008) identified facilities as a major factor contributing to performance in the schools system. These include: classroom furniture, recreational equipment among others. Different studies conducted by Ayodele (2000) and Vandiver (2011), showed that a positive relationship exists between availability of facilities and students' academic performances.

Research findings on the influences of facilities in private boarding and day and public boarding and day secondary schools on students' performance are controversial. Keeves (1978) found out that the type of school, classified as public or private, day or boarding did not make any difference on students' academic performance. However, Ajayi (2006) found out that school types make a difference in students' performance. In addition, Philias & Wanjobi (2011) reiterated that the type of schools, (single sex or mixed, private or public, day or boarding) has effect on the performance of students in Mathematics and other subjects.

2.4 Students' Performance in WASSCE in Mathematics

Mathematic has been the impediment or hindrance to the progress of many students, out of all the subjects in the school curriculum. It is mathematics that records the most woeful and heart-rending results in publicly-conducted examinations. This disappointing poor performance of students in mathematics year-in-year-out has been a constant source of concern, worry and anxiety to

all stakeholders in the educational sector- ; governments, educationists, proprietors, principals, teachers, guardians etc. However, it is the failure rate that leads to the research on the analysis of students' performance in WAEC (2005-2011) boarding and day Senior Secondary School Certificate mathematics examinations in Kano Metropolis.

Mathematics is one of the compulsory subjects that students must offer in senior secondary school because of their status, not minding whether such students are in Science, Commercial, Arts or Social Science class. In secondary school curriculum according to National Policy on Education (2004), there are core subjects, as well as electives, that students must offer. These are: English Language, one of the Nigerian Languages (i.e. Hausa, Igbo and Yoruba) Mathematics, one of Physics, Chemistry or Biology; one of Literature in English, History or Geography and Agriculture or a vocational subject. Also, there is a list of subjects tagged electives from which students have to offer three. These include Economics, Government, Commerce, Chemistry, and Health Science.

The students' anticipated career will determine which of the electives to offer. These subjects are Mathematics, English Language, Biology, one Nigerian Language and Economics. In addition, students are expected to register for three or four additional subjects making a total of eight or nine subjects. To further their studies in institutions of higher learning, especially in University, students are expected to have credit pass in five subjects, including Mathematics and English Studies. Credit pass in Mathematics is also required for students offering Science and Social Science courses. This makes Mathematics one of the essential subjects for students' advancement. Mathematics is an important subject, because its usefulness cuts across all spheres of life such as Commerce, Computer

processing, Engineering and Music. It is one of the subjects taught at both the primary and secondary school levels. Mathematics assists in the development of individual's intellectual abilities. Schwab (1964) conceptualized mathematics as a highly structured discipline and he identified the two structures as conceptual and syntactic.

The conceptual structure deals with the products of mathematics such as defined concepts, undefined concepts, postulates and theorems. The syntactic structure consists of the processes used in solving problems such as induction, deduction and idealization. For any successful problem solving, the problem solver is required to have adequate understanding of the two structures. That is, the problem solver must have adequate grasp of the conceptual content as well as understand the process recommended and know when and where to apply them in problem solving. Fajemidagba (1986) affirmed that, it is inadequate understanding of concepts featuring in mathematics word expression and ability to choose the appropriate process that leads students into committing errors in mathematics.

Clement (1982) classified errors usually committed in problem solving into two types. These are semantic and syntactic errors. Semantic errors are committed due to lack of understanding of the meaning of the given problem, while syntactic error is committed when the problem is given direct translation as it is structured or constructed. For a word problem to be meaningfully and conceptually interpreted there should be cognitive interaction with the concepts featuring in the problem. To enhance correct transformation of problem statements into equivalent algebraic equations, for example, the problem solver needs to be equipped with adequate knowledge of mathematical words, symbols, notations, models and so on.

Mathematics is a fundamental science that is necessary for understanding of most other fields in education. He stressed further that, it is glaring that no other subject forms such a strong force among the various branches of science. The Science Teachers Association of Nigeria (1992) referred to Mathematics as the central intellectual discipline of the technology societies. In his submission, Odusoro (2002) affirmed that the knowledge of science remains superficial without Mathematics. It therefore means that, the position of Mathematics in secondary school curriculum in Nigeria is important for scientific development. However, it is disheartening that research and data from National Examination Bodies like West African Examinations Council (WAEC) have shown a consistent poor performance in this subject.

Majority of secondary school students often dread and show negative attitude towards Mathematics (Awofala, 2000) and the trends of their achievement in the senior secondary school certificate examination is also a source of worry to the stakeholders. Mathematics is an important school subject because it is associated with more academic and or career opportunities (Akinsola and Tella, 2003). Burton cited in Agwagah and Usman (2003) relates the importance of mathematics to the scientific, industrial, technology and social progress of a society. It is a science that studies numbers, shapes, objects and their properties which are needed as basic requirement for all sciences. That mathematics as an important subject is unbeatable. But it is very sad to note that the performance by undergraduate students particularly the majors in the subject in recent time are not encouraging. This can be attributed to the fact that majority of mathematics secondary school students have been observed to be procrastinators. This is confirmed by the observation by

(Ferrari and Beck, 1998) that over 70% of students engaged in frequent procrastination, most commonly with writing term papers. Procrastination is probably the single most common time management problem (Learning Common Fast facts Series, 2004).

One basic thing about procrastination is that everyone procrastinates to some extent. However, some reasons can be put forward why students rank highly among those mostly vulnerable to procrastination (Learning Commons Fast facts Series, 2004). The reasons according to this group are:

(i) There is always a tremendous amount of work to do. Regardless of how much time the students spend studying, it can seem impossible to get finished;

(ii) For most students, only a few hours each day is spent in class and laboratories. The majority of time is unstructured, and students are responsible for deciding what to do and when to do it; and

(iii) In the school environment, particularly in hostels, there is usually something more enjoyable to do than studying. Many activities compete for a limited number of hours in a week, and studying is often pushed to the bottom of the list.

It also recognized that many mathematics students refer to the subjects as being difficult. And they (Learning Commons Fast facts Series, 2004) have already asserted that procrastination often results when a task seems difficult, unpleasant, or overpowering. It seems reasonable to realise at this point that if the college mathematics students continue to procrastinate, definitely the weak manifestation of academic achievement in the subject will as a matter of fact continue. As a result, the poor performance of secondary school students in

the subject (mathematics) cannot be allowed to go unattended. Hence the effort to look into the probable causes of students' poor performance in the subject and this research will also try to dive into the comparative analysis of performance of day students and boarding students in secondary school certificate mathematics examinations.

2.5 Students' (Physic, Chemistry and Biology) Performance in West African Senior School Certificate Examination in Science Subjects

The Federal Government of Nigeria has taken a good number of measures in the previous years to improve and promote the study of science, technology and mathematics in the country. This is evident in her effort in establishing more special science secondary schools in Kano Metropolis to facilitate the teaching and learning of sciences. The teaching of the three basic science subjects in secondary schools is in line with the National Policy on Education. One of the policy statements of the National Policy on Education, section 39.1 stipulated that "a great proportion of education expenditure will be devoted to science and technology" (NPE revised, 1998). If this policy were properly implemented, there should be enough availability of learning resources for the teaching and learning of science subjects in most, if not all the secondary schools in the country.

The relationship between learning resources and students academic achievement has been investigated. For instance, Aderounmu, Aworanti and Kasali (2007), investigated "the impact of the supply of learning resources in science, technology and mathematics education on the trend of students' performance at the National Technical Certificate (NTC) /National Business Certificate (NBC)

Examination in the five (5) Government Technical Colleges of Oyo State from 2000 - 2005 and found that learning resources revealed a significant effect in students' performance. Ivowi (2000) and Cirfat and Zumyil (2000) observed that lack of science equipment and laboratories are major causes of poor performance in the science subjects in secondary schools in Nigeria. Okafor (2000) reported that 5% of the post primary schools in Lagos State had no laboratories and schools with laboratories were ill-equipped with human and material resources. These factors affected students' achievement and their attitude towards Chemistry.

Lamenting on students' poor performance in Physics, Chemistry and Biology DanAzumi (1998), reiterated that one of the most repeatedly mentioned problems causing poor performance in these subjects since introduction of SSCE is lack of equipment and materials to conduct practical. In a multivariate study, Lawal (2006) reported no significant correlation between adequacy of laboratory equipment and academic achievement of students in Sciences (Physics, Chemistry and Biology) in SSCE in his study on "availability and impact of material resources on achievement in Physics, Chemistry and Biology in selected secondary schools in Katsina metropolis". In his study on communicating Physics through teaching materials in Akwa-Ibom State Government Science Colleges, Onwioduokit (1998) revealed that there exist a positive relationship between the provision of materials and secondary students' performance in Physics, Chemistry and Biology. This report corroborated the assertion of Jegede, Fraser and Okebukola (1992) who posited that inadequate facilities and close ended laboratory investigations were responsible for students' poor performance in Physics, Chemistry and Biology in the seventies and eighties.

On the relationship between availability of qualified teachers and students' academic achievement, Nwosu (1998) reported that there is a strong relationship between teachers' quality and students' academic achievement in secondary school science subjects. They further reported that students' performance was taken as an index of teacher effectiveness. A study carried out by Nnamid et al (2008) showed that students taught by professionally trained Biology teachers performed better than those who were taught by none professionally trained Biology teachers. Supporting the fact that a qualified teacher had an effect on students' academic achievement, Darling - Hammond (1999) using teacher's college degree to represent teachers' knowledge of subject matter, found that teachers who do not have at least a minor in the subject matter they taught accounted for 20% of variation in academic achievement scores of the students. The most reliable predictor of students' academic achievement scores in science and mathematics as found by Goldherber and Brewer (2000), is the presence of qualified teachers with at least a major in their subject areas.

On teacher quantity, Fabunmi, Brai-Abu and Adeniji (2007) noted that schools with larger size and high teacher-students ratio recorded poor performance in science subjects whereas schools with small size and lower teacher - student ratio had better academic achievement. He also observed that schools with shortage of science teachers perform far below expectation in SSCE examination. Okonkwo (2000) in his study in the relationship between some schools and teacher variables and students' achievement in mathematics found out that the qualification and experience of the teacher had a serious effect on the performance of Junior Secondary One students.

Ibraheem (2004) also reported a strong correlation between teacher qualification and students' academic achievement in science subjects in secondary schools in Epe Division in Lagos State.

From the foregoing discussion, there is a strong indication that academic achievements of science students are a correlate of learning resources available at their disposal in the environment of instructions. Eloebhose and Imhanlahimi (2000), said that learning resources are those devices, like human and material employed during the teaching/ learning process to avoid a situation whereby the predetermined specific learning objectives of the lesson are not achieved. The influence of these resources on students' academic achievement cannot be overemphasized, therefore, a careful and cautious attention has been accorded to it, if we want to build and sustain scientists of the future in Kano metropolis.

According to Ango (1986) laboratory work:

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

Laboratory helps to provide a forum wherein the learner is given the exercise to subjects, his beliefs, ideas, statements, theoretical propositions etc. to some forms of experimental test (Soyibo, 1990). To maintain and arouse the interests of students in subjects

involving laboratory work, the teacher should be effectively involved in order to transfer knowledge and facts to learners for a good performance in any examinations. In line with this, one then pauses to ask, to what extent has laboratory been able to achieve its objectives. Odulaja and Ogunwemimo (1989) highlighted that the teacher assumes a position of dispenser of knowledge with the laboratory serving the function of drill or verification. They further explained that at the other extreme, the teacher assumes the position of guide to learning and laboratory as a place where knowledge is discovered.

Learning resources play a paramount role in the teaching and learning of science subjects and inevitably the student's academic achievement in the subjects. Despite the fact that the need for meaningful science teaching in Nigeria and Kano State as a whole is identified, a lot of hurdles still prevent the effective teaching and learning of the science subjects. Various scholars have viewed these problems from different perspectives. For instance, Balogun (1982) asserted that no meaningful science education programme can exist without laboratory facilities. Laboratory facilities are indispensable to good science teaching and learning process.

In a world of change where science and technology is advancing very fast, science education at all levels in Nigeria is almost at a deplorable state, especially in Kano State. This is evidenced by the decline in science subjects learning outcome characterized by student's poor performance (Okafor, 2000) and inadequate supply of skilled human and material resources (Agusiobo, 1998), in most types of secondary schools. Eule and Chukwu (2000) were of the view that the global change in science curriculum due to knowledge

explosion and technological development demands for qualitative science teaching. This changes call for the provision of standard resources at the secondary school, which the foundation of science learning is laid.

Considerable research efforts are being expended on how to improve student's performance in science subjects. Aguisiobo (1998), explained that the poor capital investment in terms of provision of science learning resources contribute to student's low level of academic performance. Students from Kano State Senior Secondary Schools lack science process skills. This has led to their incomprehensive state of science content, hence their poor performance in SSCE examination in science subjects. Many factors could contribute to this condition. These include lack or inadequate or total absence of laboratory space and or facilities, and insufficient time spent on the teaching and learning of sciences (Maduabum, 1989; Asiya, 2006; Nnaka and Anaekwe, 2006 and Ihuarulam, 2008).

The importance of learning resources in teaching and learning of science cannot be overemphasized, Nwocha (1998) insisted that human and material resources are very important to effectively teach and learn sciences. Stressing the importance of learning resources in science teaching, Maduabum (1989) and Ango (1990) alluded that a teacher can only achieve his aspirations if enough resources for teaching and learning are available. The absence or the insufficient supplies of these learning resources undoubtedly affect student's academic performance in science subjects.

2.5.2 Factors Affecting Improvisation of Instructional Materials in the Learning Process

Teachers are encouraged to improvise where the school cannot provide all the instructional materials, but Balogun (2002) identified two main constraints militating against the successful improvisation of Science equipment. These are the technical and the human factors respectively. While the technical factors relate to the question of degree of accuracy and precision that is possible with the improvised equipment, the human factor relates to the teachers' skill in developing the resources while providing the appropriate learning experience to the learners. Also, Maduabunmi (2003) reported lack of adequate professional training as a major problem militating against the effective use of local resources for Science teaching. Oyediran (Isola, 2010) then stressed the need for a definite well planned training programme of improvisation for teachers. He suggested regular meaningful workshop on improvisation technique for Science teachers to improve and up- date their competence.

2.6 Students' Performance in West African Senior School Certificate Examination (WASSCE) in Vocational and Technical Studies

Vocational/ technical education is among the vital tools an individual can use to be developed. It is training for useful employment in trade, industries, agriculture, business and home making etc. The emphasis on vocation/ technical education is to prepare one for self- reliance. American vocational association (1971) sees vocational subjects as those designed to develop skills, abilities, understanding, attitude, work habit and appreciation encompassing knowledge and information needed by workers to enter and make progress in employment on a useful and productive basis. It contributes to the production of good citizens by developing their physical, social, civic, cultural and economic competencies.

The advent of formal education in Nigeria neglected vocational and technical education entirely. Despite all efforts made to recognize it, yet little or no attention was given to it. No meaningful development was made in the area of vocational education until 1981, when the National Policy on Education was published. Due to total neglect, vocational education suffered a major decline in quality, number, policy and directive in Nigeria due to the total neglect. It was after the oil boom era 1970s that it dawned on the nation that there was acute scarcity of skilled manpower. Osuala (1999) emphasized that the term either technical or vocational education has no single universally accepted definition but what is common is the various definitions in its goals and objectives that remain the same. Technical education has been defined as that phase of education which seeks to help the people, students and the populace acquire specific mechanical or manipulative skills required in industrial arts or applied science.

2.6.1 The Aims of Vocational and Technical Education

The National Policy on Education (2004) stated the goals and objectives of vocational and technical education as follows:

(1) To provide trained manpower in applied science, technology and commerce particularly at sub-professional grades.

(2) To provide technical knowledge and vocational skill necessary for agriculture, industries, commercial and economic development.

(3) To give training and impact the necessary skills leading to the production of craft-man, technicians and other skilled personnel who will be enterprising and self-reliant.

(4) Enable our young men and women to have intelligent understanding of the increasing complexity of technology.

(5) To give an introduction to professional studies in engineering and other technologies.

Anyakoha (2000) emphasized that Home Economics is a unique and dynamic field of study. Its central theme is the improvement of lives of individuals, field of study that draws knowledge from many disciplines including Science and Humanities in order to fulfil its objectives. Being a vocational subject that focuses on the welfare of individuals, families and societies, Home Economics contributes meaningfully to the solutions of the problems of the society such as unemployment, poverty, malnutrition (Olaitan 2000). Osuala (1992) also stressed that Home Economics as a vocational subject is required to equip the learner with the knowledge of skill and attitude necessary for true effective management of the home. It requires skills, wisdom, dedication, care, intelligence, unusual patience and very strong power of observation and imagination. Therefore, a student that has these qualities should study vocational/ technical subjects, especially Home Economics; rather the reverse is the case.

Federal Government wants vocational/technical education to occupy a prominent position in our secondary schools; Nigerian schools pay little or no attention to vocational/technical subjects. Teachers and students seem not to understand what it is all about and consequently, develop some contempt and aversion for the subjects. As such vocational/technical subjects remain unhealthy. Many of the occupations and trades are regarded as ignoble and unbecoming. An average Nigerian parents does not want his son to earn a living as a full time farmer, a watch-repairer, a plumber, a house painter, for many Nigerians, these jobs are for the poor and underprivileged.

The influence of parents in the development of students' interest in vocational/technical subjects cannot be over emphasized this is because parents seem to have much influence on children's choice of educational career. The socio-economic status of parents of a child determines the type of career one chooses to do. Some parents have biased and rigid thoughts regarding the occupational choices of a child/children. Parents forget that every type of work, once it is beneficial to the individual and society, is worthy and noble. (Nwankwo ,1996). The result of this is a quasi - calculated attempt to frustrate the good intention of the federal and state governments about vocation/technical education.

The quality sign of potential success in students' vocational pursuits require the identification of the students' interest, aptitudes, abilities, values and judgments, if these will be discovered; it requires a guidance counsellor who will give the appropriate occupational information to the student with proper exposition to various opportunities available in the world of work. It is not surprising that students are not interested in vocational/technical subjects. Osuala (1992) opined that, at the heart of our society and economic problem is a national attitude that implies that vocational/technical subjects are designed for somebody else's children and is meant primarily for the children of the poor. This same attitude is shared by students. Thus, it makes the students lack interest in the study of vocational subjects, particularly Home Economics.

The skill that teachers exhibit in teaching influences the student enrolment in vocational/technical subjects. Onwuka, (1981) postulated that the method of approach is very vital in any teaching/learning situation. The way the teacher presents the subject matter to

the learner may make a student like or dislike a subject. Nwogwu (1989) pointed out the need for blending theoretical and practical work in teaching of subjects as to stimulate students' interest more, especially on vocation technical subjects. The greatest single factor in teaching learning is the teacher. No technique, no method, no device, no gadget can guarantee success, but only an effective qualified teacher can adequately execute these. (Okafor, 1987). Thus, the greatest motivating device yet discovered is that highly motivated teacher of students are to be involved actively in teaching and learning process in a way of projects, field trips, directed field activities etc, note learning and subject centred orientation should be changed to a more practical and child centred out-look. The increase in qualities and quantities of outputs should be primarily due to improvement in the quality of the teacher. It is therefore the inclusive trust of this study to explore the influential factors that affects the secondary school students' academic performance in the study of vocational subjects in Kano Metropolis.

Vocational/Technical education subjects ought to attract many students because of its laudable importance but reverse has been the case. The reasons for this probably are due to people's perception that it does not require specialized kind of training. The students have the feeling that even if one is at home at the requite skills one needs to learn how to cook, farm; etc and hoe these can be acquired without formal training. People are ignorant of the importance of the vocational subjects which could help male and female students receive formation and are able to work solution to problems. Also, it enables the students to acquire skills, abilities essential for independent life meet up with personal and family needs more, especially in this economic difficulties.

The Federal Republic of Nigeria (2004) stated that the broad goal of the secondary school education is to prepare individuals for: "useful living within the society and higher education". To achieve this objective, secondary school education in Nigeria has six years duration given in two stages – three years of junior secondary school followed by three years of senior secondary school. The curriculum designed for senior secondary school is comprehensive and broad based, aimed at broadening students' knowledge and outlook. Subjects offered in senior schools are in three groups – core subjects, vocational and non-vocational subjects. One of the vocational subjects is Home Economics. The grades analysed from the secondary schools in Kano Metropolis would reveal accurate students' performance in Home Economics.

Interest is also a significant factor in students" vocational choice. Owie (2003) advanced the position that the most important reason why a person chooses a particular career is that the person has intrinsic interest in the field. While this may be highly influenced by prior academic achievement, it is, however, expected that intrinsic interest remains a primary factor if the individual is going to be effective, satisfied and excel in the career. Where intrinsic interest is lacking, no amount of training motivation or gratification would significantly increase the person's professional effectiveness. He pointed out that a considerably large numbers of prospective teachers in this country found themselves in colleges of education not because of a basic interest in teaching but as a result of a complex combination of factors such as poor secondary school academic records, and low JAMB scores. However, a good number of students seem to prefer a career in teaching because they are intrinsically motivated and hence highly interested in the job.

The role of gender in students' vocational choice cannot be underplayed. In most parts of the country, the cultural roles expectations of men and women are known to be clearly defined. Some studies have shown significant relationship between gender and occupational aspirations, preference and choice. In the Nigeria society, boys and girls often undergo different socialization experiences and they tend to learn different gender roles and behavioural patterns and hence develop different interests. These roles and interests later become the dominant factors in career choice. Gesinde's (1976) study also showed that gender plays an important role in determining the career preferences of students. Other research findings which support gender differences in career preferences and choices include the works of Yuh (1980) who in her study of some correlates of vocational orientations of some Nigerian secondary students discovered that significantly, more male students preferred realistic, investigative and enterprising careers than females.

2.6.2 Students' Performance in Vocational Studies

Several academic and non-academic factors affect a students' academic success. These factors include socio-economic status, truancy, discipline and classroom management. Socio-Economic Status/Family Issues Shaker (2001) stated that in the United States, the least controversial purpose for schooling is to prepare students for economic productivity for themselves and for the whole of society. This mission was attempted through vocational education and practical application of knowledge in the academic curriculum. However, when the development of personal economic skills was neglected from this curriculum, the socio-economic status had an effect on the educational success of the child. Many at-risk children live in socially and/or economically disadvantaged situations that significantly

affect their academic growth and development. (Bauer, Sapp, Johnson, 2000). Cottele (1998) cited several facts from a variety of sources related to socio-economic status of American children. According to statistics from the U.S. Bureau of Census, one in five children grows up in poverty. One of four girls and one in seven boys reports some form of abuse. Statistics related to infant mortality, child abuse, child poverty, teenage drug abuse, suicide and high school dropouts revealed American children faring far worse than they did fifteen years ago.

2.6.3 Students' Performance in Core- Subjects in Secondary Schools

Worried by the persisting mass failure, the Ministry of Education, under the former minister, Dr. Sam Egwu, set up an investigation panel to look into the problem. The probe, according to Egwu's imagination, could be the magic to make the individual heads of public schools stand on their toes. Egwu also threatened to hold them responsible if such poor performance re-occur. The Principal Assistant Registrar of WAEC, Mr Collins Uduh, while presenting a paper at a seminar tagged: 'Overcoming Candidate's Poor Performance at the West African Senior School Certificate Examination' said candidates' performance at the WASSCE in Nigeria, has been consistently poor and worrisome over a period of time. According to him, candidate-related factors such as students' inadequate preparation and poor coverage of the syllabuses, failure to adhere to instructions, lack of understanding of the demands of the questions, which is due to the poor reading culture, illegible handwriting and poor spellings, examination malpractice, among others, are responsible for the poor performance of students in the examinations.

He analyzed the results of the West African Senior School Certificate Examinations of candidates who obtained credit passes in at least five subjects, including English Language and Mathematics over a period of five years, and concluded that the downward trend is shameful. "For year 2005, we had 27.53 per cent, 15.56 per cent for 2006, 25.54 per cent for 2007, 13.76 per cent for 2008 and 25.99 per cent for year 2009," he said. This, he pointed out, is an indication of the level of wastage at the senior secondary school; and that various studies, conducted by WAEC between 1999 and 2005, identified a number of factors responsible for the poor performance in examinations which include lack of preparation right from SS1, shortage of qualified teachers, inadequate facilities, lack of good school environments, students' inability to understand questions and their absolute reliance on short notes, amongst others.

Unfortunately, recommendations made after the inquiry based on the identified factors, have regrettably not been applied to improve students' performance.

"It is disheartening to note that some candidates are unmindful of their handwriting. Some of them cannot write some of the letters and numbers properly and this makes scoring of their responses not only difficult but also inaccurate. No matter how brilliant a student is, his intelligence will come to naught if he cannot manifest it by way of accurate response to questions before him in an examination."

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of preparation right from SS1, shortage of qualified teachers, inadequate facilities, lack of good school environments, students' inability to understand questions and their absolute reliance on short notes, amongst others.

Official statistics have revealed that 84 per cent of the candidates who sat for the 2009 May/June Senior Secondary Examinations failed. According to the statistics, just 356, 981 or 25.99 per cent of the 1, 373, 009 candidates, comprising 755,955 males and 617, 054 females, obtained five credit passes and above in English, Mathematics and at least, three other subjects. The result of NECO for June-July for the same year indicated that of the 1, 200, 765 candidates who registered for its examination, only 126, 500, representing just 10.7 per cent got five credits, including English and Mathematics. A total of 289,966 candidates, representing 24.5 per cent could not make five credits in English and Mathematics.

2.7 Performance of Students in Boarding and Day Secondary School Systems

Boarding school can be a great place to meet new people and to have fun while you are at school, but day school is also a good place to go if you do not like being away from your parents or you have great friends where you are. Both are really great, but boarding school can be really fun and you get really close to the people you meet there. One cannot say that boarding school is better or Day school in comparison, while both are effective in producing good results in terms of academics, extra-curricular, social interactions, etc but for some parents it is difficult to give extra-care and time to their children from the drudgery of their routine, and also due to other reasons they send their children to boarding.

Students in day schools are affected by the environmental factors. The environment for a boarding school is far better, so it is believed that one finds a larger number of students in boarding schools doing well. Apart from the school environment, the day scholars are sometimes troubled by volatile home environment such as parents' misunderstandings, sometimes ending up in divorce. Students in day schools, but staying in hostels also faces enormous challenges (Okonkwo, 2010).

2.8 Performance of Students in Boarding Senior Secondary Schools

The aim of boarding school is the development of holistic education in all those who come under its influence maximally for successful living in that society (Taiwo, 1980). Of course, man is a multifarious ability being. Therefore, education which is highly susceptible to values, capabilities, attitudes, skills and indeed potentials, the boarding school system offers extensive and intensive influences through well - structured programmes and activity cycle that ensures effective reception. The boarding system has its merits among which is the supervision of students' habit and development after school hours. It affords principals and teachers the opportunity of influencing students discipline, world–view and intellectual habits among others. Boarding students should be supervised from time to time by competent staff. Their hostels should be inspected weekly and prizes awarded to the best house in order to encourage the habit of cleanliness and orderliness among others. (Shekarau, 1995).

The boarding system reduces compartmentalization because academic studies are blended with other activities, such as sports. This natural blend increases the appeal for both pursuits, provides for stability, not available in families where one or both parents travel

or are virtually never at home due to work; safety of individuals residing in boarding houses are relatively higher than non-boarders; students enjoy more challenges and face fewer harmful distractions. Students learn to govern their own behaviour. This enhances students' development and also enhances their appreciation of parents: Where earlier generations have attended the mammon, a family tradition is sustained-becoming an additional source of motivation. The above benefits clearly testify that the boarding school system holds potentials for development of broad based capabilities; a rendezvous where children from diverse cultural and ethnic backgrounds could learn to live and work together, thereby helping to foster national consciousness and cohesion (Edem, 1987; Javier & Brian, 2003-2006).

According to Lewin (2004) access to and success in secondary schooling will continue to be highly correlated with subsequent employment and income distribution patterns. Low enrolment in secondary education in East Africa may reflect lack of supply of schooling, the opportunity cost of attending school and factors such as distance from school (Raja and Burnett, 2004). Major determinants for enrolment include household income, schooling costs, presence of schools, transportation, community involvement, and education quality and relevance (Raja and Burnett, 2004). As secondary schooling expands, the case of subsidizing boarding secondary schools weakens. Schools can be located within daily travel distances for the majority of school age children (Lewin, 2006). Selective boarding secondary schools are common in Africa, but can double or triple the per pupil cost and results in much lower enrolment rates than would otherwise be the case.

According to Holsinger, Jacob and Migimu (2002), in Uganda many boarding school meals are frequently badly managed or badly prepared, despite the adequacy of the diet. Kitavi and Westhluzan (1997) reported overcrowding in dormitories in boarding schools, which sometimes double the originally intended number of students being accommodated. In spite of those problems, an average boarding student enjoys living and studying conditions which are luxurious, compared to the hardship and squalor endured by many day students. According to Clarissa (1992), Desarrollo (2007), Evans (1999) Jagero (1999) Scharff and Brady (2006) and Oloo (2003), the greatest problem faced by day students was home environment that was not conducive to reading. Other problems include: long distances from school, bad company at home, lack of proper accommodation and proper diet.

According to reports by African Almanac (2004) and studies by Holsinger, Jacob and Migimu (2002) Chediel, Sekwao and Kirumba (2000) Jagero (1999) and Oloo (2003), the majority of day secondary schools continued to perform poorly in the national examinations compared to boarding secondary schools. For example according to Kisumu District Education office, about 65% of schools which were ranked in the top ten in the district from 2005 to 2008 in the National Examinations were boarding secondary schools. The study provides information that could be used by teachers, head teachers, parents, Parents' Teachers Association (PTA), Board of governors (BOG), Ministry of Education on ways of improving performance of day and boarding secondary schools in Kenya.

In China, boarding secondary schools are very useful because they help to uplift the educational conditions of the students, especially those whose parents are migrant workers (Government of China, 2007). In China, there are 40 million children whose parents

are working away from home. With their parents' physical absence, most of those children struggle with their lives, especially towards education and personal development (Government of China, 2007). The Chinese government has a plan to establish additional government boarding schools that are least expensive so that most Chinese parents can afford them. Most parents in China believe that boarding high schools can help students to be fully educated at the same time to be guided in forming and shaping the personal characteristics of the students to become responsible and good to the society. Studies by Jagero (1999) and Holsinger, Jacob and Migimu (2002), found out that problems faced by boarding students included overcrowding in the students' hostels, inadequate and low quality food, scarcity of water, noise from class or neighbouring classes. Other problems include lack of good lighting system, interference from friends in the same or other classes and disturbances from non- human activities like mosquitoes.

According to Javier & Brian (2003-2006), children trained in a boarding school environment are expected to be highly motivated; self-disciplined and well mannered; able to co-exist and interact in meaningful ways; well blended and comprehensive students; stable and integrated to family and community; mature and academically polished, hence better prepared to be adults in today's world. They note that in boarding schools: daily co-existence leads to friendships, not just among students, but also with teachers and other personnel; low student-teacher ratio (40:1) therein makes for efficient and effective teaching and learning, thereby increasing good performance.

Yet, scholars (Edem, 1987; Fafunwa, 1974; Taiwo. 1980; Kosemam & Okorosaye-Orubite, 2002; Javier & Brian, 2003-2006) identified a positive correlation between boarding system and holistic education development. Indeed, education development stands a

good chance to gain from the reintroduction and effective administration of the boarding school system. For example, Edem (1981) in his book on School Housing Policies: Day Schools versus the Boarding System of Students in Kaduna State stated its problems and needs. He saw the schools in particular as a place which ‘‘provides a specialized environment for the students’ potential experience’’.

The boarding school experience is singular and dynamic. It refuses to limit learning to the classroom or the conventional academic day. Sharing a boarding school campus twenty-four hours a day, seven days a week with friends, teachers, coaches and mentors makes the difference. Students learn that diversity is the cornerstone of community and that every person has a valuable contribution to make. Outside the classroom, boarding school students learn about themselves by trying new things and taking risks. Boarding schools offer a unique opportunity for international students to meet and make friends with students from other cultures. They are exposed to people from different religious, geographic, and linguistic backgrounds. They will make friends with people that they would usually not have a chance to meet. Being part of a boarding school community can help them overcome cultural barriers associated with living outside their country. Boarding school students ("boarders") normally return home during the school holidays and, often weekends, but in some cultures may spend the majority of their childhood and adolescent life away from their families.

One of the reasons sometimes stated for sending children to boarding schools is to develop wider horizons than their families can provide. A boarding education is geared towards good academic performance combined with personal development to produce a well-rounded individual with the qualifications and skills sought by universities and employers alike. It restricts the movement of students

under the control of the school authority, thereby reducing the level of deviant behaviour, prostitution and other vices. The boarding schools, on the other hand, according to Wolfenden (1948) asserted that boarding students have common loyalty and genuine feeling of belonging to the school community. The system breeds students who have feelings of being personally concerned about the success or failure of the school. A boarding school child learns to conform, at an early age, to the habits and practices of the school community. Wolfenden also observed that these virtues will eventually be extrapolated to the larger society.

Some of those who opposed the de-boarding exercise believed that day school system can breed indiscipline among students. They also believed that the boarding school students have maximum security from societal hazards such as accidents and diseases than the day students. There are those who believed that the day secondary schools are only good for male students. Such individuals argued that when girls of secondary school age leave their homes to school every day, there is likelihood for her to be abused sexually and socially by some unruly elements.

New research proves that boarding schools serve a diverse body of motivated and well-rounded students, who study and live in inclusive academic communities, where they learn about independence and responsibility. In addition to the benefits of serious education and dedicating significantly more time to their studies, boarding school students participate more in extra-curricular activities than other students. While academic expectations are high, there is intensive support and encouragement to assist students to meet those expectations.

One of the proponents of de-boarding system, Christopher (1982), in trying to point out the effect of the system, is of the view that ‘‘apart from the few benefits that may occur from the day schools, one cannot be blinded to the immense educational value that students in the boarding school acquire’’. Thus, he further argued ‘’Besides the academic work, students who live in boarding houses enjoy and grow up in the disciplined, and regulated life later’’. It is, of course, a fact that life in the boarding institutions is well regulated. For example: there is time for prep, games, eating, attending library etc. Orgam (1990) seems to share the same view in his article, ‘We are losing by abolishing boarding schools.’

2.8.1 Education and the Boarding School system

Philosophy suggests that the foundation of a realizable National Policy on Education should be constructed on well identified national ideology (Akinpelu, 1981). The Nigerian philosophy on education among others, avers to produce comprehensive and practically responsive school programmes that fully integrate the individual into the community. Taiwo (1980) contends that if the education of the youth has to acquire appropriate capability enough to meet recent socio-economic challenges, then the boarding school is quite an influence to consider.

Education is susceptible to influence, as Okeke (2004) contends, particularly from the substructure and reveals the need for conscious planning if influence is to be effective and maximal. As a definition, Okeke's conception that education encourages learners’ participation also requires an enabling environment that could stimulate individual capabilities towards effective integration into the

society. Our continuing success lies in our ability to develop an enabling environment replete with appropriate infrastructures capable of galvanizing learning habits and attitudes for survival at home and abroad.

Colonial preference for boarding school was in tune with the same desire: ensuring total and complete indoctrination, regular and systematic training of children. Fafunwa (1974:89) puts it this way: 'Most missions preferred children to live with them (boarding schools), for a number of reasons:

(1) It would make indoctrination total and complete.

(2) It would guarantee regular attendance and systematic instruction.

(3) It would allow slave-owners (parents) who wanted to lighten their responsibility to do so more readily...'

It was not only the missions that preferred boarding schools. Traditionally, Nigerians liked any form of apprenticeship. Hence, colonial decision for boarding schools could have been a product of careful appreciation of the typical African (Nigerian) learning character. For instance, apprenticeship training, where children live and study latitudes and longitudes away under master craftsmen, was not only a system of pedagogy, but also the Nigerian (traditional) learning character which was cherished and transmitted from generation to generation (Fafunwa, 1974). This closely approximates boarding school education. Apprenticeship was not meant, as Fafunwa asserts, to throw children away but it was a conscious attempt to check mental and physical indolence, truancy, absenteeism, and gross indiscipline.

Boarding system of education should be able to curb the ugly situation that may arise in the school compound. This is conditioned to the proper handling and supervision of the principal and staff. All students should be placed under the strict watchful eyes of the principal. This will help a great deal to reduce the students' ugly behaviours that are normally characterized by the adolescent age in which the majority of students in the secondary schools are found.

The routine that the boarders follow helps to teach them time management and keeps them busy.

2.8.2 Performance of Students in Day Senior Secondary Schools

(De-boarding and School Administration in Kano State)

"The De-boarded or Day school is legitimated on the provision of Section 4, Sub-section 25(1) of the National Policy on Education which stipulates that with the dramatic explosion of the demand for secondary education, the possibility of making (the) Junior (and Senior) Secondary School neighbourhood day schools should be given high priority, subject to special attention being given to some aspects in their planning (NPE, 1981, p. 20)."

De-boarding of secondary institutions by the various state governments is a response to the 1976 National Policy on Education which states that the principles behind the policy is an outgrowth of nation's desire to pursue egalitarianism, a policy that gives everybody in the society equal opportunity to develop to the fullest. With this, they envisaged that there would be more number of children aspiring for admission into secondary institutions, especially with the products of the Universal Basic Primary Education (UBE).

It was; therefore, felt that schools must be de-boarded in order to allow more intakes. Edem (1981) has analysed some figures to show that the cost of boarding schools is twice the cost of running day secondary schools.

The idea of a day school simply implies an arrangement whereby students reside off the school premises and go to and leave from school every day at fixed hours of the day. Such an arrangement frees the schools from the responsibility of providing for students; meals for which the school is responsible (Shuaibu 1980). The establishment of day secondary schools is not a new innovation in the history of educational development in this country. It started as far back as 1921. In the early days of secondary education in Nigeria, most schools ran day and boarding systems side by side. However, since the attainment of political Independence in Nigeria, the demand for Western education became so accelerated that today it is almost insatiable. Several factors such as the creation of more states, the introduction of free primary education and the dearth of high level manpower in most of the newly created states among others, are responsible for this. One of the emphases is towards the day secondary school system, which is presently being embarked upon by many state governments in the country (Bello, 1981). The crave for post-primary education calls for a critical look at the situation to see how best we can provide meaningful education to an ever increasing number of students at a time when the economic resources of the country are diminishing.

Some people have even suggested that the money used in maintaining boarding secondary schools should be utilized in providing day secondary schools in order to make education available to a wider spectrum of the society. The former Governor of Kano State,

Alhaji .A. Dawakin Tofa, in the New Nigerian newspaper's editorial of 25th November 1981, stated that the only way education as an expensive venture can be achieved is through de-boarding so that many more children will have the opportunity of entering secondary schools. A committee on public schools in England observed that day school students are initiated in the most natural way to the problem of citizenship. This is because they are always in touch with what is happening in the society, and in contact with all societal institutions and functions. They are also in contact with their parents and other members of their family.

Day schools create an educational opportunity for more students where living accommodation is no longer the constraint; efforts of both government and community that are desirous of education for their children could jointly be directed at building more classrooms which could permit more of their children to receive secondary education. Day schools are believed to reduce the overall costs of running schools for both the parents and the government. First of all, it reduces the burden of boarding fees from parents so that they can concentrate on buying reading, writing and clothing materials for the children onwards. This will make it possible for some parents who would not have been able to combine the payment of boarding with the tuition fees, to now send their children to secondary schools. On the part of the government, the exorbitant amount of money usually spent on hostel accommodation and feeding could now be diverted to building more classrooms, which in turn will make room for more students to receive secondary education.

Consequently, frequent rioting in boarding schools on account of poor feeding or poor accommodation would be reduced, since the students would have to live and eat in their individual homes and hence direct their grievances in food or accommodation individually to their parents, and not to principals. It will place more responsibility for the proper upbringing of young secondary school students on the parents rather than on the school. Up till now, it is a common occurrence that when students misbehave outside the school, the teachers are to blame. But the new innovation of day secondary schools would hopefully transfer the responsibility of discipline and proper upbringing first to the parents who will rightly share in any blame arising from students negative behaviours observed (1981).

Day secondary school system would make it possible for students to be more useful, as helping hands, to their parents after school hours. The issue of falling standards under the influence of moral decadence and general character pollution as a result of bad company may be reduced since students would be directly under the supervision and guidance of their parents most hours of the day, rather than living within and copying drug addicts and hemp smokers. More so, the National Policy on Education and the Nigerian Constitutions speak of equal rights of every child to be educated and of egalitarian society, where equal rights to freedom can be guaranteed. It has been noted that no government, however rich can cater for the entire educational needs of her citizens while continuing to maintain the highly expensive and selective boarding system, hence the need for the establishment of the day senior secondary schools (Garba, 1984).

2.9 Empirical Studies Review

The issues raised here are works done by other scholars which are related to the title of this study:

Adetunde, A. I, Asare,B. (2009) in their work 'Comparative Performance Of Day And Boarding Students In Secondary School Certificate Mathematics Examinations: A Case Study Of Kasena-Nankana and Asuogyaman Eastern Region. Districts Of Ghana' to investigate the performance of a student being a day student or boarding student in relation to his/her Senior Secondary School Mathematics examination. He adopted the use of an ex-post facto research design, using a multistage probability proportion to size (MPPS) method to select the samples from the population used in this study. Out of 11 Secondary schools in the two districts 4 on the basis of (a) single sex school (b) public mixed school (c) private school (d) government co-educational school whose results were consistently released for years were selected for the study. The latter used the sample size of candidates' grades of twelve boarding senior secondary schools with permissible credit passes (A1; B2; B3; C4; C5 and C6) in their core subjects examinations and twelve day senior secondary schools with permissible credit passes (A1; B2; B3; C4; C5 and C6) in their core subjects in Kano Metropolis. Since the population of the Day registered candidates under study was 23,969, relatively larger than the Boarding registered candidates which were 16,369, a uniform sampling of 12 Schools were randomly picked from the Day Schools called sample and was investigated. The population is sampled through the adoption of random sampling from the twenty six (26) day schools. Hypothesis was tested while the analyses of data were presented using t-test for differences between sample means. The study revealed that there was a significant difference between a student being a boarding student and day student.

For the statistical analysis two schools each were selected from each district. Empirical descriptive research was carried out ex-post facto, and a multi-stage probability proportion to size (MPPS) sampling technique was used. The study revealed that: There was no significant difference between a student been a boarder or day student in terms of the performance in mathematics. There are some boarding students who will not study because there is no control over them. There are however day students who will have no choice but to sit behind their books and study because their parents say so. The role of parents on day students is a factor for the insignificant difference in their performance otherwise boarding students should have done better than the day students.

It was recommended that Government should encourage the hall tutors or house master, to be given counseling to the boarding students so that they may know the need why they are in boarding school. The parent Teacher Association should also do likewise.

The work of Adetunde, A. I, Asare,B. is related to this researcher's work because it investigated 'Comparative Performance of Day And Boarding Students In Secondary School Certificate in Mathematics', one of the core –subject to investigate the performance of a student being a day student or boarding student in relation to his/her Senior Secondary School Mathematics examination. They adopted the use of an ex-post facto research design, using a multistage probability proportion to size (MPPS) method to select the samples from the population used in this study.

(a) single sex school (b) public mixed school (c) private school (d) government co-educational school whose results were consistently released for years were selected for the study. The scope of this study was restricted to the schools within the urban area that have presented students for WASSCE for at least ten years in Kano Metropolis due to the large number of Day and Boarding Senior Secondary Schools in the metropolis: The researcher did not cover all the day senior secondary schools in Kano metropolis, which consists of seven Local Government Areas. Samples were randomly drawn from day and boarding secondary schools:

This researcher used Samples randomly drawn from Day and Boarding Secondary Schools:

1) Government Colleges and Private-owned (Voluntary agency) Schools in Kano metropolis.

2) Co-educational and single sex schools in Kano Metropolis.

3) Schools in the urban area of Kano Metropolis.

This selection is to reflect the true character of all the Day and Boarding Senior Secondary Schools in Kano metropolis. For the purpose of this study, the twelve (12) senior secondary boarding schools in the metropolis would be selected while a random sampling of twelve day (12) senior secondary schools in the metropolis would be selected. While the former used tested Hypothesis and the analyses of data were presented using t-test for differences between sample means.

This researcher used and answered Research Questions and the analyses of data were presented using simple percentage statistical tool to obtain mean score and frequency distribution table showing the extent of degree to measure student's performance

and mean percentile score was used to estimate the relationship between the variables of the study. Both study revealed that there was a significant difference between a student being a boarding student and day student. However, the former revealed that there was no significant difference between a student being a boarder or day student in terms of the performance in Mathematics. There are some boarding students who will not study because there is no control over them, while this latter study revealed that the pattern of the results of Mathematics from 2005-2011 was in favour of the boarding schools. Though, some individual day schools performed better than others above 50%.

The low level performance in the urban areas of Kano Metropolis could be attributed to congestion of students in classes, inadequate inspection by the State Ministry of Education, inadequacy of facilities and automatic promotion. The implication of running day system of education in Kano Metropolis therefore is that many students might not be qualified for admission into higher institutions in the country.

The former recommended that Government should encourage the hall tutors or house master, to be given counselling to the boarding students so that they may know the need why they are in boarding school. The parent Teacher Association should also do likewise. The latter however recommended that the State Ministry of Education should provide more infrastructural facilities to decongest large classrooms, provide more regular inspection to Schools, and reverse the system of automatic promotion in all state

schools in Kano with the view to maintaining quality. Parents are urged to be part and parcel of the school system by lending a helping hand to government.

Both empirical study and this research work are valid because despite the differences in the process, they have close similarities in content, finding and recommendations to tackle the out-cry on the persistent poor and unpromising performances of many day and boarding senior secondary school students in Kano Metropolis, Nigeria specifically, in the past six years (2005/2006, 2006/2007, 2007/2008, 2008/2009, 2009/2010, 2010/2011) in Senior Secondary School Certificate Examinations (SSCE) conducted by West Africa Examination Council (WAEC) made educationists and the government policy makers and the researcher wonder whether the schools are measuring up to the expectations. However, several factors among the numerous problems confronting Day and Boarding Senior Secondary Schools in Kano Metropolis will without doubt positively or negatively affect students' performance in WAEC examinations.

Adeyemi, T.O (2010) in his work 'A Comparative Study of Students' Academic Performance in Public Examinations in Secondary Schools in Ondo and Ekiti States, Nigeria' investigated students' academic performance in public examinations in Secondary Schools in Ondo and Ekiti States, Nigeria. The instrument used to collect data for the study was an inventory while the data collected was analyzed using percentages, chi-square statistic and then t-test. It was found that the performance of student in the Junior Secondary Certificate (JSC) and the Senior Secondary Certificate (SSC) examinations was low. Based on this, it was recommended that the

educational system needs to be revamped and made result oriented in the two States. The teaching and learning processes in all schools in the two States should be re-examined with the aim of improving the quality of performance of students in JSC and SSC examinations. The study population comprised all the 281 secondary schools in Ondo State, Nigeria and the 171 secondary schools in Ekiti State, Nigeria. Out of this population, a sample of 240 Secondary Schools in Ondo State and 146 secondary schools in Ekiti State was taken.

The method of selection was by stratified random sampling technique taking into consideration the location of the school on the basis of urban and rural location. The sample accounted for 85% of the study population in each of the two States. Out of the 51,380 students who registered for the Junior Secondary Certificate (JSC) examinations in 2009 in Ondo State, Nigeria, 20,160 students who obtained credit and above, that is, grades A, B and C in the examinations were selected for the study. In Ekiti State, Nigeria, out of the 40,825 students who registered for the Junior Secondary Certificate (JSC) examinations in 2009, 38,824 students who obtained credit and above, that is, grades A, B and C in the examinations were selected for the study. In the Senior Secondary Certificate (SSC) examinations, out of the 30,262 students who registered for the examinations in 2009 in Ondo State, Nigeria, 16, 035 students who obtained credit and above, that is, grades A1; B2; B3; C4; C5 and C6 in the examinations were selected for the study. In Ekiti State, Nigeria, out of the 21,634 students who registered for the Senior Secondary Certificate (SSC) examinations in 2009, 11,570 students who obtained credit and above. The method of selection was by purposive, multi-stage and stratified random sampling techniques.

The instrument used to collect data for the study was an inventory titled the Secondary Schools Academic Performance Inventory (SSAPl). The inventory requested among other things, data on enrolment figures, sex of school, type of school, number of classes, number of teachers and grades obtained by students in English Language, Mathematics and Integrated Science in JSC examinations for the years 2005 to 2009 and in English Language, Mathematics, Physics, Chemistry and Biology in SSC examinations for the years 2005 to 2009 in Ondo and Ekiti States, Nigeria. The latter used sample size of candidates' grades of twelve boarding senior secondary schools with permissible credit passes (A1; B2; B3; C4; C5 and C6) in their core subjects examinations and twelve day senior secondary schools with permissible credit passes (A1; B2; B3; C4; C5 and C6) in their core subjects in Kano Metropolis. Since the population of the Day registered candidates under study was 23,969, relatively larger than the Boarding registered candidates which were 16,369, a uniform sampling of 12 Schools were randomly picked from the Day Schools called sample and was investigated. The population is sampled through the adoption of random sampling from the twenty six (26) day schools.

The data collected were analyzed with the use of percentages, Chi-Square test and the t-test. It was recommended that the educational system in the two States needs to be revamped and made result oriented. The Ministries of Education in the two States should also intensify more efforts in conducting regular short visit and routine inspection to schools in a bid to monitor the performance of students in their various examinations.

The similarities in these two areas of study by Adeyemi, T.O (2010) in his work ‘A Comparative Study of Students' Academic Performance in Public Examinations in Secondary Schools in Ondo and Ekiti States, Nigeria’ and this work titled ‘Analysis of Students’ Performance in West African Senior Certificate Examinations in Boarding and Day Secondary Schools in Kano Metropolis, Nigeria (2005-2011)’ investigated Students' Academic Performance in Core –Subjects Examinations in Secondary Schools in Nigeria. As a descriptive research, the former used the study population which comprised of all the 281 secondary schools in Ondo State and the 171 secondary schools in Ekiti State, Nigeria. Out of this population, a sample of 240 secondary schools in Ondo State and 146 secondary schools in Ekiti State was taken. The method of selection was by stratified random sampling technique. The instrument used to collect data for both study was an inventory while the data collected was analyzed using percentages, chi-square statistic and then t-test. The latter researcher concentrated on the analysis of students’ performance in West African Senior Certificate Examinations in Boarding and Day Secondary Schools in Kano Metropolis.

The scope of this study was restricted to the schools within the urban area that have presented students for WASSCE for at least ten years in Kano Metropolis due to the large number of Day and Boarding Senior Secondary Schools in the Metropolis: The researcher did not cover all the Day Senior Secondary Schools in Kano Metropolis, which consists of seven Local Government Areas. Samples were randomly drawn from day and boarding secondary schools:

This researcher used samples randomly drawn from Day and Boarding Secondary Schools:

1) Government Colleges and Private-owned (Voluntary agency) Schools in Kano metropolis.

2) Co-educational and single sex schools in Kano Metropolis.

3) Schools in the urban area of Kano Metropolis.

This selection is to reflect the true character of all the Day and Boarding Senior Secondary Schools in Kano metropolis. For the purpose of this study, the twelve (12) Senior Secondary Boarding Schools in the Metropolis would be selected while a random sampling of twelve day (12) Senior Secondary Schools in the Metropolis would be selected. The former used the method of selection by stratified random sampling technique taking into consideration the location of the school on the basis of urban and rural location. The sample accounted for 85% of the study population in each of the two States. The method of selection was by purposive, multi-stage and stratified random sampling techniques.

The instrument used to collect data for both study was an inventory titled the Secondary Schools Academic Performance Inventory (SSAPl). The inventory requested among other things, data on enrolment figures, sex of school, type of school, number of classes, number of teachers and grades obtained by students in English Language, Mathematics and Integrated Science in JSC examinations for the years 2005 to 2009 and in English Language, Mathematics, Physics, Chemistry and Biology in SSC examinations for the years 2005 to 2009 in Ondo and Ekiti States, Nigeria. These subjects selected for both research are core subjects in the Nigerian

secondary schools' curriculum (Federal Republic of Nigeria, 1998). The data collected were analyzed with the use of percentages, Chi-Square test and the t-test.

The latter researcher used and answered Research Questions and the analyses of data were presented using simple percentage statistical tool to obtain mean score and frequency distribution table showing the extent of degree to measure student's performance and mean percentile score was used to estimate the relationship between the variables of the study. The low level performance in the urban areas of Kano Metropolis could be attributed to congestion of students in classes, inadequate inspection by the State Ministry of Education, inadequacy of facilities and automatic promotion..

The data collected were analysed using simple percentages with frequency distribution tables showing the extent of degree to measure students' performance and mean score to estimate the relationships between the variables of the study. It was found that the performance of students in the Day Senior Secondary Schools in West African Senior Secondary Certificate Examinations (WASSCE) with particular reference to English, Mathematics, Sciences, and Home Economics for the years 2005 to 2011 in Kano Metropolis of Kano State was low. There was no year where the performance level of Day Senior Secondary Schools in Kano Metropolis reached 50% in any subject from 2005-2011.

The study revealed that the performance of student in the Junior Secondary Certificate (JSC) and the Senior Secondary Certificate (SSC) examinations was low in Ondo and Ekiti States, while in the Senior Secondary level of Ondo and Ekiti the findings shows the

picture of secondary school in Ondo and Ekiti States Nigeria where the performance level of students in public examinations had been below expectation especially in the major science subjects at the time when the yearnings an aspirations of the Federal Government are towards technological development. This suggests that the objectives of secondary education in the, FRN (2004) which among other things, included the preparation of the students for higher education as not been fully achieved in the two States.

While the latter revealed that there was a significant difference between a student being a boarder and a day student. The result indicated that the performance level of the Boarders in West African Senior School Certificate Examination in English Language and Mathematics was better and higher than that of the day students in Kano Metropolis from 2005 to 2011. Therefore, the Boarding Schools' performance level was greater than that of the Day Schools' performance. Notably, there was no year where the academic performance level of Day Senior Secondary Schools in Kano Metropolis reached 50% in any core subject from 2005 to 2011.

The low level performance in the urban areas of Kano Metropolis could be attributed to congestion of students in classes, inadequate inspection by the State Ministry of Education, inadequacy of facilities and automatic promotion. The implication of running day system of education in Kano Metropolis therefore is that many students might not be qualified for admission into higher institutions in the country.

The non significance difference found in these studies in the performance of students in JSC examinations in Ondo and Ekiti States, Nigeria implies that the performance of students in the examinations in the two States was almost at par. This suggests that little or no improvement as occurred in the performance level

of students in the two States over the year. The low level performance of students in the examinations further implies that the inspection of schools by the Ministries of Education in the two States might not have been adequate and effective as expected.

The former recommended that the educational system in the two States needs to be revamped and made result oriented. The Ministries of Education in the two States of Ondo and Ekiti should also intensify more efforts in conducting regular short visit and routine inspection to schools in a bid to monitor the performance of students in their various examinations. The latter recommended that the State Ministry of Education should provide more infrastructural facilities to decongest large classrooms, provide more regular inspection to Schools and reverse the system of automatic promotion in all state schools in Kano with the view to maintaining quality. Parents are urged to be part and parcel of the school system by lending a helping hand to government.

2.10 Summary

The uniqueness of this study is to analyse West African Senior Certificate Examination of Boarding and Day Senior Secondary School Students which will help to ascertain among other things that in Kano Metropolis, the Boarding and Day Senior Secondary School Students must feel comfortable in their environment of study, in moderately sizeable classrooms and face out congestion, and

these facilities will provide a good balance between school responsibilities and personal life activities. The essence of creating and running secondary schools, according to FRN (2004) Nation Policy on Education is to prepare candidates for admission into higher institution in the country. Some factor affecting performance as observed at the course of this study are health, motivation, learning problems, psychological problems, family social status, self -esteem, mental strain, social, economic, healthy relationship between students and teachers, personal factors (service facilities) teacher factor (methodology) and environmental factors. Others are specifically, students' over-population, shortage of teachers, incessant strike, work –to – rule and higher teacher efficiency.

Empirical studies carried out have justified that lack of modern equipment and laboratories are major causes of poor performance in the Science subjects in Secondary Schools in Nigeria, the same is true of schools in Kano Metropolis, Nigeria. The problem of downward trend in academic performance of students has often been attributed to a number of factors among which are: the principal's leadership style, teacher quality, home factors, government factors and non-provision of educational resources (human, material, financial, physical resources). However, this study was limited to the provision of human and material resources as potent factors for students' performance.

However, it has been observed that secondary schools in Kano State do not have the required number of teachers (both in terms of quantity and quality). This is evident in high student-teacher ratio in the schools. Personal observation has also shown that material resources are in short supply in the schools. The poor status of material facilities in the schools is not unconnected with the dearth of fund

in the system. A close look at the schools and what goes on there shows that nothing good can come out of most public schools as they do not have facilities and adequate and appropriate human resources to prepare candidates for West African Examination Council (WAEC) examinations (Owoeye & Yara, 2011).

The availability of educational resources (human and material) is very important because of its role in the attainment of educational objectives. Human resources are a unique educational input necessary for the overall development of skill acquisition and literacy of the students. Human resources within the educational system can be classified into teaching and non-teaching staff. Availability of these classes of resources is needed to achieve excellence in the system. The Federal Republic of Nigeria (2004) stated that the broad goal of the secondary school education is to prepare individuals for: "useful living within the society and highers education".

It can be inferred from the literature so far that both human and material resources have positive significant relationship with academic performance. However, literature has also shown a contradictory finding on whether or not private (boarding) schools perform than public (day) schools.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research design and methodology employed by the researcher in collecting data for conducting the research, where the analysis of students' performance in WAEC (boarding and day) in senior secondary schools in Kano Metropolis was examined. This chapter dealt with the following issues:

1. Research Design
2. Population
3. Sample and Sampling techniques
4. Instrumentation

5. Validity of Instrument

6. Reliability

7. Data Collection Techniques

8. Statistical Methods of Data Analysis

3.2 Research Design

This study was designed to ascertain students' performance in (boarding and day) senior secondary schools in WAEC in Kano Metropolis (2005-2011). The descriptive survey research design was used for the study.

3.3 Population

The research was carried out in Kano Metropolis. The population of this study comprised of all the twelve (12) Boarding Senior Secondary Schools with 16,369 registered candidates from 2005-2011and twenty-six (26) Day Senior Secondary Schools with a total of 23,969 registered candidates from 2005-2011 in Kano Metropolis, Kano State, Nigeria. These schools are Boarding and Day. There are different types of schools which cut across Private, Government and Voluntary Agency Schools. There are single-sex and mixed schools.

They offer Sciences and Technical Studies, Arts, Commercial. The Boarding schools are mainly in the Urban areas of Kano Metropolis, that is, Dala, Nassarawa and Kano Municipal. The researcher, however used the WAEC grading of candidates who scored A1-C6 permissible credit passes in their core-subjects in Senior Secondary Boarding and Day Schools. Also, she considered the Senior Secondary Boarding and Day Schools which have presented candidates for WAEC in ten consecutive years.

3.4 Sample and Sampling Procedure

The sample size of this study is the candidates' grades of twelve boarding senior secondary schools with permissible credit passes (A1; B2; B3; C4; C5 and C6) in their core subjects examinations and twelve day senior secondary schools with permissible credit passes (A1; B2; B3; C4; C5 and C6) in their core subjects in Kano Metropolis. Since the population of the Day registered candidates under study was 23,969, relatively larger than the Boarding registered candidates which were 16,369, a uniform sampling of 12 Schools were randomly picked from the Day Schools called sample and was investigated. The population is sampled through the adoption of random sampling from the twenty six (26) day schools. These sample size of schools were used because (Adetoro, 1997) stated that the larger the sample size, the nearness the truth and facts about the population inferred.

The entire private and public senior secondary boarding schools in Kano Metropolis were used as listed in table 3.1

Table 3.1: List of Senior Secondary Boarding Schools in Kano Metropolis

(2005-2011)

S/N	NAMES OF SCHOOLS	No of Candidates
1.	St. Louis Secondary School, Bompai, Kano	580
2.	Federal Government College, Zaria Road, Kano	1678
3.	Government Girls College, Kano (W.T.C)	2808
4.	Government Girls College, Dala	1518
5.	Government Arabic College, G/Dutse	1189
6.	Science and Technical College, Kofar Nassarawa, Kano	3534
7	Yandutse College, Kano	320
8.	Al- Ansar College, Rijiyar Zaki, B.U.K New Site (Day & Boarding)	610
9.	Dr, Hassan Gwarzo Secondary School, Sallari, Kano (Day & Boarding)	585
10.	Shekara Girls College, Kano	2764
11.	Turkish International College, Kano	450

S/N	NAMES OF SCHOOLS	No of Candidates
12.	Divine Daughters College, Kano	336
	TOTAL	**16,369**

Source: (Ministry of Education, Kano, 2012)

The rationale for using all the Boarding Schools in the urban areas of Kano Metropolis is:

to be unbiased in the selection.

to maintain the idea that the main body of statistical theory is built around the idea of randomness .

to increase the precision of the result and finally,

to access the valid level of this precision and the degree of uncertainty of the conclusion.

Table 3.2 List of randomly selected Senior Secondary Day Schools in Kano Metropolis (2005-2011) is as arranged below:

S/N	NAME OF SCHOOL	No of Candidates

1.	Rumfa College, Kano	1708
2.	Government Secondary School, Kawaji	2678
3	Government Secondary School, Stadium	3544
4	Government Girls'Arabic Secondary School, Kawaji	1984
5	Government Secondary School, Goron Dutse	2983
6	Government Secondary School, Gwammaja	2455
7	Government Secondary School, Kwakwashi	3034
8	Government Girls' Secondary School, Gwale	428
9	Government Girls' Secondary School, Maikwatashi	2235
10	Arabic Day Secondary School, Bukavu	890
11	St Thomas Secondary School, Airport, Kano	1673
12	Government Girls' Secondary School, Giginyu	357
	TOTAL	**23,969**

3.5 Instrumentation

The instrument used to collect data for this research was a self- designed inventory titled Secondary Schools Academic Performance Inventory (SSAPI). The grades obtained by students in West African Senior Secondary Certificate Examination (WASSCE) results were used with particular reference to English, Mathematics, Biology, Chemistry, Physics, Geography, History, Home Economics for the years (2005 – 2011) in Kano Metropolis in Kano State, Nigeria. These subjects are core subjects in the Nigerian Secondary School Curriculum (Federal Republic of Nigeria, 1998). The researcher used the boarding and day senior secondary schools results under study and percentile summary of the State results from Kano Educational Resource Department (KERD). The raw grades (A1-C6) were used because the researcher believes that they would provide better and authentic information about the performance of the boarding and day senior secondary schools in West African Senior School Certificate Examinations (WASSCE) in Kano Metropolis.

3.6 Validity of Instrument

Validation of an instrument refers to making sure that an instrument is actually measuring what it is meant to measure. Therefore, the instrument used for the collection of data for this study was based on the researcher's initiative. It was verified for content and face validity as supported by insight from the related literature reviewed on the subject in chapter two (2). However, the research instrument was validated by three experts; a statistician and my two supervisors - lecturers in the Department of Educational Foundation and

Curriculum, Faculty of Education, Ahmadu Bello University (ABU) Zaria, Kaduna State, Nigeria. Recommendations, as regards methodology, collection of instrument, the arrangement of frequency tables and chronological arrangement of headings and titles and referencing were made by the supervisors and based on their suggestions, necessary corrections were made in the body of the work. Some items were such as Hypotheses, Statistical data analysis, Questionnaires, and Research Methodology as adopted by the researcher were dropped at different stages, while some were reframed as suggested by the Supervisors. Their valuable guidelines and constructive criticisms were taken into consideration.

3.7 Reliability of Instrument

The reliability of the instrument was carried out by simply converting results/grades collected into simple percentage for the comparative data table of Boarding Senior Secondary School Students and Day Senior Secondary School Students analysed to obtain the mean score of the research questions. Statistics of West African Senior Certificate Examinations results covering the years under study-2005-2011 were obtained and provided to justify the facts and figures of students' performances. The research instruments also were collected from the Ministry of Education and particular school principals to authenticate their genuineness. The instruments were confirmed as authentic by the supervisors before they were tested and analysed and conclusions were drawn for the study.

3.8 Data Collection Techniques

The researcher obtained Letter of Introduction form the Department of Educational Foundation and Curriculum, Faculty of Education, Ahmadu Bello University, Zaria addressed to whom it may concern, This paved way for the researcher at the State's Ministry of Education and the schools visited to access valuable and relevant information for the research purpose only.

The researcher visited the different Institutions personally with the Letter of Introduction and directly obtained the data for analyses. The researcher had to make return visits to some of the institutions while the Ministry of Education- Kano State Educational Resource Department attended to her immediately and provided her with all statistics of Senior Secondary Schools West African Senior Secondary Certificate Examinations of all the schools in Kano State. The information relevant to the study was extracted from the whole.

In this study, two methods of data collection techniques were used.

i.) A Compilation of the percentile Statistics of State WAEC results 2005-2011 from Ministry of Education (Kano Educational Resource Department) Kano.

ii.) Raw grades from 2005-2011 WAEC Core-subject results from the entire (12) Boarding Senior Secondary Schools and (12) sampled Day Senior Secondary Schools respectively in the urban areas of Kano Metropolis. These were collected from the principals of each school using the self-designed inventory titled the Secondary Schools Academic Performance Inventory (SSAPI).

3.10 Statistical Methods of Data Analysis

Data collected were analysed using simple percentage statistical tools for the analysis of data, which include: simple percentages to obtain mean score and frequency distribution tables showing the extent of degree to measure students' performance. Mean percentile score was used to estimate the relationships between the variables of the study.

CHAPTER FOUR

PRESENTATION OF DATA ANALYSES

4.1 Introduction

This chapter deals with analysis and discussion of data related to the issues raised in Chapter One. The issues are as follows:

1. Students' performance in West African Senior School Certificate Examination in English Language.
2. Students' performance in West African Senior School Certificate Examination in Mathematics.
3. Students' performance in West African Senior School Certificate Examination in the Science Subjects.
4. Students' performance in West African Senior School Certificate Examination in Vocational and Technical Studies.
5. Students' performance in West African Senior School Certificate Examination in Boarding and Day Senior Secondary Schools.

4.2 What is the difference in performance of Day and Boarding Senior Secondary School Students in English Language in Kano Metropolis?

This research question was answered and presented in table 2

Table 2: Summary of Percentile Analyses of Difference in the Performance of Boarding and Day Students in West African Senior School Certificate Examination in English Language in Kano Metropolis.
Table 2

Years **2005-2011**	**English**

Boarding	69.7%
Day	30.3%
Total	100%

In Table 2, the performance level of boarding students in West African Senior School Certificate Examination in English Language in Kano Metropolis from 2005 to 2011was 69.7% and day students' West African Senior School Certificate Examination in English Language in Kano Metropolis from 2005 to 2011was 30.3%.

4.3 What has been the pattern of performance of Day and Boarding Senior Secondary School Students in Mathematics in Kano Metropolis?

This research question was answered and presented in table 3

Table 3: : Summary of Percentile Analyses of the Pattern of Performance of Boarding and Day Students in West African Senior School Certificate Examination in Mathematics in Kano Metropolis.

Table 3

Years 2005-2011	**Mathematics**
Boarding	72.3%

Day	30.9%
Total	100%

In table 3, the performance level of boarding students in West African Senior School Certificate Examination in Mathematics in Kano Metropolis from 2005 to 2011 was 72.3% and day students' West African Senior School Certificate Examination in Mathematics in Kano Metropolis from 2005 to 2011was 30.9%. The results from 2005-2011 is in favour of the performance of students in the boarding schools with 72.3% which is greater than the performance of students in day schools with 30.4%. There was no year in which the performance level in Mathematics reached 40% in the day schools from 2005 to 2011.

4.4 Is there any difference in the performance of Day and Boarding Senior Secondary School Students in Science Subjects in Kano Metropolis?

This research question was answered and presented in table 4

Table 4: Performance of Boarding and Day Students in West African Senior Secondary School Certificate Examinations in the three Science Subjects- (Biology, Chemistry and Physics) in Kano Metropolis.
Table 4

Years 2005-2011	Biology	Chemistry	Physics
Boarding	83.9%	79.7%	87.6%
Day	30.5%	27.4%	24.7%

In Table 4, the performance level of the three science subjects by boarding students in West African Senior School Certificate Examinations was high in each of the three Science Subjects- Biology 83.9%, Chemistry 79.7%, and Physics 87.6%. However, the performance level of the day students in the West African Senior School Certificate Examinations was low in each of the three Science Subjects - Biology 30.5%, Chemistry 27.4%, and Physics 24.7%. The percentile analyses of the performances of students as displayed in Table 4 revealed that there was significant difference between being boarding students and day students. From the table, Physics appeared to have had better performances in the boarding schools among the three Science Subjects comparatively and Biology had a fairer performance in the day schools among the three Science Subjects.

Table 5: : Summary of Percentile Analyses of Significant Difference in the Performance of Boarding and Day Students in West African Senior School Certificate Examination in the three Science Subjects in Kano Metropolis.

Table 5

Years 2005-2011	Sciences

Boarding	83.7%
Day	27.5%

Consequently, the summary of the percentile analyses of the significant difference in the performance of boarding schools was 83.7% and day schools were 27.5% in West African Senior School Certificate Examination in the Science Subjects in Kano Metropolis. Therefore, this revealed that there was significant difference in the performance of boarding schools and day schools in the sciences subjects in Kano Metropolis. The analysis revealed that boarding schools performance level was higher in Science Subjects in Kano Metropolis, Nigeria.

4.5 What is the performance of Day and Boarding Senior Secondary School Students in Vocational and Technical Studies in Kano Metropolis?

This research question was answered and presented in table 5

Table 6 : Summary of Percentile Analyses of relationship between the Performance Level of Boarding and Day Students in West African Senior School Certificate Examination in Vocational and Technical Subjects in Kano Metropolis.

Table 6

Years 2005-2011	**Home Economics**
Boarding	87.8%
Day	46 %

In Table 6, the performance level of boarding students in West African Senior School Certificate Examination in Vocational and Technical Subjects in Kano Metropolis from (2005 -2011) was 87.8% and day students' West African Senior School Certificate Examination in Vocational and Technical Subjects in Kano Metropolis from (2005- 2011) was 46%. The results from 2005-2011 is in favour of the performance of students in the boarding schools with 87.8% which is greater than the performance of students in day schools with 46%. There was no year in which the performance level in Vocational and Technical Subjects reached 50% in the government day senior secondary schools in Kano Metropolis from 2005 to 2011. However, Vocational and Technical Subjects among other subjects have had the highest percentage in day senior secondary schools from the analyses done so far by the researcher. Therefore, the difference in percentile scores between boarding 87.8% and day 46% students indicated that there was no significant relationship between boarding and day students' performance in West African Senior School Certificate Examination in Vocational and Technical subjects in Kano Metropolis, Nigeria from 2005 to 2011.

4.6 What is the overall performance of Boarding and Day Senior Secondary School Students' West African Senior School Certificate Examination in Boarding Senior Secondary Schools in Kano Metropolis?

This research question was answered and presented in table 7

Table 7: Summary of Mean Percentile Score showing relationship between the Performance Level of (12) Boarding and the (12) Day Schools West African Senior School Certificate Examination in Core Subjects in Kano Metropolis

Table: 7

Years 2005-2011	**Eng**	**Maths**	**Bio**	**Chem**	**Phy**	**Geo**	**His**	**H. Econs**
Boarding	69.7 %	72.3%	83.9 %	79.7%	87.6 %	82.1%	74.6 %	87.8%
Day	30.3 %	30.9%	30.5 %	27.4%	24.7 %	31.6%	30.7 %	46%

Calculated Percentile Score $(\overline{X})$ for the Boarding Schools =79.85%

SUMMARY OF STUDENTS' PERFORMANCE IN DAY SCHOOLS IN KANO METROPOLIS, NIGERIA

Table 7

YEARS 2005-2011	ENG	MATHS	BIO	CHEM	PHY	GEO	HIS	H. ECONS	TOTAL
DAY	30.3 %	30.9%	30.5 %	27.4%	24.7 %	31.6%	30.7 %	46%	**252.1%**

Calculated Total Score $(\overline{X})$ for the Day Schools was 252.1%=$\frac{252.1}{8} = 31.5\%$

(Note: If $\bar{X}_d$ calculated < $\bar{X}_b$ Calculated = (Research Question is justified as having the lower performance level if the school has the lower percentile score).

The calculated value of the mean score $(\overline{X})$ for the performance of Boarding schools in Kano Metropolis was 79.7%, while the calculated value of the mean score $(\overline{X})$ for the performance of the Day Schools in Kano Metropolis was 31.5%. Thus, the $\bar{X}_b$ calculated in boarding secondary schools was greater than the calculated value of the $\bar{X}_d$ of Day secondary schools in Kano Metropolis. ($\bar{X}_b$

calculated > $\bar{X}_d$ Calculated). Thus, $\bar{X}_b$ calculated is greater. Therefore, there is significant difference in the performance of boarding and day students in WASSCE Core subjects from 2005 to 2011 in Kano Metropolis, Nigeria.

In answering research questions 5, the grades obtained by students in West African Senior Secondary Certificate Examinations (WASSCE) were collected from the principals of each of the schools using the inventory, with particular reference to English, Mathematics, Science subjects (Biology, Chemistry, Physics), Geography, History, Home Economics for the years 2005 to 2011 in Kano Metropolis of Kano State. These subjects are core subjects in the Nigerian Secondary School Curriculum (Federal Republic of Nigeria, 1998). The Mean Score $(\overline{X})$ statistics was used to calculate 5 and 6 research questions. The data collected were analysed with the use of simple percentage to obtain mean score. The table shows the findings.

In Table 7, the calculated $(\overline{X})$ value for the Boarding Secondary Schools of 79.7% was greater than the calculated $(\overline{X})$ value for the Day Secondary Schools of 31.5% hence, this shows that the performances of students' West African Senior Secondary Certificate Examination in Boarding Senior Secondary Schools in Kano Metropolis were better and higher than those of Day Senior Secondary Schools in Kano Metropolis, Nigeria.

4.8 Summary of Findings

The following were the main findings:

1. Boarding Students performed better and higher than the Day Students in English West African Senior School Certificate Examination, Kano Metropolis from 2005 to 2011.
2. Boarding Students performed better and higher than in Mathematics West African Senior School Certificate Examination in Kano Metropolis from 2005 to 2011.
3. Boarding Students performed much better and higher than the Day Students in Science Subjects' West African Senior School Certificate Examination Kano Metropolis from 2005 to 2011.
4. Boarding Students performed better and higher than Day Students in Vocational and Technical Studies' West African Senior School Certificate Examination in Kano Metropolis from 2005 to 2011.
5. Boarding Secondary Schools' general performance level in West African Senior School Certificate Examination was greater than those of the Day Secondary Schools' performance.

4.9 Discussion of the Findings

The foregoing analysis had shown that the performance levels of students in the West African Senior School Certificate Examinations in the day schools were low, especially with particular reference to core subjects such as English Language, Mathematics, Sciences and Home Economics (Vocational and Technical subject) in Kano Metropolis from 2005 to 2011.

This study revealed that there is a significant difference in the performance of boarding and day senior secondary schools in West African Senior School Certificate Examination (WASSCE) Core subjects from 2005 to 2011 in Kano Metropolis, Nigeria. The calculated mean score showed that there was no relationship between the performances of students' West African Senior School Certificate Examination in boarding and day Senior Secondary Schools in Kano Metropolis from 2005 to 2011. The calculated $\bar{X}_b$ (for the boarding secondary schools) was 79.7% which was greater than the calculated $\bar{X}_d$ (of the Day secondary schools) was 31.5%. Thus, **(Where $\bar{X}_b$ calculated > $\bar{X}_d$ calculated).** Therefore, the Boarding Schools' performance level was greater than that of the Day Schools' performance.

Notably, there was no year where the academic performance level of Day Senior Secondary Schools in Kano Metropolis reached 50% in any core subject from 2005 to 2011.

An evaluation of the findings showed the performance of senior secondary schools in Kano Metropolis, where the performance level of students in day schools examinations had been below expectation, especially in the core subjects at the time when the yearnings and aspirations of the Federal Government are towards technological development. This suggests that the objectives of the secondary education in the National Policy on Education, (FRN:2004) which among other things, included the preparation of the students for higher education have not been fully achieved in Kano Metropolis from 2005 to 2011.

Academic performance has been described as the scholastic standing of a student at a given time. This could be explained in terms of the grades obtained in a course or groups of courses (Daniels and Schoulen, 1970). Considering the results in students' West African Senior School Certificate Examination in Day schools in Kano Metropolis, a fall in performance in public examination core subjects has been recorded in many States (World Bank, 1988; Adeyegbe,2002; Onipeded,2003). In Nigeria, Adeyegbe (2002) found that there was a decline in students' performance in West African Senior School Certificate Examination of Day schools. He reported that in topics where teachers found difficult to teach, students tend to perform below expectation.

However, the researcher observed that two particular day schools:- St. Thomas Secondary School, Airport Road, Kano and Government Secondary School, Stadium, Kano, performed well in the core- subjects of West African Senior School Certificate Examination in Kano Metropolis from 2005 to 2011, but the high scores were lost in the cumulative score percentages of the twelve (12) day schools during the analysis because majority of the schools under study in Kano Metropolis performed woefully in their core subjects. This is probably due to the sizeable number of students and adequate facilities. The teachers were also qualified and competent according to research. The students were likewise studious.

Although, the performance level of students in the examinations was low in the day schools, the performance of the boarding schools was better. The low level performance in the examinations in the day schools in Kano Metropolis might be attributed to what

Omotoso (1992) described as poor staffing in schools, frequent and early withdrawal of students from Primary to Secondary education, laziness on the account of many students, poor preparation of work in respect of many teachers, societal wrong values, truancy and general indiscipline. All these problems lent credence to the question 'which way education in Nigeria?' which Olabisi (1992) considered as historical one that best summarizes the path that the Nigerian educational system is treading.

The low level of examination in the day senior secondary schools in Kano Metropolis found in this study agreed with the findings of other researchers (Oke, 1992; Adeyemi, 1998; Onipede, 2003). Oke (1992) for example gave other reasons for this poor low level performance of schools in certificate examinations. He argued that adolescents experience other problems, which affect their studies. These include having to repeat classes and the lack of adequate knowledge in particular subjects, especially English Language, Mathematics, the Sciences and /or Vocational and Technical subjects. He then reported that the problem of failure has contributed a lot to the moral decadence of adolescents.

The low performance level found in Kano Metropolis day schools from 2005 to 2011 agreed with the findings made in previous studies (Adeyemo, 2001; Adeyegbe, 2002; Adeyemi, 2007). Adeyegbe (2002) for instance, observed a decline in students' performance in West African Senior School Certificate Examinations in other States of the country and attributed this to the inadequacy of facilities in

schools. The study showed that boarding senior secondary schools with high standards and prescribed educational facilities did perform better than day senior secondary schools in core subjects in West African Senior School Certificate Examinations.

The researcher found out that the analysis on Tables 1 to 4 revealed that there is significant difference between being boarding students and being day students. The boarding senior secondary schools in Kano Metropolis performed better than the day senior secondary schools in their core subjects in West African Senior School Certificate Examinations from (2005 to 2011).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter, the summary presents the highlights of the major findings. The conclusion gave the inference drawn from the findings. Meanwhile, the recommendations considered possible remedies to identified problems of the study as well as areas for further research.

5.2 Summary of the Work

Education is the bedrock and the foundation towards higher knowledge in tertiary institutions. Unfortunately, there have been outcries over the persistently poor performance of Secondary School Students in public examinations. Therefore, this study examined 'Students' Performance in West African Senior Certificate Examinations in Boarding and Day Secondary Schools of Kano Metropolis, of Kano State Nigeria (2005-2011). It ascertains the relationship in the performance of Boarding and Day Senior Secondary Schools in Kano Metropolis.

As a descriptive research, the study population comprised of all the twelve (12) Boarding Senior Secondary Schools and twenty-six (26) day Senior Secondary Schools in Kano Metropolis, Kano State. The researcher however used WAEC grading of candidates, who scored A1-C6 permissible credit passes, in senior secondary boarding and day schools which have presented candidates for WAEC in the

last ten years. The objectives of the study was addressed with six research questions ranging students' academic performance in West African Senior School Certificate Examination in English Language, Mathematics, Sciences, Geography, History, Vocational and Technical Studies and Home Economics in Kano Metropolis. The method of sample selection adopted was by random sampling technique from the twenty six day schools. The instrument used to collect data for the study was an inventory titled Secondary Schools Academic Performance Inventory (SSAPI).

The data collected were analysed using simple percentages with frequency distribution tables showing the extent of degree to measure students' performance and mean score to estimate the relationships between the variables of the study. It was found that the performance of students in the Day Senior Secondary Schools in West African Senior Secondary Certificate Examinations (WASSCE) with particular reference to English, Mathematics, Sciences, and Home Economics for the years 2005 to 2011 in Kano Metropolis of Kano State was low. There was no year where the performance level of Day Senior Secondary Schools in Kano Metropolis reached 50% in any subject from 2005-2011.

The study revealed that there was a significant difference between a student being a boarder and a day student. The result indicated that the performance level of the Boarders in West African Senior School Certificate Examination in English Language was better and higher than that of the day students in Kano Metropolis from 2005 to 2011. The findings showed that the pattern of the results

of Mathematics from 2005-2011 was in favour of the boarding schools. Though, some individual day schools performed better than others above 50%. However, the performance level of the day senior school students in West African Senior School Certificate Examinations was low in each of the three science subjects (Biology 30.5%, Chemistry 27.4%, and Physics 24.7%). The fourth sought to inquire the relationship between the performance of day and boarding students in (West African Senior School Certificate Examination) Vocational and Technical Subjects in Kano Metropolis from 2005 to 2011. The fifth sought to determine the relationship between the Academic Performance Level of (12) Boarding and the (12) Day Senior Schools in West African Senior School Certificate Examination in Core Subjects in Kano Metropolis from 2005 to 2011. Therefore, the Boarding Schools' performance level was greater than that of the Day Schools' performance. Notably, there was no year where the academic performance level of Day Senior Secondary Schools in Kano Metropolis reached 50% in any core subject from 2005 to 2011.

The low level performance in the urban areas of Kano Metropolis could be attributed to congestion of students in classes, inadequate inspection by the State Ministry of Education, inadequacy of facilities and automatic promotion. The implication of running day system of education in Kano Metropolis therefore is that many students might not be qualified for admission into higher institutions in the country. In the same vein, the implication of running boarding system of education in Kano Metropolis therefore is creating a healthy teaching/learning climate that is conducive to higher students test scores, the procurement and disbursement of

instructional materials, provision of adequate and modern equipment and library facilities coupled with enough co-curricular activities.

It was recommended that the State Ministry of Education should provide more infrastructural facilities to decongest large classrooms, provide more regular inspection to Schools and reverse the system of automatic promotion in all state schools in Kano with the view to maintaining quality. Parents are urged to be part and parcel of the school system by lending a helping hand to government.

5.3 Conclusions

Considering the findings of this study:

It was concluded that the performance level of boarding students' West African Senior School Certificate Examinations (WASSCE) in Core subjects from 2005 to 2011 in Kano Metropolis was better than the day students' West African Senior School Certificate Examinations in (WASSCE) Core subjects from 2005 to 2011 in Kano Metropolis.

The day schools' performance was poor and unpromising for these numbers of years under study. The finding is that many students from the day schools in Kano Metropolis might not be qualified for admission into higher institutions in the country since they require the core-subjects for their different disciplines of study.

There are, however day students, who will have no choice, but to sit behind their books and study because this is pertinent at this time. The role of parents on day students is a factor for the significant difference in their performance; otherwise day students should have performed well like their boarding counterparts.

Thus, the study showed that students' good performance in West African Senior School Certificate Examinations in (WASSCE) Core subjects from 2005 to 2011 in Kano Metropolis was correlated with being boarding students.

Finally, there should be good inter-personal relationship between students and their teachers to enhance better learning conditions in Nigeria secondary schools. Hence, suffice it to say that, the success of any organization like a school depends largely on the quality of leadership, qualified and competent teachers, number of students in class and output from supervision of the human resources available. Leadership therefore influences the result to be achieved and how it is pursued within the school.

5.4 Implications of the Study

The knowledge gathered from this study could be used by State government, supervisors and Ministry of Education to identify schools which are having problems creating healthy teaching/learning climate that is conducive to higher student test scores. Thus, it provides principals, teachers and other educational personnel an investigation tool that will identify a principal's leadership strengths and areas that need improvement in particular schools. Professional development plans can be made target specific rather than generalities.

However, involving teachers and students in planning schools' curriculum and activities will go a long way in improving teaching learning in senior secondary schools in Kano Metropolis, Kano State. Although, the findings revealed that most of the boarding schools are better than day senior secondary schools, but what is obtainable in the real life situation is nothing to write home about. There is need for face-to-face discussion, regular staff meetings, and consultations among experienced and amateur teachers to take care of students' complaints, if there are any. Meanwhile, the problems surrounding teaching and learning can be dealt since no one has the monopoly of knowledge.

The school principals should consider placing priority on instructional management to maintain an equilibrium regarding concern for teachers' welfare. There should be occasional evaluation of students'/teachers' performance, feedbacks, students' seminar, the procurement and disbursement of instructional materials at appropriate time to achieve the goals of education. The school PTA should also discuss this problem of poor academic performance and proffer solutions to them, in conjunction with the school management.

Professionally, lack of adequate supervision of teachers makes most teachers unserious and sometimes unprofessional in their conduct. The State government too, has continued to fail in raising the status quo of the teachers; especially core- subjects' teachers who are not sufficient and not evenly distributed to/ in schools. Most of the available ones also are ineffective, some unserious.

5.5 Recommendations

Although, there have been various suggestions and recommendations in the past by many people in form of articles in newspapers and periodicals, papers at seminars and conferences, discussions on radio and television as to how the level of productivity and efficiency of teachers in the educational sector could be improved, this will not prevent the researcher form proffering some again.

1. The State's government and officials of Ministry of Education should organize regular special sensitization programmes such as seminars, workshops, conferences and in-service training for Senior Secondary School teachers to improve their competence in English Language and Mathematics for better students' performance and to update their knowledge on the new development in other areas of specialization.
2. All Stakeholders should make decisions on the provision of infrastructural facilities, modern equipment and adequate library and laboratory facilities to aid teaching and learning of Science subjects in all Senior Secondary Schools where enrolment outweighs available facilities in Kano Metropolis.

3. The Ministry of Education in the State should also intensify more efforts in conducting regular and adequate short visits and routine inspection to schools in a bid to monitor congestion of students in classes and improve the performances of students in Geography and History and other core subjects in external examinations.
4. The Government and State's Ministry of Education should welcome construction of new schools and refurbishing of old buildings to improve the academic standards and programmes suitable for entrepreneurship skills in Vocational and Technical skills to improve the academic standards in Kano Metropolis. .
5. The government should reverse the system of automatic promotion in all schools in Kano with the view to maintaining quality. Government should as well make efforts to provide enough funds for schools so that principals could improve the academic standards and programmes

a. Suggestions for Further Research

The instrument described in this study can be used as a research tool to examine the relationship and /or significant difference between boarding and day students' academic performance. It is suggested that other related research which this study did not cover be investigated upon. Such as:

1. Factors responsible for students' poor performance in core subjects in West African Senior School Certificate Examinations (WASSCE) in Kano Metropolis.
2. Relationship between Students' Performance and Class Size in Senior Secondary Schools Kano Metropolis.

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APPENDIX A

		2005	2006	2007	2008	2009	2010	2011
1	**English Language**	97	92	84.9	94.4	100	100	100
2	**Mathematics**	85	45	86.4	79.4	86.5	83.9	94
3	**Biology**	100	97.8	97.3	83.2	100	75	94.2
4	**Chemistry**	100	100	100	100	100	100	100
5	**Physics**	100	100	100	100	100	100	97.4
6	**Geography**	100	100	100	100	100	100	100
7	**History**	57.3	92	100	100	94.4	91.7	87.6
8	**Home Economics**	100	100	100	100	100	100	100

BOARDING SCHOOL A **WASSCE RESULTS 2005-2011**

BOARDING SCHOOL B **WASSCE RESULTS 2005-2011**

S/N	SUBJECTS	**%CR 2005**	**% CR 2006**	**% CR 2007**	**% CR 2008**	**% CR 2009**	**% CR 2010**	**% CR 2011**
1	**English Language**	45	32	14.3	29	55	59	32
2	**Mathematics**	85	45	18.6	44	86.5	34	0.4
3	**Biology**	24	45	21.5	35	100	75	44.8
4	**Chemistry**	14	0	12.1	48	80.5	94	0.63
5	**Physics**	09	08	100	70	100	63	45.3
6	**Geography**	13	06	22.3	44	100	63	12.3
7	**History**	07	12	36	12	52	48	4.25
8	**Home Economics**	36.7	95	40.6	66	100	83	94.9

BOARDING SCHOOL C **WASSCE RESULTS 2005-2011**

S/N	SUBJECTS	**%CR 2005**	**% CR 2006**	**% CR 2007**	**% CR 2008**	**% CR 2009**	**% CR 2010**	**% CR 2011**
1	**English Language**	80.5	89.5	57.9	98.3	100	100	100
2	**Mathematics**	44.1	53.4	51.3	100	89	96	99
3	**Biology**	97.4	92	89.5	98.3	100	100	100
4	**Chemistry**	68.6	89	100	100	97	100	100
5	**Physics**	100	100	100	100	100	100	100
6	**Geography**	94.3	92	97.5	100	100	100	100
7	**History**	80.9	96	97.5	100	47	100	29
8	**Home Economics**	65	78.6	100	100	97.4	57.3	100

BOARDING SCHOOL D **WASSCE RESULTS 2005-2011**

S/N	SUBJECTS	**%CR 2005**	**% CR 2006**	**% CR 2007**	**% CR 2008**	**% CR 2009**	**% CR 2010**	**% CR 2011**
1	**English Language**	57.9	99.3	87.3	91.6	100	99	98
2	**Mathematics**	51.3	100	73.4	73.5	43.8	99	73
3	**Biology**	89.5	91.3	100	100	97.9	99	98
4	**Chemistry**	100	100	90.9	100	78.6	98	99
5	**Physics**	100	100	100	100	100	100	100
6	**Geography**	100	100	100	100	100	100	100
7	**History**	97.5	92.9	100	72.1	88.9	91	99
8	**Home Economics**	97.5	100	100	100	100	100	100

BOARDING SCHOOL E **WASSCE RESULTS 2005-2011**

S/N	SUBJECTS	%CR 2005	% CR 2006	% CR 2007	% CR 2008	% CR 2009	% CR 2010	% CR 2011
1	**English Language**	8.68	7.86	32.3	17.4	11.2	34.7	12.6
2	**Mathematics**	85	46	36	3.52	69.3	1.58	78.6
3	**Biology**	78	58.4	62.5	64.8	89.8	88.2	93.5
4	**Chemistry**	58	100	74.8	79.6	44.4	46.6	88.2
5	**Physics**	48.5	97.2	88	68.2	90.8	87.9	10.2
6	**Geography**	65	69.8	97	83.2	88.9	87.7	66.5
7	**History**	89.9	45.9	63	69.2	58.3	90.9	100
8	**Home Economics**	100	100	40.6	89.8	85.7	92.6	100

BOARDING SCHOOL F **WASSCE RESULTS 2005-2011**

BOARDING SCHOOL

RESULTS 2005-2011

S/N	SUBJECTS	%CR 2005	% CR 2006	% CR 2007	% CR 2008	% CR 2009	% CR 2010	% CR 2011
1	**English Language**	86.8	76.8	33.2	74	11.2	4.7	12.6
2	**Mathematics**	58	64	69	52	69	58	76
3	**Biology**	85	48	65.2	68.4	89	88.2	95
4	**Chemistry**	58	68	78	79.6	44.4	46.6	87
5	**Physics**	84	97	77.8	68.2	90.8	87.9	89
6	**Geography**	65	89	97	83.2	88	87.7	66.5
7	**History**	89	45.9	63	69.2	58.3	90.9	100
8	**Home Economics**	100	100	40.6	89.8	85.7	83.6	100

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WASSCE

S/N	SUBJECTS	%CR 2005	% CR 2006	% CR 2007	% CR 2008	% CR 2009	% CR 2010	% CR 2011
1	**English Language**	55	82	52	43.5	35.5	65	66

2	**Mathematics**	85	73	35	35	84	83	55
3	**Biology**	93.5	92	62	86	25.8	83	87
4	**Chemistry**	94	73	86	73	34	83	29.5
5	**Physics**	84	92	96	58	83	82	83
6	**Geography**	92	56	88	62	59	38.6	77
7	**History**	63	72	45	55	33	65	57
8	**Home Economics**	29	92	100	78	77	88	92

BOARDING SCHOOL H **WASSCE RESULTS 2005-2011**

S/N	SUBJECTS	**%CR 2005**	**% CR 2006**	**% CR 2007**	**% CR 2008**	**% CR 2009**	**% CR 2010**	**% CR 2011**
1	**English Language**	52	29.3	12.3	77	74	73.9	37.8
2	**Mathematics**	33	22.4	52.5	83	78	67	64
3	**Biology**	45	53	46	57	74	88	28
4	**Chemistry**	82	13	29	93	87	93	84
5	**Physics**	45	43	49	91	83	68	74
6	**Geography**	23	17	81	73	28	73.2	73.2
7	**History**	28.7	11	33	98	71.6	88	87.3
8	**Home Economics**	44	54	74	56	69.2	81.5	76.8

BOARDING SCHOOL I **WASSCE RESULTS 2005-2011**

S/N	SUBJECTS	**%CR 2005**	**% CR 2006**	**%R 2007**	**% CR 2008**	**% CR 2009**	**% CR 2010**	**% CR 2011**

1	**English Language**	82	100	100	98	96.2	83	84
2	**Mathematics**	83	100	100	100	100	94	93
3	**Biology**	93	100	100	100	100	82	84
4	**Chemistry**	90	84	100	100	100	83	92
5	**Physics**	72	78	100	100	100	55	83
6	**Geography**	83.8	93	100	100	100	94	79
7	**History**	92	100	100	100	100	78	74
8	**Home Economics**	88	100	100	100	100	83	82

BOARDING SCHOOL J **WASSCE RESULTS 2005-2011**

S/N	SUBJECTS	**%CR 2005**	**% CR 2006**	**%CR 2007**	**% CR 2008**	**% CR 2009**	**% CR 2010**	**% CR 2011**
1	**English Language**	63	73	53	54	85	82	72
2	**Mathematics**	77	82	83	62	77	83	73
3	**Biology**	83	72	93	72	93	64	62
4	**Chemistry**	82	93	63	92	94	63	72
5	**Physics**	74	79.2	47	73	75	72	83
6	**Geography**	92	83	83	62	63	73	74
7	**History**	54	72	82	77	72	68	62
8	**Home Economics**	82	94	77	83	66	82	83

BOARDING SCHOOL K **WASSCE RESULTS 2005-2011**

S/N	SUBJECTS	%CR 2005	% CR 2006	% CR 2007	% CR 2008	% CR 2009	% CR 2010	% CR 2011
1	**English Language**	86	71.7	92	64.8	96.2	83	64
2	**Mathematics**	69	45.9	90	94	93.2	84	93
3	**Biology**	83	84.7	80	93.5	93	72	94
4	**Chemistry**	80	64.5	100	93.4	84	86	72
5	**Physics**	82	68	100	100	82	65	43
6	**Geography**	93.8	83	100	100	82.7	74	38
7	**History**	82	82.6	100	55	66	94	93
8	**Home Economics**	78	89.7	100	100	45	72	56

BOARDING SCHOOL L **WASSCE RESULTS 2005-2011**

S/N	SUBJECTS	%CR 2005	% CR 2006	% CR 2007	% CR 2008	% CR 2009	% CR 2010	% CR 2011
1	**English Language**	82	100	100	98	96.2	73	84
2	**Mathematics**	83	55	74	100	100	94	93
3	**Biology**	73	100	100	100	100	82	64
4	**Chemistry**	90	84	84	64	60	93	62
5	**Physics**	78	78	94	100	100	55	83
6	**Geography**	85.8	93	80	100	100	93	79
7	**History**	92	100	47	98.4	83	68	74
8	**Home Economics**	88	100	94	100	100	83	82

APPENDIX B

DAY SCHOOL A

RESULTS 2005-2011

SN	SUBJECTS	%Cr 2005	%Cr 2006	%Cr 2007	%Cr 2008	%Cr 2009	%Cr 2010	%CR2011
1	**ENGLISH LANGUAGE**	58.7	2.62	9.35	43.8	00	_	9.50
2	**MATHEMATICS**	60.4	2.62	29.4	97.9	8.43	_	9.50
3	**BIOLOGY**	73.9	2.31	75	75	43.3	2.31	_
4	**PHYSICS**	13.6	13.6	65	65	22.8	_	_
5	**CHEMISTRY**	35.4	15.9	47	47	4.65	_	_
6	**GEOGRAPHY**	59.1	3.63	55	55	2.73	_	_
7	**HISTORY**	90	71.3	65	65	-	_	_
8	**HOME ECONOMICS**	54.2	0.26	65	65	13.8	43.4	–

WASSCE

DAY SCHOOL B

200-2011

WASSCE RESULTS

SN	SUBJECTS	%Cr 2005	%Cr 2006	%Cr 2007	%Cr 2008	%Cr 2009	%Cr 2010	%CR 2011
1	**ENGLISH LANGUAGE**	53.5	43.4	88	62.5	70.9	32.4	65.3
2	**MATHEMATICS**	26.3	43.6	99.3	43.7	29.3	8.35	52.4
3	**BIOLOGY**	5.3	7.25	90.6	53.5	52.6	73.4	52.8
4	**PHYSICS**	7.7	3.8	5.0	43.6	52.8	95.6	73.2
5	**CHEMISTRY**	84.6	00	21.3	35.9	69.8	100	93.2
6	**GEOGRAPHY**	58.2	32.3	92.2	62.5	29.4	93.4	74.3
7	**HISTORY**	00	00	90.5	00	92.8	98.5	72.3
8	**HOME ECONOMICS**	76.3	17.6	93	42.5	83.3	83.1	52.5

DAY SCHOOL C

RESULTS 2005-2011

WASSCE

SN	SUBJECTS	%Cr 2005	%Cr 2006	%Cr 2007	%Cr 2008	%Cr 2009	%Cr 2010	%CR2011
1	**ENGLISH LANGUAGE**	0.43	62.4	42.2	92.2	12.1	44.3	74.4
2	**MATHEMATICS**	1.28	38.4	51.4	64.1	00	33.6	73.3
3	**BIOLOGY**	25.1	26.4	43.6	82.5	0.49	62.8	53.4
4	**PHYSICS**	00	72.4	4.35	92.3	00	73.6	34.7

5	**CHEMISTRY**	2.98	32.5	28.5	94.8	10.2	21.7	32.4
s6	**GEOGRAPHY**	8.08	24.3	27.4	83.3	30.5	39.7	64.2
7	**HISTORY**	1.11	23.4	63.3	00	33.2	32.8	43.2
8	**HOME ECONOMICS**	20.2	32.4	38.3	45.7	55	53.6	37.6

DAY SCHOOL D **WASSCE RESULTS 2005-2011**

S/N	**SUBJECTS**	**%Cr 2005**	**%Cr 2006**	**%Cr 2007**	**%Cr 2008**	**%Cr 2009**	**%Cr 2010**	**%CR 2011**
1	**ENGLISH LANGUAGE**	99.7	65.5	64.3	47.3	62.5	73.4	63.5
2	**MATHEMATICS**	57.5	54.5	48.5	56.3	73.6	48.8	73.5
3	**BIOLOGY**	98	98	87.4	83.4	73.4	63.7	73.5
4	**PHYSICS**	97.5	97.5	73.6	28.4	72.4	82	63.5
5	**CHEMISTRY**	87.5	87.5	65.4	67.4	62.6	57.5	52.4
6	**GEOGRAPHY**	17.5	97.5	34.5	87.4	38.6	53.5	46.6
7	**HISTORY**	78.5	70.5	43.4	72.3	83.2	62.4	63.5
8	**HOME ECONOMICS**	77.5	76.4	37.3	83.5	73.5	62.7	77.4

DAY SCHOOL E **WASSCE RESULTS 2005-2011**

S/N	**SUBJECTS**	**%Cr 2005**	**%Cr 2006**	**%Cr 2007**	**%Cr 2008**	**%Cr 2009**	**%Cr 2010**	**%CR 2011**
1	**ENGLISH LANGUAGE**	7.3	5.4	7.4	8.4	4.6	5.7	5.3
2	**MATHEMATICS**	8.5	6.3	9.5	3.5	6.3	7.4	5.4

3	**BIOLOGY**	7.3	8.4	8.3	6.3	7.3	6.3	6.5
4	**PHYSICS**	8.4	7.3	9.4	7.4	4.4	8.4	7.5
5	**CHEMISTRY**	5.74	6.5	8.43	8.4	6.2	4.6	5.3
6	**GEOGRAPHY**	3.56	7.2	7.32	4.6	7.4	8.4	4.7
7	**HISTORY**	5.46	6.8	4.3	6.3	5.6	7.4	3.5
8	**HOME ECONOMICS**	8.34	8.4	2.8	7.3	8.4	5.7	4.9

DAY SCHOOL F **WASSCE RESULTS 2005-2011**

S/N	**SUBJECTS**	**%Cr 2005**	**%Cr 2006**	**%Cr 2007**	**%Cr 2008**	**%Cr 2009**	**%Cr 2010**	**%CR 2011**
1	**ENGLISH LANGUAGE**	21.8	43.4	6.23	62.4	45.3	43.5	7.54
2	**MATHEMATICS**	43.4	7.3	47.4	73.4	6.4	34.5	36.5
3	**BIOLOGY**	28.4	6.4	73	43.5	6.5	53.5	23.5
4	**PHYSICS**	4.3	8.3	43.5	6.32	54.6	34.5	35
5	**CHEMISTRY**	7.4	6.3	7.34	7.4	53.4	34.5	5.43
6	**GEOGRAPHY**	8.8	2.9	62.5	4.32	7.54	43.6	65.4
7	**HISTORY**	8.54	13.4	6.32	46.4	7.4	73	38.5
8	**HOME ECONOMICS**	74.3	38.4	63.4	64	63.5	75.4	24.4

DAY SCHOOL G
WASSCE RESULTS 2005-2011

S/N	**SUBJECTS**	**%Cr 2005**	**%Cr 2006**	**%Cr 2007**	**%Cr 2008**	**%Cr 2009**	**%Cr 2010**	**%CR 2011**
1	**ENGLISH LANGUAGE**	00	5.34	00	63.4	54.3	34.5	12.4
2	**MATHEMATICS**	0.38	65.5	00	34.3	6.54	14.6	2.54
3	**BIOLOGY**	00	3.5	00	6.45	8.56	00	26.5
4	**PHYSICS**	0.34	00	00	53.5	00	00	4.32

5	**CHEMISTRY**	3.56	00	0.56	00	00	00	3.4
6	**GEOGRAPHY**	2.45	00	0.67	3.45	12.4	24.5	3.56
7	**HISTORY**	34.3	0.54	0.45	6.43	4.3	63.5	5.34
8	**HOME ECONOMICS**	27.5	65	0.65	64.4	74.5	3.45	34.4

DAY SCHOOL H **WASSCE RESULTS 2005-2011**

DAY SCHOOL I

RESULTS 2005-2011

S/N	**SUBJECTS**	**%Cr 2005**	**%Cr 2006**	**%Cr 2007**	**%Cr 2008**	**%Cr 2009**	**%Cr 2010**	**%CR 2011**
1	**ENGLISH LANGUAGE**	00	00	00	34.2	34.5	00	34.5
2	**MATHEMATICS**	00	4.5	4.34	65.5	45.6	00	7.45
3	**BIOLOGY**	00	00	00	43.5	43.5	00	4.34
4	**PHYSICS**	0.37	3.54	00	63.4	65.4	00	53.4
5	**CHEMISTRY**	2.98	00	00	00	45.6	0.34	7.45
6	**GEOGRAPHY**	54.4	00	00	65	6.4	0.32	6.45
7	**HISTORY**	24.3	00	43.5	00	6.43	4.54	8.2
8	**HOME ECONOMICS**	54.5	54.8	48.6	45.5	2.45	5.43	64.3

WASSCE

S/N	**SUBJECTS**	**%Cr 2005**	**%Cr 2006**	**%Cr 2007**	**%Cr 2008**	**%Cr 2009**	**%Cr 2010**	**%CR 2011**
1	**ENGLISH LANGUAGE**	16.3	21.4	92.5	47.5	54.4	56.4	43.5
2	**MATHEMATICS**	28.4	24.4	76.3	93	83.5	73.5	32
3	**BIOLOGY**	5.3	38.2	32.5	43.4	52.3	46.9	63.5
4	**PHYSICS**	39	43	5.5	4.6	64.8	4.3	8.4
5	**CHEMISTRY**	35	45.5	21.3	6.4	34.5	45	9.4

6	**GEOGRAPHY**	36.2	7.7	63	43.6	92.8	36.8	64.5
7	**HISTORY**	90.5	84.6	17.6	35.8	42.5	63.5	7.4

S/N	**SUBJECTS**	**%Cr 2005**	**%Cr 2006**	**%Cr 2007**	**%Cr 2008**	**%Cr 2009**	**%Cr 2010**	**%CR 2011**
1	**ENGLISH LANGUAGE**	00	23.4	2.43	0.43	00	0.23	65.3
2	**MATHEMATICS**	00	43.8	45.4	56	4.56	4.53	34.3
3	**BIOLOGY**	00	23.5	2.34	4.5	8.7	00	34.3
4	**PHYSICS**	34.4	23.8	25.4	34.5	0.54	0.42	2.34
5	**CHEMISTRY**	23.4	00	43.6	52.5	8.4	0.43	2.5
6	**GEOGRAPHY**	24.3	29.3	0.54	54.3	7.4	6.4	00
7	**HISTORY**	54.3	0.34	0.43	25.3	9.4	4.56	23.5
8	**HOME ECONOMICS**	64.3	0.34	54.3	44.5	7.4	0.23	3.5
8	**HOME ECONOMICS**	14.6	12.7	88.4	73.3	63.7	54	34.2

DAY SCHOOL J **WASSCE RESULTS 2005-2011**

DAY SCHOOL K **WASSCE RESULTS 2005-2011**

S/N	**SUBJECTS**	**%Cr 2005**	**%Cr 2006**	**%Cr 2007**	**%Cr 2008**	**%Cr 2009**	**%Cr 2010**	**%CR 2011**
1	**ENGLISH LANGUAGE**	00	2.3	3.45	3.4	7.34	4.34	45.6
2	**MATHEMATICS**	00	5.3	3.5	5.4	56.5	4.6	56.2
3	**BIOLOGY**	00	4.4	6.3	6.4	34.6	2.56	43.5
4	**PHYSICS**	0.45	5.43	4.43	3.5	72.5	6.3	36.4

5	**CHEMISTRY**	03.4	6.4	4.56	7.43	3.44	6.42	34.5
6	**GEOGRAPHY**	3.45	3.54	3.43	6.43	6.23	45.4	6.43
7	**HISTORY**	34.6	23.4	5.5	5.4	6.34	6.23	5.2
8	**HOME ECONOMICS**	76.3	2.5	2.5	83	43.4	56.4	38.3

DAY SCHOOL L **WASSCE RESULTS 2005-2011**

S/N	**SUBJECTS**	**%Cr 2005**	**%Cr 2006**	**%Cr 2007**	**%Cr 2008**	**%Cr 2009**	**%Cr 2010**	**%CR 2011**
1	**ENGLISH LANGUAGE**	0.34	0.24	7.34	8.43	34.5	6.23	34.5
2	**MATHEMATICS**	0.34	0.45	8.43	17.4	3.54	23.4	3.45
3	**BIOLOGY**	2.45	0.34	6.34	6.34	62.3	53.4	2.45
4	**PHYSICS**	2.45	0.34	6.43	8.34	24.3	34.5	6.32
5	**CHEMISTRY**	0.34	3.5	9.45	5.34	43.2	52.4	6.34
6	**GEOGRAPHY**	45.5	34.4	56.4	7.34	64.4	87.3	56.3
7	**HISTORY**	34.5	8.45	46.3	8.32	23.5	35.6	54.3
8	**HOME ECONOMICS**	53.3	74.9	83.2	82	45	83	63.6

Appendix C

WASSCE TOTAL GRADES AS COLLECTED FROM ALL THE SECONDARY SCHOOLS IN KANO METROPOLIS

	YEARS IN VIEW	**DAY SCHOOLS' West African Senior School Certificate Examinations 2005 - 2011**	**BOARDING SCHOOLS' West African Senior School Certificate Examinations 2005 -2011**

S/N	SUBJECTS	Number Registered	5 Credits % Above English	5 Credits % Above Mathematics	5 Credits % Above Sciences	5 Credits % Above Vocational Subjects	Total Credits	Number Registered	5 Credits % Above English	5 Credits % Above Mathematics	5 Credits % Above Sciences	5 Credits % Above Vocational Subjects	Total Credits
1	SCHOOL A	**1708**	4	12	7	90	**113**	580	500	390	400	420	**1,710**
2	SCHOOL B	**2678**	35	17	80	120	**252**	1674	692	300	437	1609	**3,038**
3	SCHOOL C	**3544**	25	5	699	71	**800**	2808	571	20	502	1270	**2,363**
4	SCHOOL D	**1984**	3	14	251	99	**367**	1518	400	190	600	1500	**2,690**
5	SCHOOL E	**2983**	10	100	11	98	**219**	1189	100	1250	490	157	**1,997**
6	SCHOOL F	**2455**	1	69	40	905	**1,015**	3534	3000	1500	1069	1258	**6,827**
7	SCHOOL G	**3034**	10	75	8	410	**503**	320	250	201	70	20	**541**
8	SCHOOL H	**428**	8	29	10	240	**287**	610	210	300	200	350	**1,060**
9	SCHOOL I	**2235**	2	8	2	30	**44**	586	400	450	150	300	**1,300**
10	SCHOOL J	**890**	2	24	18	67	**111**	2764	60	250	700	1600	**2,610**
11	SCHOOL K	**1673**	5	4	41	17	**67**	450	300	375	75	400	**1,150**
12	SCHOOL L	**357**	269	250	179	125	**823**	336	150	156	105	202	**613**

SN	**SUBJECTS 2005-2011**	SCHOOL A	SCHOOL B	SCHOOL C	SCHOOL D	SCHOOL E	SCHOOL F	SCHOOL G	SCHOOL H	SCHOOL I	SCHOOL J	SCHOOL K	SCHOOL L
1	**ENGLISH LANGUAGE**	668.3	266.3	626.2	633.1	124.74	299.3	399	356.3	643.3	482	557.7	633.2
2	**MATHEMATICS**	560.2	313.5	532.8	514	320	446	450	391.9	670	537	569.1	599
3	**BIOLOGY**	647.5	345.3	677.2	675.7	624.2	538.8	529.3	391	659	539	600.2	619
4	**CHEMISTRY**	700	253.23	654.6	666.5	491.6	461.6	472.5	481	649	559	579.9	537
5	**PHYSICS**	697.4	395.3	700	700	490.8	594.7	578	453	588	503.2	540	588
6	**GEOGRAPHY**	700	260.6	683.8	700	558.1	576.4	472.6	368.4	649.3	530	571.5	630.8
7	**HISTORY**	623	171.25	550.4	641.4	517.2	516.3	390	417.6	644	487	572.6	562.4
8	**HOME ECONOMICS**	700	516.2	598.3	697.5	608.7	599.7	556	455.5	653	567	540.7	647

APPENDIX E

SN	SUBJECTS 2005-2011	SCHOOL A	SCHOOL B	SCHOOL C	SCHOOL D	SCHOOL E	SCHOOL F	SCHOOL G	SCHOOL H	SCHOOL I	SCHOOL J	SCHOOL K	SCHOOL L

DAY SCHOOLS A-L WASSCE 2005-2011 RESULTS

1.	**ENGLISH LANGUAGE**	123.97	416	328.03	476.2	44.1	230.17	169.94	103.2	332	91.79	66.43	91.58
2.	**MATHEMATICS**	208.25	302.95	262.08	412.7	46.9	248.9	123.86	127.39	411.1	188.59	131.6	57.01
3.	**BIOLOGY**	271.82	335.45	294.29	577.4	50.4	234.8	45.01	91.34	282.1	73.34	97.76	133.62
4.	**PHYSICS**	180	281.7	277.35	514.9	52.8	186.52	58.16	186.11	169.6	121.4	129.01	82.68
5.	**CHEMISTRY**	149.95	404.8	223.08	480.3	45.17	121.79	7.52	56.37	197.1	130.83	76.15	120.57
6.	**GOEGRAPHY**	175.46	442.3	277.28	375.6	43.18	195.06	47.03	132.57	344.6	122.15	74.91	351.64
7.	**HISTORY**	291.3	354.1	197.01	473.8	39.36	193.56	114.86	86.97	341.9	117.83	86.67	210.97
8.	**HOME ECONOMICS**	241.66	448.3	282.8	488.3	45.84	403.4	269.9	275.58	340.9	174.57	302.4	485

Appendix F Performance Level of Boarding and Day Students in Secondary Schools in Kano Metropolis

S/N	SUBJECTS 2005-2011	Total addition of grade scores 2005-2011 of the 12 Boarding Schools	Total addition of grade scores 2005-2011 of the 12 Day Schools	Total addition of Boarding grade scores 2005-2011 divided by number of schools (12)	Total addition of Day grade scores 2005-2011 divided by number of Schools (12)
1	**ENGLISH LANGUAGE**	5,689.94	2,473.41	474.1617	206.1175
2	**MATHEMATICS**	5,903.50	2,521.33	491.9583	210.1108
3	**BIOLOGY**	6,846.20	2,487.33	570.5167	207.2775
4	**PHYSICS**	6,505.93	2240.23	542.1608	186.6858
5	**CHEMISTRY**	6,828.40	2,013.63	569.0333	167.8025
6	**GEOGRAPHY**	6,701.50	2,581.78	558.4583	215.1483
7	**HISTORY**	6,093.15	2,508.33	507.7625	209.0275
8	**HOME ECONOMICS**	7,139.60	3,758.68	596.9667	313.2208

APPENDIX G

SIMPLE PERCENTILE SCORES OF THE BOARDING AND DAY WASSCE PERFORMANCES

4.3 Performance of students' West African Senior School Certificate Examination in Boarding Senior Secondary Schools in Kano Metropolis?

YEARS 2005-2011	ENG	MATHS	BIO	CHEM	PHY	GEO	HIS	H.ECONCS	**TOTAL SCORE**
BOARDING	69.7%	72.3%	83.9%	79.7%	87.6%	82.1%	74.6%	87.8%	**637.7%**

Table:6 SUMMARY OF STUDENTS' PERFORMANCE IN BOARDING AND DAY SCHOOLS 2005-2011

YEARS 2005-2011	**ENG**	**MATHS**	**BIO**	**CHEM**	**PHY**	**GEO**	**HIS**	**H. ECONS**
BOARDING	69.7%	72.3%	83.9%	79.7%	87.6%	82.1%	74.6%	87.8%
DAY	30.3%	30.9%	30.5%	27.4%	24.7%	31.6%	30.7%	46%

(Note: If $\bar{X}_b$calculated > $\bar{X}_d$ Cal**c**ulated= (Research Question is justified as having the higher performance level if the school has the higher percentile mean score).

$$\bar{X} = \frac{\sum fx}{\sum f} = \frac{\sum fx}{n}$$

$$\text{Mean} = \frac{\sum fx}{\sum f} = \frac{Summation\ of\ all\ the\ Boarding/Day\ Secondary\ School\ Scores}{Number\ of\ Subjects\ Analysed}$$

Table 4.6 SUMMARY OF STUDENTS' PERFORMANCE IN BOARDING SCHOOLS IN KANO METROPOLIS, NIGERIA

YEARS 2005-2011	ENG	MATHS	BIO	CHEM	PHY	GEO	HIS	H. ECONS	TOTAL
BOARDING	69.7%	72.3%	83.9%	79.7%	87.6%	82.1%	74.6%	87.8%	**637.7%**

$$\text{Mean} = \frac{\sum fx}{\sum f} = \frac{Summation\ of\ all\ the\ Boarding\ Secondary\ School\ Scores}{Number\ of\ Subjects\ Analysed}$$

(Note: If If $\bar{X}_b$calculated > $\bar{X}_d$ Critical= (Research Question is justified as having the higher performance level if the school has the higher percentile mean score).

(Where If $\bar{X}_b$ calculated > $\bar{X}_d$ Critical = Therefore, If $\bar{X}_b$ represents the mean score for Boarding schools, while $\bar{X}_d$ represents the mean score for Day schools)

Calculated Mean Score for the Boarding Schools was 637.7%

$$\bar{X} = \frac{\sum fx}{\sum f} = \frac{\sum fx}{n}$$

$$\text{Mean} = \frac{\sum fx}{\sum f} = \frac{637.7}{8} = 79.7\%$$

Calculated PERCENTILE Mean Score for the Boarding Schools =79.7%

4.4 Performance of students' West African Senior School Certificate Examination in Day Senior Secondary Schools in Kano Metropolis?

SUMMARY OF STUDENTS' PERFORMANCE IN DAY SCHOOLS IN KANO METROPOLIS, NIGERIA

YEARS 2005-2011	ENG	MATHS	BIO	CHEM	PHY	GEO	HIS	H. ECONS	TOTAL
DAY	30.3%	30.9%	30.5%	27.4%	24.7%	31.6%	30.7%	46%	**252.1%**

$$\text{Mean} = \frac{\sum fx}{\sum f} = \frac{\textit{Summation of all the Day Secondary School Scores}}{\textit{Number of Subjects Analysed}}$$

Calculated Mean Score for the Day Schools was 252.1%

$$\bar{X} = \frac{\sum fx}{\sum f} = \frac{\sum fx}{n}$$

$$\text{Mean} = \frac{\sum fx}{\sum f} = \frac{252.1}{8} = 31.5\%$$

Calculated PERCENTILE Mean Score for the Boarding Schools =31.5%

Table 7: Summary of Mean Percentile Score showing relationship between the Performance Level of (12) Boarding and the (12) Day Schools West African Senior School Certificate Examination in Core Subjects in Kano Metropolis

(Note: If $\bar{X}_d$ calculated < $\bar{X}_b$ Calculated = (Research Question is justified as having the lower performance level if the school has the lower percentile score).

(Where $\bar{X}_d$ calculated < $\bar{X}_b$ Calculated = Therefore, $\bar{X}_d$ represents the mean score for Day schools, while $\bar{X}_b$ represents the mean score for Boarding schools.

APPENDIX I

DAILY ROUTINE OF GOVERNMENT BOARDING SYSTEM

The daily routine in a boarding secondary school may take the following form:

MONDAY - FRIDAY

6.00 am	Rising bell
6.45-7.00am	General Cleaning of the School Environment
7.50 – 8.00a.m	School Assembly
8.10- 2,00p.m	Classes (8 periods of 40mins each)
2.00- 3.00p.m	Visitation (Monday- Wednesday per month)

2.00 -2.30 p.m	Lunch
2.30 -3.45 p.m	Rest
4.00p.m- 6.00 p.m	Preparatory lessons for some classes
	(Or **games on Wed/ (Friday)**
6.00 - 6.45 p.m	Break
7.00 – 7.30 p.m	Supper
7.30 – 9.00.p.m	Evening prep
9.00- 9.25 p.m	Sweeping the Classrooms
9.30 - 9.50 p.m	Break, free period
9.50 p.m	Light out

SATURDAY

6.00 - 8.00 a.m	General cleaning and Inspection of portions
9.00 - 10a.m	Hostel General Cleaning
11.00 a.m	Free period till lunch time

The day is as Monday to Friday except that there is no organised prep.

SUNDAY

All the programme areas are scheduled for the week, except the Sunday, societal meetings, and organised prep at night. There are free periods till supper and light out. These times are strictly adhered to.

Source; (Government Girls' School, Dala)

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

Our Ref: DE/S.25

Date: 9th August 2012

The Director,
Ministry of Education
Kano, Kano State

Dear Sir,

LETTER OF INTRODUCTION

The bearer, OGUNBANWO ROSELINE ABIOLA, with Registration Number M.Ed/EDUC/1061/2009/10, is a student in this department. He /She is carrying out research, being part of requirement for graduation, in EDUCATIONAL ADMINISTRATION & 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

ANALYSIS OF STUDENTS' ACADEMIC PERFORMANCE IN WEST AFRICAN EXAMINATION COUNCIL (WAEC) EXAMINATION IN BOARDING AND DAY SENIOR SECONDARY SCHOOLS IN KANO METROPOLIS (2005 – 2011)

Thanks in anticipation of your kind response.

Yours sincerely,

Dr. Bashir Maina
Head of Department

Dept. of Educational Foundation & Curriculum
A. B. U. ZARIA