

**QUALITY AND UTILIZATION OF EDUCATIONAL
RESOURCES AND STUDENTS' ACADEMIC
ACHIEVEMENT IN LAGOS STATE
SECONDARY SCHOOLS**

BY

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(Matriculation No.: 860301076)

DECEMBER, 2008

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CERTIFICATION

This is to certify that the Thesis:

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STUDENTS' ACADEMIC ACHIEVEMENT IN LAGOS STATE
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By

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DEDICATION

This thesis is dedicated to the glory of God Almighty for granting me the wisdom, knowledge and understanding to complete this work.

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ABBREVIATIONS

N.C.E	-	Nigeria Certificate in Education
U.N.E.S.C.O	-	United nations Educational Scientific and Cultural Organization
USAID	-	United State Agency for International Development
ANCOPSS	-	All Nigerian Conference of Principals of Secondary Schools
NPE	-	National Policy on Education

ABSTRACT

In this study, effect of educational resources and student academic achievement in SSCE English and Mathematics which are perquisites subjects for admission into tertiary institutions or career opportunities became imperative. Within the context of this study, the administrative strategy use to ensure quality within the school organization known as quality control organ was examined to ascertain the effectiveness and efficiency of the school system on students' academic achievements. The theoretical framework for this study was anchored on concept of system theory by Bertalanfy (1971). The literature review revolved around the selected variables such as quality education, resources utilization and student academic achievement.

This study was correlational adopting the survey research design. The population was the entire English and Mathematics teachers from the 293 public and 495 private secondary schools, principals, and inspectors of education in the six Education Districts in Lagos State. A stratified random sampling was employed in selecting 60 inspectors, 78 principals, 302 public and 213 private senior secondary schools teachers for this study. Two instruments were developed to elicit information from the respondents. They were questionnaires for teachers' inspectors and principals with the same subject matter and Observation /Interview Schedule used to assess the availability of resources. The questionnaires were Teachers' Perception of Quality and Utilization of Educational Resources and Academic Achievement Questionnaire (TPQUERAAQ); Inspectors' Perception of Quality and Utilization of Educational Resources and Academic Achievement Questionnaire (IPQUERAAQ) and Principals' Perception of Quality and Utilization of Educational Resources and Academic Achievement Questionnaire (PPQUERAAQ).

The results of Senior Secondary Certificate Examination (SSCE) from 2002-2006 were obtained from the schools records, the summary were indicated in Appendix D. For the statistical analysis of the nine hypotheses, inferential statistics (t-test and Pearson Moment Correlation Coefficient (r)) were used. The results of this study show that only hypothesis five was accepted while the remaining eight null hypotheses were rejected. Amongst the recommendations made was the need for government to make sure that adequate educational resources are made available in public and private secondary schools so as to enhance quality of education and ensure improvement in student academic achievement.

CHAPTER ONE

INTRODUCTION

Background to the Study

Quality in education deals with issues of relevance, validity, functionalism and efficiency of educational system in the achievement of national goals and objectives (Zelvys, 2004). These goals involve paying attention to academic standards, expectations of the society, students' aspirations and requirements of the institutions. The role played by education in the development of any nation cannot be over-emphasized from the individual or societal perspective (Sofolahan 1994). Fagbamiye (2004) affirms that education has been recognized as the fundamental basis on which any nation can be effectively constructed. Most educational programs and activities in Nigeria over the years have been reported to be the "brain-child" of the government at different times.

Oluyeni (1997) gives an account of how the American Baptist Foreign Missionary Society set up Phelps-Stoke Commission in 1920, to ascertain the quality of education that was being provided in the West, South and Central Africa. The objectives of the Commission were to inquire as to the educational needs of the people in the light of religious, social, hygienic and economic conditions; to ascertain the extent to which these needs are being met; and to make available to the fullest, the results of the study. The report of the Commission stated that the education being provided was a mere carbon copy of Euro-American models and that:

Little attempt was made to use local materials in the teaching of subjects such as History and Geography. In the South, the emphasis was on learning new habits, customs and tastes. Bits of information were crammed with a view to passing examinations... whether the education given was realistic or not seemed not to worry the givers and receivers. (p. 4)

The report, was observed to have ignited the sensibilities of the colonial government regarding the state of education in Nigeria at that time. Fafunwa (1975) explains that the Federal Government of Nigeria in a quest to improve the quality of education has over the years made changes in its educational policies. The system of education that provided two years of primary education, six years of standard education, five years of secondary education, two years of Higher School Certificate (HSC) and three years of tertiary education was replaced with six years of primary education, five years of secondary education, two years of HSC and three years in the tertiary institution (6-5-2-3). This was later replaced with 6-3-3-4 system of education and the recent change in policy to 9-3-4 Universal Basic Education which is aimed at promoting national goals and making education qualitative and more relevant to the Nigerian society (Olubodun, 2002). On the issue of demand for education, Okunola (1989), and later Ibukun (2004) observed that, the demand for formal education in Nigeria has risen astronomically at all levels of our educational system with a corresponding increase in the number of intakes in educational institutions. Secondary school enrolment had increased from 135,434 pupils in 1960 to 6,359,449 in 2002. He estimated that by the year 2007 the number must have increased to over 14 million. They observed that as enrolment increased the supply and quality of educational resources were not addressed and as such quality was not assured.

The United Nations Educational Scientific and Cultural Organisation (UNESCO 2004) stated that the poor quality of education which has yielded poor academic achievement of students is a common disturbing phenomenon in Nigeria today and unfortunately student achievement is sometimes used to assess the quality of education in the school system. To say that the quality of education is improving is open to argument. Over

the years, there has been a lot of public outcry over the poor achievement of Nigerian students in the Senior School Certificate Examination (SSCE). Some studies such as Kolawole (1998) and Okebukola (2000) have reported that the last decade witnessed poor achievement in the examination; and that high rates of failure in public examinations at both junior and senior school certificate examination were prevalent.

Bababunmi, Okebukola and Olaniyonu (1995) also reported that candidates who passed five subjects at credit level (including English Language and Mathematics) in May/June SSCE between 1982 and 1987 were less than 8% of the total number that sat for the examination. This statistics is discouraging. Kamara's (1993) analysis of SSCE results from 1988 to 1990 shows that only a small proportion of candidates passed at credit level and above, in all subjects examined. Statistics of achievements through the achievements of candidates in SSCE from the years 1991 to 2002 revealed that only an average of 14.67% and 18.91% of the entire population who sat for SSCE passed English Language and Mathematics respectively at credit level to satisfy the entry requirement for admission into tertiary institutions. It was observed that specifically in 1995, the overall achievement in the SSCE performance nation wide was 30%.

Ajomagberin (2004) and Alele-Williams (2004) lament that many students, on completion of their secondary school education, become delinquents because of their inability to have five credits (English Language and Mathematics inclusive) in SSCE, a requirement for admission into tertiary institutions. Majasan (1997) observes that, due to continuous students' poor achievement of performance as recorded by SSCE on yearly basis, parents have resorted to enrolling their wards in private lessons to

complement the school activities in order to ensure better students academic achievements. Fabiyi and Adetoro (2006), corroborate this when they reported that parents send their children and wards who cannot attain good performance in SSCE to coaching centres or remedial schools to re-sit the examination in order to be qualified for admission into tertiary institutions.

Many reasons have been put forward to explain the poor students' academic achievements through performances of secondary school pupils. One of the most and consistent defensible factors is national budget allocation to education, which is 9.9% and far below the 26% recommended by UNESCO. It has been argued that this situation is adversely affecting the quality of education in the institutions of learning. Omoike and Aigbe (2001) also criticized this and appealed to government to adhere strictly to UNESCO's recommendation in order to ensure quality education in the country. Obanya (2002) attests to this, when he stated that Nigeria's budgetary allocation to education was unfavourable compared with several African countries.

The UNESCO report for 2005 shows that Lesotho spent 13.2% of its GDP and 25.5% of its annual budget on education while Zimbabwe spent 10.12% of the GDP and 17.6% of its annual budget on education; South Africa, spent 6% of its GDP and 24% of its annual budget; Namibia 9.1% of the GDP and 22.5% of its annual budget on education; while Nigeria devoted 5.31% of GDP and 9.9% of the annual budget to education.

Fagbamiye (2006) opines that teachers' competence contributes to students' achievements. The achievements of the learners, therefore, can directly be tied to the inputs of the teacher in teaching and learning interaction; just as the learner cannot rise

above the level of his academic experience, so also can the teacher not transfer more than he knows. The strength of an education system depends upon the quality of its teachers. A teacher's poor input is a reflection of various factors some of which could be poor academic background, poor remuneration and lack of motivation. The poor student academic achievements, which could result in attrition as seen in high dropout rate, might directly be an offshoot of very poor teacher quality.

As indicated in the National Policy on Education (NPE, 2004), one of the national goals for teacher education is to produce highly motivated, conscientious, competent, dedicated and effective teachers at all levels of education system. According to Bello (2006), the issue of 'teachers' quality can never be over-emphasized because teachers are the pivot in the entire educational programme to the extent that their training makes or mars the end product of their job. The richer the teachers are in terms of knowledge, the more competent they would certainly be in preparing their students for future challenges.

Abolade (2003) stated that in order to meet up with financial goals and enlarge their capital base for infrastructural development, some private schools employ non-qualified teachers in order to cut cost on salary instead of employing teachers with degree in education (B.A.Ed) and teachers with Higher National Diploma, who have a Post Graduate Diploma in Education (PGDE) to teach at the senior secondary school. The National Policy on Education (NPE 2004) emphasised Nigerian Certificate in Education (NCE) as the minimum qualification for teaching in junior secondary school while in senior secondary schools only graduates with teaching qualifications are recommended to teach.

Teachers' characteristics based on quality of teachers, professional background, commitment and experience may be grossly inadequate when their number is too few to adequately cater for large enrolment figures existing in secondary schools in Lagos State. According to UNESCO recommendation, the teacher-student ratio should be 1:25-30 while the National Policy on Education (NPE 2004) states a ratio of 1:40. Babasola (2005) presented the minimum teacher-student ratio as 1:70 in Lagos State public secondary schools while in private secondary schools the ratio is 1:50 which has gone well beyond UNESCO's recommendation and the recommendation stipulated in the NPE. This high enrolment will not permit the teachers to fulfil the stated objectives of topics to be taught, this could be a major factor for poor quality output and academic achievements of students.

Teachers' working experience may also be a major determinant of the quality during the teaching and learning interaction in public and private secondary schools. Due to the salaries demanded by experienced teachers, many private schools might not be eager to employ experienced and well qualified teachers. Also in public secondary schools, age factor may be considered in employing teachers who are almost close to retirement age to avoid additional cost for the government. Thus, the service of experienced teachers whose quality input extends beyond the classroom academic work, to say guidance counselling and solving motivational problems in learning might be lost.

Fagbamiye (1997) and Ejiogu (2000) maintain that teachers' quality is measured by teachers' commitment, experience and qualification, which are more predictive of students' academic achievements. Oguntayo and Alani (1998) opined that teacher's

quality have positive effect on academic achievements even though their co-efficient were statistically insignificant, the congruency between low-quality of teachers and poor academic achievement in examinations necessitates adopting salary policies that would attract and retain teachers of proven ability.

Also, the ability to practically carry out what is being taught in schools may be another contributing factor to quality education. Sofolahan (1994) suggested that studying practical courses can only be fully complemented by undertaking laboratory and workshop lessons. Many of these courses are psychomotor oriented disciplines such as Electronics, Technical Drawing, Fine Arts, to mention a few. Even Pure and Applied Sciences need experiment in fully equipped science laboratories. Bishop (2000) posits that in most secondary schools, poorly equipped laboratories and workshops contribute to 'practical alternative' that is described as theories explaining practical processes without students seeing, laying hands on or manipulating tools and equipment that should be involved in teaching the practical aspects of these subjects. It is actually a cognitive learning process in the place of the psychomotor it has been designed for.

Another factor which seems imperative to quality education and student academic achievements is the school library. Fabunmi (2004), states that libraries are the keystone of teaching and learning process, as it is, the heart of the school. Oyebade (1999) adds that no other single non-human factor is as closely related to the quality of education in a school more than a good library. In addition, he notes that a quality education is impossible without a well equipped library. He also observes that many secondary schools have no libraries and those available, are not adequately equipped. Adeogun (1999) explains that without adequate literature to give a wider scope in the

learning process students may be inadequately informed on each subject matter. This in itself could reduce the quality of the teaching and learning process.

Akude (2004) adds that the teacher is no longer the sole dispenser of knowledge and that the textbooks are not the only source of recorded information. Multimedia resources, which are also known as teaching aids, instructional materials, learning materials or educational technology, have all made it possible to accommodate the individual differences that exist among the learners. The place of educational technology, which produces and supplies instructional media, cannot be overemphasised at any educational system. Ifeagwu (2006) emphasizes the importance of instructional resources and maintained that hearing in classroom teaching-learning interaction is responsible for only 15% assimilation while smell is responsible for 3.4%; taste is responsible for 1.2%, touch for 1.2% and sight 75% but when sight and hearing (audio-visual) are combined 90% assimilation is achieved by students. Ifeagwu adds that 85% to 90% learning thus achieved, underscores the powerful role of instructional media in teaching-learning process. Except for practical courses, and also, in those few schools with equipped laboratories and workshops, no use of audio-visual materials is observed in the teaching of all subjects in secondary schools.

In order to enjoy standard and quality input, school activities should be inspected, reviewed and modified regularly. When school activities are treated with laissez-faire attitude by the Inspectorate Division of the Ministry of Education that is mandated to control quality, there is likely to be a neglect of quality by teachers and students alike and this will eventually lead to poor teaching and learning conditions. Ofoegbu (2005) considered the weakening of the inspectorate and supervisory services, as the major

reason for the declining quality of education. Similarly, the persistent and enduring decline in the quality of academic achievements of Nigerian schools has variously been attributed to lack of sufficiently responsive inspectorate and supervisory services. Oguntoye (1993) posited that all things being equal, the quality of education would be significantly improved, if there were an increase in the scale of operation in schools.

The poor academic achievements of students may also be traced to poor state of infrastructures that house the academic programmes in secondary schools. Ibukun (2004) has observed that it is doubtful if the quality in education has been attained. Many secondary school buildings and other infrastructures are poorly maintained in many states of the country. A dilapidated classroom block may not only pose health hazards to students, but becomes an opening for distractions from weather conditions like wind, sun, rain and dust and all these make teaching-learning activities ineffective.

Among the problems, which may be observed in many secondary schools are the inadequate classroom furniture like lockers and chairs. Many of the students squat while some use the windowpanes as seats and others sit on the floor. These sitting positions may be a factor to poor student learning, the outcome of which is poor quality output. From the various assertions made above, it could be reasoned that the greater the dwindling fortune of a school in terms of availability of educational resources, the lower the quality of its output as measured by students' academic achievements. This study aims at evaluating the cognitive outcome of Senior Secondary Schools Certificate (SSCE) in relation to the existing educational resources in Lagos State public and private secondary schools.

Statement of Problem

A report of Lagos State Chapter of All Nigerian Conference of Principals of Secondary Schools (ANCOPSS, 2002) indicated their agitation on students' academic achievements in SSCE in the last decade. In an attempt to resolve the problem, an ad-hoc committee was set up to identify factors responsible for students' poor academic achievements. However, the committee's inability to take off jeopardized the effort of ANCOPSS.

In October 28 2006, the President of the Federal Republic of Nigeria invited concerned citizens and stakeholders to an education forum where issues bothering on students poor academic achievements in SSCE were discussed. Unfortunately, no logical conclusion was reached on how to resolve the problem.

The researcher observed that many factors contribute to students' academic achievement in any examination. As such, a student achievement in an examination is not only a matter of students' ability but a relationship between students' ability and other factors that play a significant function in the classroom activities that precede examination. One of the factors identified in an effort to ensure quality during school inspection by the researcher was the internal performance indicators otherwise known as operational indicators. The operational indicators are educational resources (human, physical, material and instructional resources) school-size, teacher-student ratio and teachers' quality (experience and commitment). Even if a student is very brilliant without positive contribution of operational indicators, the student academic achievement may not be optimized. However, if the student is average but has positive

contribution of operational indicators the student academic performance may be enhanced.

It appears that as population of students increase in schools, the existing educational resources become overstretched. The situation worsen as the classrooms are overcrowded especially in public schools where many of the students make use of the windowsills as seats while others choose to stand up during the lesson as a result of inadequate desks and chairs.

Also, the condition of infrastructure such as school buildings require rehabilitation while many of the schools do not have laboratories and workshops and those that have, do not have adequate equipments to take care of the students offering pure and applied sciences in order to carry out instructions during teaching and learning activities. Most students do not have necessary text-books that will enable them to do the school work while libraries are not available in many of the schools and those that have stock obsolete books.

In view of the situation highlighted above, it therefore become imperative to examine if there has been a proportionate increase in the provision and utilization of educational resources in terms of physical, material, instructional and human resources. The focus of the study is to investigate the contribution of school-size, teacher-student ratio and teachers' quality (experience and commitment) to the students' academic achievement in SSCE. Do quality and utilization of educational resources predict students' cognitive outcome in private and public secondary schools in Lagos State?

Objectives of the Study

The objectives of this study are to:

1. examine the availability of educational resources to public and private secondary schools in Lagos State,
2. determine the differences that exist in the utilization of educational resources between public and private secondary schools in Lagos State,
3. evaluate the academic achievements of students in public and private secondary schools in Lagos State,
4. examine the availability of educational resources and its effects on students' academic achievements in Lagos State secondary schools,
5. determine the differences that exist in the utilization of educational resources and students academic achievements in Lagos State secondary schools,
6. find out the impact of teachers commitment on students' academic achievements,
7. establish the interaction between teachers' experience and students' academic achievements,
8. explain the effect of school size on student academic achievements, and
9. examine the relationship that exists between teacher-student ratio and student academic achievements.

Research Questions

The following questions are to guide the study:

1. Are there differences in the availability of educational resources between public and private secondary schools in Lagos State?

2. What differences exist in the utilization of educational resources between public and private secondary schools in Lagos State?
3. What are the levels of students' academic achievements between 2002 to 2006 in Lagos State public and private secondary schools?
4. Are there any relationships in the availability of educational resources and students' academic achievements in Lagos State secondary schools?
5. Are there relationships in utilization of quality educational resources and students' academic achievements in Lagos State public and private secondary schools?
6. What relationship exists between teachers' commitment to the use of educational resources and students' academic achievements in Lagos State public and private secondary schools?
7. What relationship exists between teachers' experience and students' academic achievements in Lagos State public and private secondary schools?
8. What relationship exists between school-size and students' academic achievements in Lagos State public and private secondary schools?
9. Is there any relationship between teacher-student ratio and students' academic achievements in Lagos State public and private schools?

Research Hypotheses

Schools where quality educational resources are adequate and appropriately utilized are expected to enhance better students' academic achievement than those that do not have quality educational resources. Therefore, the following operational hypotheses have been tested in this study:

1. There is no significant difference in the availability of educational resources between public and private secondary schools.
2. There is no significant difference in the utilization of educational resources between public and private secondary schools.
3. There is no significant difference in the academic achievements of public and private secondary schools
4. There is no significant relationship in the availability of educational resources and students' academic achievements in Lagos State secondary schools.
5. There is no significant relationship in utilization of quality educational resources and students' academic achievements in Lagos State secondary schools.
6. There is no significant relationship between teachers' commitment to use of educational resources and students' academic achievements in Lagos State public and private secondary schools.
7. There is no significant relationship between teachers' years of working experience and students' academic achievements in Lagos State public and private secondary schools.
8. There is no significant relationship between school-size and students' academic achievements in Lagos State public and private secondary schools.
9. There is no significant relationship between teacher-student ratio and students' academic achievements in Lagos State public and private secondary schools.

Significance of the Study

Going by the concern about students' academic achievement in Nigeria, it has become imperative to assess the quality of educational resources available in Lagos State secondary schools (public and private) and their relationship with students' academic achievement in SSCE performance. Lagos State is regarded, as the centre of excellence in the Federation and excellence has to do with quality. This study is important as it helps to determine what educational resources should be made available and utilized for better academic achievements of students which is measured by their performance in SSCE.

It is anticipated that the findings of this study brings to the fore, the crucial place of quality and utilization of educational resources in the students academic achievements. It is expected to help the custodians of education (inspectors of education, principals and teachers) in their effort to evolve viable solution to problems in secondary education system in order to ensure efficiency, effectiveness and commitment. It is also hoped to bring about the realization of desired fulfillment of work ethics and job commitment on the part of the custodians of education in secondary schools.

It is also expected to bring innovations, to optimize quality educational resources and students' academic achievements. The result of this study also becomes a pointer to the improvement of quality in education and educational resources during the teaching and learning process and this will in turn enhance students' academic achievements.

Theoretical Framework

Zelvys (2004) perceives the concept of quality as one of the most important concepts in contemporary educational terminology. Quality, as defined by the International Organization for Standardization (1999), is “the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs”. According to Gaskell (1995), the heart of education is quality. Ashworth and Harvey (1998) acknowledged that an excellent school is regarded as a quality school. To have a school that is effective and efficient; quality must be geared towards enhancing individual potential and a full development of the learner’s personality. Oderinde (2004) enumerated two aspects of quality in education, which are internal and external. The internal aspect is the implementation of schools objectives, while the external aspect deals with the implementation of national objectives, which are pre-requisites for the achievement of quality in secondary schools.

This study examined motivation and learning theories in connection with educational resources and students’ academic achievement. Maslow (1971), a psychologist, developed a theory of motivation on which he classified human needs into five categories namely psychological needs, safety needs, love needs, esteem needs, and self actualization needs. For the psychological needs to be satisfied, payment of good salaries and good incentives are necessary for increasing the efficiency and effectiveness of teachers. Human beings desire stimulation for better job performance.

Boorer (1977) asserts that in some ways, the teacher is synonymous with learning and when learning is talked about in the school context, the teacher must be considered, for his influence upon learning will be of paramount importance. A successful learning

process can only take place due to the rapport and confidence generated between the teacher and the students. Learning is any change in an individual that expresses itself in a relatively stable form of behavior, and which is the result of interaction with the external environment. It occurs throughout the whole range of human activity and involves gradual modification under the influence of the environment (Borger and Seaborne 1982).

This study examines Bush (1995) postulated theories on educational management, having taken educational system as a whole; he considered formal, uncertainty and political theories. These theories assessed the operation within the school system and found out the effects of external factors on school system.

Formal theory describes a school as an organization which its major existence is to satisfy its customers who are students. A customer focused organization places considerable effort in anticipating the future expectations of its customers and by working with them in long-term relationships helps them to define their future needs and expectations. The formal theory is a way of controlling quality in any production system by the inspectors. Formal theory criticises the inspectors of education for their inability to evaluate the school work with regards to curriculum. The uncertainty theory believed that educational institutions depend on external influence, since many unplanned decisions are made. The political theory perceived educational organisation like other organisations as a ground for political activities. The main focus of political theory is on distribution of power and influence among the government and stakeholders. These theories have exhibited the effect of external influences on the school organisation.

This study also examines systems theory in relation to quality and utilization of educational resources and students academic achievements in Lagos State secondary schools because of its relevance to its understanding. Hall (1982) defines a system theory as elements which are in exchange and which are bound. Obi (2003) defines a system as an entity which can maintain some organisations in the face of change from within or without. Cole (1996) describes it as a set of objects or elements in interaction to achieve a specific goal. Huse and Bowditch (2004) conceptualise a system as a series of interrelated and interdependent parts, such that the interaction of any part affects the whole system.

A system may be close or open. An open system has the capacity of receiving inputs from outside environment in form of output. Bertalanfy (1971) emphasises that real systems are open to and interact with their environment. A close system is one that neither relates to nor makes exchange with its environment. The peculiarity of open systems is that they interact with other systems outside themselves; this interaction has two components, which are *input* that which enters the system from the outside through the boundaries and *output* that which leaves the system for the environment. The transformation of inputs into outputs by the system is called *throughput* and is fundamental for the survival of an open system. The input throughput and output are necessary and sufficient to form the framework required for this study since secondary school as a unit has all the attributes of an open system. Fig 1 shows the theoretical model for this study.

INPUT-OUT MODEL OF EDUCATIONAL RESOURCES ON STUDENTS' ACADEMIC ACHIEVEMENTS

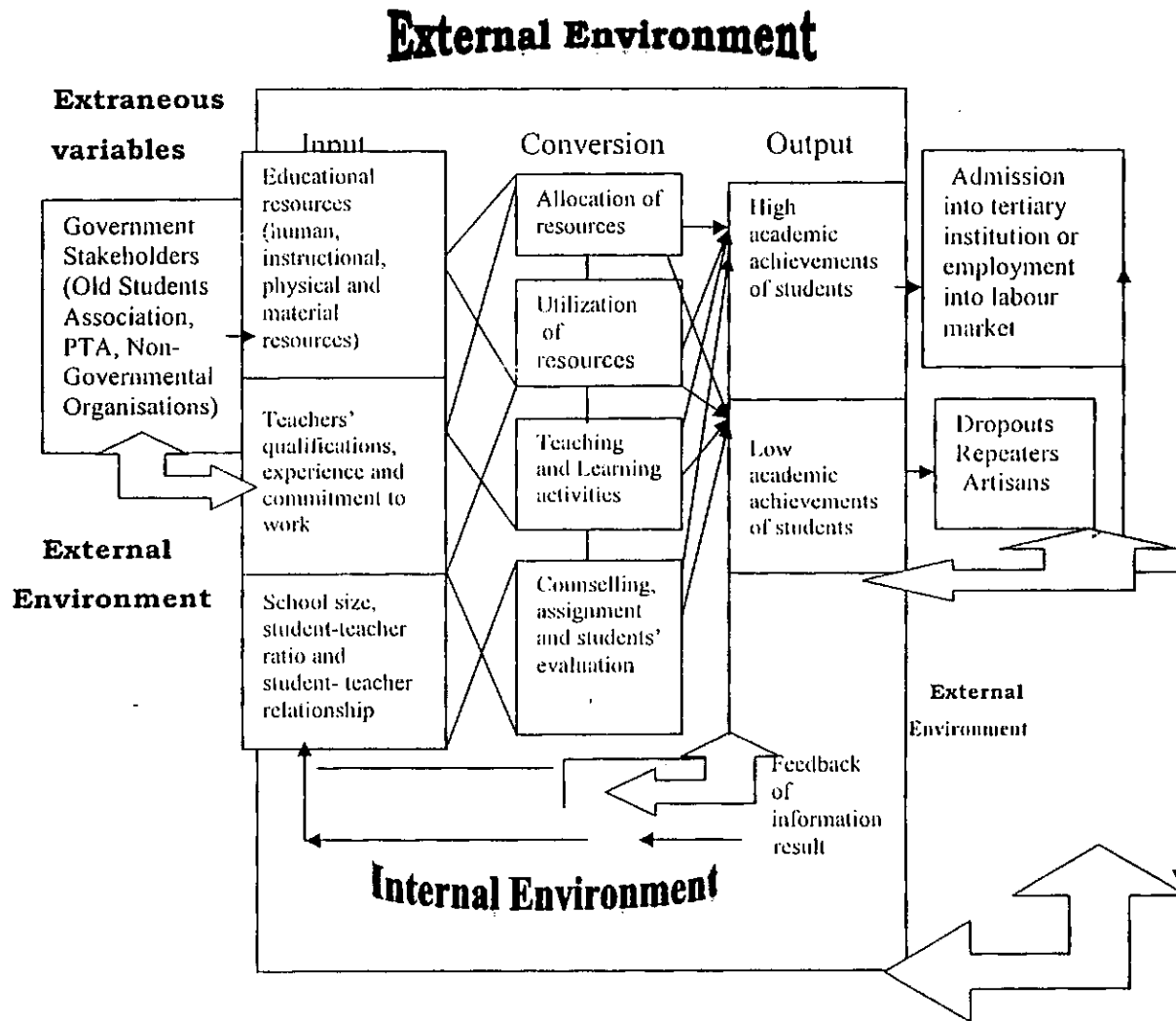


Fig 1: Peretomode (1995) Applied Concepts and Theoretical Perspective (Modified)

Source: Author.

This model shows the interactions among the variables and how the educational resources enhance students' academic achievement in Lagos State secondary schools. This diagram depicts a high degree of interrelationship between and among the variables as shown in the diagram. The diagram shows the contributions of

government and stakeholders to the school system in terms of resources that come in from outside environment as input. These resources are human, physical, material, instructional and financial resources available for distribution within the school and which interact and are interdependent on one another. All the activities carried out in a school system to produce a set of desired outcome are related to one another. They are known as either transformation process or throughput. These resources undergo the transformation process or conversion process during teaching and learning activities to produce the finished products (output), who either come out with high or low academic achievements as a result of their performance. The output shows the quality of students as measured by their academic achievements in SSCE. It is the end product of resources utilization, which determines where the students are placed within the external environment, whether they proceed into tertiary institution, go into labour market, become artisans, repeat the class for better performance or become dropouts. These students who pass through educational system are absorbed into the larger society, from where they start as inputs, in order to maintain quality output. This process is known as feedback. The feedback process is an evaluative process which provides the necessary information about the achievements of students so that possible discrepancies between intended output and actual outputs can be sensed and compared so as to ensure appropriate modifications.

Operational Definitions of Terms

The following terms were defined in the context of this study.

Public Secondary Schools: These are schools owned and managed by the government and governmental agencies. They are funded by governments and provide free education for the children.

Private Secondary Schools: These are schools owned, funded and managed by individual (s), groups or voluntary agencies. They are believed to provide qualitative education and make some level of profit.

Educational Resources: These are the sum total of everything that goes into educational system. They are physical, material, financial, instructional and human resources.

Resource Utilization: This is the level at which resources are used. It is measured in terms of adequacy of resources provision in schools.

Quality: It is the degree of congruence between expectations of the standards and its realization for effectiveness, efficiency and excellence.

Administrators: These are government appointed officials who manage the day-to-day activities in schools as well as supervising the teachers and their teaching methods. The inspectors of education and school principals perform these activities and are as well regarded as administrators.

Academic Achievement: Academic achievement is the degree of success in the production of secondary schools students in Senior School Certificate Examination.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The key literature that discussed quality and utilization of educational resources and students' academic achievements in Lagos State public and private secondary schools were reviewed in theoretical and empirical studies putting into consideration the relationship between the selected variables and students' academic achievements under the following major headings:

- Concept of quality in education
- Quality in secondary schools
- Utilization of educational resources
- Academic achievements
- Size of school and academic achievements
- Qualification, experience and commitment of teachers and students academic achievements
- Quality of physical/material resources and student academic achievements
- Quality control and academic achievements.

Concept of Quality in Education

Quality originates from the Latin word 'qualis' that means real. If education is adopted as an instrument for effecting national development and growth, such education should be full of quality. Isyaku (1999) explains that quality or degree of excellence of any product is very important to both the producers and the users of the product. This is

even truer in the case of education when one considers that the products concerned eventually form the bulk of leadership of a society. The perceived fall in quality did not concern the consumers alone but also the products, the institutions, the professional bodies and any government that cares for the future of its citizen.

Zelvys (2004) noted that the concept of quality has become one of the most fashionable concepts in the contemporary educational terminology. Quality may mean different things to different people especially in the area of education. Many educationists have attempted to define the concept of quality of education. For instance, Harvey and Green (2001) state that quality of education is slippery and has ambiguous meaning to common parlance. Bradley (1997) classifies quality as the totality of features and characteristics of a product of service that bear on; its ability to satisfy stated or implied needs.

Ndili (1997) describes quality in education as dealing with the issue of relevance, validity, functionalism and efficiency of educational system in the achievement of national goals and priorities. He maintains that this can be interpreted as specifying worthwhile learning goals and enabling students to achieve them. The specifying worthwhile goals involve paying attention to academic standards, the expectation of the society, students' aspirations and the requirements of the institutions.

Dale and Bunney (1999) stated that quality is the heart of education. Okafor (1990) avers that quality is the degree of goodness and excellence in any organization and he links this with the ability to function well and meet the needs of the entrepreneur. Ashworth and Harvey (1998) in their findings on quality of education add that to have

an effective and efficient school in an educational organization, quality must be geared towards enhancing individual potentials and a full development of a learner's personality. Enemu (2005) corroborates this in defining quality as some of composite of properties inherent in a material or product. The performance or guarantee output may be the basic measure of quality. This is one of the indices of quality education. If according to the Universal Declaration of Human Rights, education shall be directed to the full, development of the human personality, then a simple definition of quality education is the type of education, which will equip the individual with all the vital ingredients for his development. Quality education improves the quality of the workforce by raising the levels of its skills and efficiency. Majasan (1997) in his study states that what constitutes quality education varies between different countries according to their economic resources, value systems, educational goals and philosophies. The democratic philosophy of education is based on the concept of free and equal access and opportunity for quality education. Depending upon nations' human and material resources, an egalitarian society ought to provide quality education for all its citizens. He also emphasizes that no nation, which hopes to maintain its place in a competitive world can permit obsolete policies and principles to dominate its education. To make education up to date when quality is being talked about, there should be up to date educational resources in our institutions.

Okunola (1989) states that the procedure of resources allocation is often not related to factors such as student population. He also observes that the utilization rates of resources are generally low and have affected the quality of education being rendered in most of the secondary schools in Oyo state. He emphasizes that educational resources should grow progressively as the student population increases.

Harvey and Anthony (2002) study the effect of quality on academic achievement in an American secondary school; they found that poor utilization of educational resources had a negative effect on students' academic achievement. They accentuate in their finding that declining quality education has to do with inadequate quality resources that should serve as sustenance of quality education in our institutions of learning. They add that one of the fundamentals requirements to assess quality education is quality of human resources (work-force), physical resources, instructional resources and material resources.

Quality in Secondary Schools

Bolman and Deal (1999) found that educational reforms worldwide are aimed at providing better quality in education, and, based on this; Isyaku (1999) opines that quality in any educational institution indicates the pre-eminence and special features that make the institution distinct from other institutions. However, it is pertinent to examine the characteristics of quality education in comparison with the conditions obtainable in our secondary schools. Obikeze (2003) cites Gould (1963) in his presidential address at the General Assembly of Delegates of the World Confederation of the Organizations of the Teaching Profession (WCOTP) that the three distinguishing characteristics of quality, are: to provide adequately for the needs of the community; to build a nation where no man is oppressed; and to make education fit every circumstance. He emphasizes that where these three are absent there can be no quality education. He also adds that quality education is the lifeline of any nation.

Ibukun (2004) in his study on management of secondary education in Nigeria considers the concept of quality in education with respect to the level of education offered in

secondary schools. Has it turned out people who are intellectually, morally, emotionally, attitudinally, culturally and, above all, functionally and relevantly equipped for useful living within the society and for higher education? In his findings, using Ondo State as a case study, a place where education is regarded as the main industry, the picture becomes clearer when a survey of the state of resources, morale and commitment of role players, output and efficiency of the system points to the direction that the standard of performance and achievement in secondary school system still has room for improvement.

Sofolahan (1988) submits that quality education has both implicit and explicit meanings. The implicit meaning is the implementation of stated objectives while the explicit meaning is adequacy of the implementation of the objectives in the 3-3 component of the 6-3-3-4 system of education right from inception. He emphasized more on the adequate allocation and utilization of resources, which inevitably enhance students' academic achievements. Oyedele (2000) reports from his research findings that the state of secondary education in Nigeria is unsatisfactory in terms of infrastructure; the education system within the six geo-political zones is ridden with tales of decay. His view was corroborated by Adeogun (2001) who also reports that secondary schools in Nigeria are characterised by dilapidating walls, windows without shutters, rooms without doors and windows, rooms with blown off roofs, leaking roofs, dirty pit toilets and poor drainage facilities.

Most buildings have either collapsed or blown away by violent winds due to poor workmanship while Adaralegbe (2001) observes that lessons take place under a shed in some schools. He also adds that educational resources like laboratories, workshops,

library and equipment required to function adequately have not been put in place for proper dissemination of knowledge, and for this reason, the output of the secondary schools is questionable, particularly with the failure rates and sub-optimal performance. Fitzpatrick (2003) stresses that inputs and process factors in schools, such as provision and utilization of educational resources, exert a much more influence on students' academic achievements.

One of the important instruments for the assessment of quality education is the quality of the work force in terms of qualifications and professional preparation. It has been observed that there have been insufficient qualified teachers in secondary schools in Nigeria. This is evident in some schools where graduates who are not professional teachers are employed to teach and this affects quality of education. Also, Olarinoye (2000) adds that many of the teachers in our schools, who are professionally and academically qualified, do not have intrinsic interest in their jobs; hence little or no dedication has been noticed. The truth is that most of the people who go for teacher education courses inevitably do so when they have failed to qualify for their original favourite course or career.

Bello (2006) in his study states that lack of incentives that should motivate teachers to be more dedicated in their jobs is another problem affecting quality of education in Nigeria; hence there is exodus of teachers to other establishments where they would earn better and also enjoy more recognition. He adds that in order to overcome this problem, it is necessary that the conditions of teachers' service are improved and encouraged through the provision of regular incentives that will stimulate them. This

would not only help in attracting qualified and dedicated people into the teaching profession, but also help to retain people already in it.

Utilization of Educational Resources

Educational resources refer to the available facilities that can be used to achieve educational goals and objectives. They are human, physical, material and instructional resources. Human resources refer to teachers, principals of schools, inspectors of education, guidance counsellors, students; and physical resources such as fixtures like buildings; material resources such as maps, textbooks, furniture; and instructional resources such as media materials like the television, radio, tape recorder, computer etc.

Various studies have been conducted to determine the usefulness of educational resources. Abolade (2003) Wenglinsky (2002), Rumberger and Thomas (2000) describe resources as a major factor influencing academic achievements of students and ultimately their goal. Lackney (2002) in support of the effect of educational resources on students' academic performance adds that availability and utilization of appropriate quality resources are advantageous to the teachers as well as to the students and, to a large extent, improve students' academic achievement.

Osadolor (2001) in his study on analysis of the allocation and utilization of resources to pre-vocational subjects in secondary schools in Edo states that resources constitute major quality determinant in any organization which must be well managed and utilised. He adds that there is a systematic relationship between educational resources which is the educational inputs and students' academic achievements which is the

educational output. His study compliments Schmoker (1999) on the key to continuous improvement in students' academic which states that input of educational resources exerts a much more powerful influence on students' academic achievements.

Fabunmi, Brai-Abu and Adeniji (2007), in their study on school size, state that utilization of educational resources is perpetually low in public secondary schools. Their finding was based on poor distribution of resources and utilization of resources; this was in consonance with Okunola (1985) and Macleans' (2002) view that ineffective teaching and learning is based on in availability and non utilisation of educational resources that should be directed towards the attainment of Nigeria's educational goals and objectives. Osadolor (2001) in his study on analysis of the allocation and utilization of resources to pre-vocational subjects in secondary schools in Edo states that resources constitute major quality determinant in any organization which must be well managed and utilised to its fullest for the maximum benefit of students' achievements.

Fagbamiye (2006) states that the Nigerian educational system places much emphasis on the academic and technical programmes that require specialised resources. As a result, the processing of educational inputs (students) would demand for resources that are optimally functional so that quality production can take place. However, he observes materials and equipment sent to many schools are not completely and operationally integrated into educational process. The study of Ajayi (2002) and Obanya (2004) links the decline in students' academic achievements with non-availability of teaching materials such as library facilities, laboratories facilities, classroom facilities, and instructional facilities among others. Oni (1995) expressly

states that a learning environment that is devoid of necessary learning resources would result in poor students' academic achievements.

Adeogun (1999) in his study on organisation and management of schools in Nigeria affirms that the quality of an education system depends on the quality of teachers and teachers' competence in the utilisation of educational resources. However, Okoro (2000) in his study does not particularly believe that teachers should rely so much on use of resources during teaching and learning process since the resources reduce teachers' activities and bulk of work which eventually renders them indolent.

Academic Achievement

Students' academic achievement had long been recognized as the single most important measurement of qualitative education (Majasan1997). General complaints by government and stakeholders about the state of education in Nigeria, especially in secondary education, show that a lot is wrong with the quality of secondary education. The quality of education has deteriorated and this is evident by the student's achievement in Senior Secondary Examination (SSCE). Fafunwa (2003) correctly observes that standards have been set for the education sector that should ensure quality, but we have not often succeeded in ensuring that such standards can be attained. He states with dismay that the last decade has witnessed poor achievements in SSCE and adds that both the government and stakeholders must work together to ensure quality education is passed on to students without any compromise so as to ensure optimal students' academic achievements.

Many research studies seem to support the fact that a lot of factors are determinants of academic achievement. Macleans (2002) gives an insight into those factors contributing to students' academic achievement. He stresses that inadequate educational resources to enhance academic achievement in schools is a major factor. A supposed learning environment devoid of necessary learning resources will certainly result in poor academic achievement.

Ijaiya (2007) tries to examine other factors responsible for students' academic achievements in secondary schools and she trims it down to classroom congestion and low utilization of teaching and learning facilities. In her view, reduction of the classroom to a manageable size will enable teachers to carry out adequate and effective teaching during which appropriate teaching and learning resources would be used to enhance teachers productivity and ensure student academic achievements. Olajuwon (2004), Oloyede and Oredein (2006), in their separate findings on quality of teaching personnel on students' academic achievement, find a high correlation between the two variables. In their recommendation they state that teachers should be exposed to information technology that will enable them to have international and technical skills which will keep them well informed to enable them impart adequate knowledge to students.

Fagbamiye (2006) in a study on secondary schools in Lagos State came to the conclusion that school factors seem to be strong predictors of students' academic achievement. He looks into teachers' quality on academic achievements. The analysis of the result reveals that schools that are well equipped with highly qualified and experienced teachers have good records of academic achievements and attract more

students. Fagbamiye (2006) states that teachers' output is directly measured by student academic achievement and change in their behaviour. He further emphasizes that student achievement is the essence of teachers' success and believes that students' academic success should be the desired goal of the teachers'

Size of School and Academic Achievement

Bourke 1993, Mok and Flynn (1997) in their studies state that one of the panaceas that policy makers put forward for enhancing academic achievements of students is the school size. Burke (1987) in a study on school size compares both small and large schools in terms of student academic achievement and he reports that academic achievements in small schools is at least equal and often superior to academic achievements in large schools. Others studies such as Mc Guire 1989, Ames and Archer 1990, Elliot and Dweck 1991 examine academic achievements from the perspective of public and private schools and from their findings, public schools offer more numerous and more varied curricula than private schools.

Glass and Cohen (1998) summarised six studies on size of school and academic achievements of students. They almost dismiss the idea of any relationship between both. They then go further to conclude that if any relationship exists at all between school size and academic achievements, this lies with the public schools and not private schools. Lynne (2002) in another study of high school size in Columbia gives credit to public schools in his findings that people from public schools score higher on standardized achievement tests than those from private schools.

Many educators have argued in favour large schools on the ground of curriculum quality. They stipulated that large schools can offer more numerous and more varied curricular than small schools. Fowler and Walberg (1998) in their study, find no relationship between school size and curriculum quality. However, they believe that the strength of the relationship between school size and curricula diminishes, as school becomes larger. They note that if public schools were broken into smaller units, students would learn more and be more likely to remain enrolled rather than having higher dropout rates. Berkey (1996) and Conant (2000) in different studies support large schools in terms of schools that could provide rich curricula. They add that if students' service, staff development and curricula are properly managed, large schools could be as efficient and effective in establishing a good learning outcome as small schools.

Palardy (2003) in his studies on school size indicates that increase in the size of small schools is associated with greater curricular gains than increase in the size of larger schools. More a priori expectation based on recent literature was that students in small schools experience better academic achievements than their counterparts in larger schools. Howley and Bickel (2002), Lee and Smith (1997) found that the small schools size is associated with higher students' achievements. Although the evidence is not strong but a consensus exists between their findings, that if a large school is broken into smaller units, students would learn better.

Rumberger and Palardy (2002) in their study on school size find that teachers in small schools are more likely to feel satisfied about their work than their counterparts in large schools, since they show more dedication to their work. Also, Lee and Smith (1997) in

their findings stated that a small school facilitates personal interaction and social intimacy between teachers and students. Driscoll and Svory (2003) also agree with Lee and Smith that a small school size fosters intimacy among teachers which enables them to improve their productivity and affects the achievements of students positively.

Adeogun (1999) emphasizes in his study on school plant planning and facilities management that a small school facilitates personal interaction and social intimacy among the school authorities, teachers' and students and heightens students' academic achievements. Rumberger and Palardy (2002) in their study subscribed to the importance of having small school size as it yields better academic achievements. They find a high correlation between school size and student academic achievements.

Also, there are some recent studies on school effect that call into question the claim that small schools are better. Palardy (2003), Howley and Bickel (2002) in their studies, using student achievement growth during high school as the outcome rather than achievement status measured at one point in time, they find that large (1201-1800 students) and extra large (1801+ students) schools perform better than small (<600) and medium-size (601-1200) schools after controlling for students' family and educational backgrounds. Rumberger and Palardy in another study found that although large schools produce higher learning rates, they also have higher dropout rates. Berkey (1996) maintains that if students' service, staff development and curricula are properly managed large schools can be as efficient and effective in ensuring a good learning outcome as small schools. Thus optimal school size appears to vary depending on the educational outcome. Much uncertainty still exists as to how school size influences different educational outcomes.

Moreover, it is not clear whether or not school size as a predictor affects students' learning and subsequent achievements. Also, Fitzpatrick (2003) in his findings on indicators of quality reveals that input (educational resources) and process factors determine students' academic achievement and the input of educational resources exerts a much more powerful influence on students' academic achievements.

Class Size/Teacher-Student Ratio and Student Academic Achievement

Many researchers have tried to find an explanation for what causes the difference in the academic achievements of students all over the world. They are yet to come up with an adequate answer. Class size is an important factor in relation to academic achievements of students. The relationship between class size and academic achievements is a major controversy.

Research findings have given both negative and positive reports on class size and its effect on academic achievements. While some researchers believe that class size determines the academic achievements of students others believe that there is no significant relationship between class size and academic achievements of students. Class size is an important factor in relation to academic achievements of students. Subedi (2003) defines class size as the number of students earmarked for instruction at a given time.

Hymes, (2004) observes that class size has become a phenomenon often mentioned in education literature as a predictor of student academic achievements. According to him, many researchers have assumed that the class size determines the achievements of

students both in internal and external examinations. He explains that there is yet no universally acceptable number of students per all types of classes; however, he argues that a large class size is malignant pressure on the academic achievements of students. He emphasized that the lower teacher-student ratio allows for more effective communication between the learner and the teacher.

Brownlee (2002) in his findings concludes that having smaller class size is a determinant of student achievements in both internal and external examinations. Eastcott (1996) and Akinkugbe (1994) opine that smaller class size increases effectiveness of teaching and learning interaction. They both agree that if a teacher has only twenty-five students to handle in a class, he probably would be able to devote more time to the preparation and delivery of his lesson as well as supervision of students' work, thereby enhancing quality in the students' academic work. There is a consensus among various researchers and educationists that the lower the class size or teacher- student ratio, the higher the students' academic achievements.

The effect of class size on the cognitive achievement has been debated and researched for many years and has been inconclusive. Many studies have pointed out the significance of teacher-pupil ratio to cognitive learning in the school. Galloway (1999), finds that compared with the large class size, the fewer the number of learners under a teacher the more opportunity for an individualized, instructional and face-to-face interaction. The average class size is larger in public schools but smaller classes are generally considered more desirable because they enable teachers to give more individual attention by lightening the teacher's overall workload.

Fabunmi and Okorie (2000) investigated the extent to which class factors like class size, students' classroom space and class utilisation rate determine the performance of students in SSCE in Epe Local Government of Lagos State between 1997 and 2000 school years using Spearman Rank Correlation and Pearson Product Moment Correlation. The analysis, which was done with Pearson Moment Correlation, revealed a negative and low relationship, but that of Spearman Rank Correlation revealed significant and positive relationship between average class size and students' academic achievement. The contradictory findings are products of the two different methods of analysis.

- Fabunmi and Okorie (2000) have also investigated the relationship between class size and secondary schools academic performance in Oyo state. The researchers used Pearson Moment Correlation to test the only hypothesis that class size does not determine significantly secondary school students' academic achievement. The analysis revealed a negative and low relationship between class size and students' academic achievement. Ajayi (2002), in his own study, having used data from the 1998 National Assessment of Educational Progress (NAEP) on reading test, he finds out that being in a small class does not affect reading achievement in any way. He opted for use of newspapers to teach reading, vocabulary development and communication skills.

Ojoawo (1989), in one of his findings on class size reveals that it is negatively related to school academic achievement. Cotton (2001) and Schneider (2002) in their studies on small learning communities find that clear air, good light, and a small, quiet comfortable and safe learning environment influence students' academic achievement.

For learning to be effective, it must take place in a conducive environment, where there are sufficient resources. Scheneider (2002) also reports on class size, that a positive relationship exists between class size and students' academic achievement because class size has a strong and direct influence on academic achievement of students. He adds that schools with large classes are said to record poor academic achievement while better academic achievement has been associated with schools that have small class size or teacher-student ratio.

Fabunmi (2007) carries out a study on class factors (class size, student classroom space and class utilization rate) and performance in Oyo State using 336 secondary schools. He concentrates on academic performance in SSCE for the years 1997-2002 based on class factors using Multiple Regression Analysis. The study reveals that a class factor determines significantly secondary school students' academic performance.

Fabunmi (2007) reported that a positive relationship exists between variables class factors and academic performance. These factors have direct influence on academic achievement. He adds that schools with larger class size or high teacher-pupil ratio record poor academic achievement while better academic achievement is associated with schools with small class size ratio. Boluwaye (2007) in his finding on factors affecting Nigerian Secondary Schools students' achievement in SSCE corroborates Fabunmi (2007) that performance falls where large classes do not permit teacher-student interaction.

The UNESCO Educational Planning Team (1982) recommends a class size of 40 students as the maximum and twenty-five students as the minimum in a class. The

National Policy on Education (NPE 2004) stipulates a class size of 40. Brown (1984) in his study identifies the levels and kinds of stress experienced by teachers in an overcrowded classroom. He states that that overcrowded classes hamper teacher's progress in disseminating knowledge to students and affect students' academic achievement. Also, the inadequate educational resources to cope with large class size and overload schedule of teachers' is a condition which can lead to teachers' poor output and students' poor achievement.

In emphasizing the importance of class size, the All Nigeria Conference of Principals of Secondary Schools (ANCOPSS) recommended 40 students per class for effective management and better control of classroom activities. Ultimately, it should be obvious from above that there is substantial empirical evidence that examines the relationship between class size and academic achievement of students which are inconclusive. Arum (1996) opines that even with the methodological problems, research has generally demonstrated the influence of class size or teacher-student ratio on students' academic achievement in a variety of educational settings. In view of this fact, it could be said that teacher-student ratio is one of the important factors determining good academic achievement of students.

Barcan (2006) in his study on class size affirms that one potent index for evaluating standards and quality in secondary schools is examination of resources. He presents the approved class size in some Western countries such as Scotland with class size of 25 in both nursery and primary classes and 30 in secondary classes; England with a class size of 20 in nursery classes, 25 in primary classes and 30 in secondary classes; Sweden with a class size of 25 in nursery classes, 30 in primary classes and 24 in

secondary classes; United States and Denmark also have a class size of 20 in primary classes, 25 in both primary and secondary classes.

In the light of this study, while it may be true that large classes may be better, for good academic achievement, small classes may be more desirable. Spady and Marx (2003) in their study emphatically state that adequate class size is very important to student academic achievement and where a large class exists; students can fall behind in school work or experience academic failure. However, it may be concluded that the fewer the number of learners under a teacher the more opportunity for an individualised instructional interaction.

Amidst all the contradictory research reports on the effect of class size on the students' academic achievement, one can expressly state that indeed, the issue is not conclusive yet.

Quality, Experience and Commitment of Teachers and Students' Academic Achievement

The success of an organisation depends largely on the quality and strength of its staff. Teachers constitute the single most important fabric on which the success of the whole educational programmes hangs. The 1969 National Curriculum Conference described the teacher as the key man in the entire educational programme and observed that the quality of his training makes or mars the outcomes of his job.

Research findings relating teacher's qualification to student academic achievements are mixed. Some studies found positive relationship while others found negative relationship. Rice (2003) reports that out of 34 correlational studies relating teachers level of training to students academic achievements in Mathematics carried out in 24 districts in Michigan only 25 of the studies reported positive relationship. Rice result left little room for doubt on teacher's qualification and students' academic achievement relationship. She concludes therefore, that teacher's level of training has a positive relationship to student's academic achievement, at least in Mathematics. Salami (2002), Fagbamiye (2004) and Orintusin (2006) corroborate this in their findings that the qualification of teachers is a pre-requisite to academic achievement. They predicate in their various studies that teachers' competence based on their quality attributes, contribute to students' academic achievement. Ejiogu (1993) opines that teachers are those men and women, a very considerable part of whose lives is spent guiding, directing, and influencing the thought, feelings and behaviour of others.

Suleiman (2006) recommends that government should devote more attention to quality of teachers through capacity building programmes that are motivating and sustainable. He states that government should make adequate provision of educational resources to teachers training colleges in order to ensure professional development of teachers. He also adds that there is the need for State Universal Primary Education (SUBEB) to utilise judiciously the 15% of the Universal Basic Education (UBE) Federal Government grant, for building the capacity of teachers. According to him, doing so will enhance teachers' sense of professionalism and improve the quality of teaching and pupils' learning outcomes.

Salami (2002) attempt to find out the relationship between teachers qualification and teaching effectiveness, looking at the various categories of teachers with educational qualification such as Bachelors degree in Education (B.Ed), Postgraduate diploma in Education (PGDE), Nigerian Certificate in Education (NCE), Associate diploma in Education and Grade Two Teacher Certificate in Education. Apart from this group of professionally qualified teachers, he also looked at teachers who do not have professional qualifications. These teachers are holders of Masters degree and Bachelors degree in Arts and Science. Are these non-professional teachers more effective than the professional teachers? The underlying assumption is that pre-service programs prepare teachers for more effective teaching

Olajuwon (2004) in his correlational study relating teachers level of training to students academic achievement emphasised on quality professional training for teachers since the qualities of teachers have greater impact on students' academic achievement. He agrees with Reichardt (2001) viewpoint that professional teachers should aim at further and continuous development of themselves. He adds that a key to success is the availability of time for teachers to participate in professional learning.

Oni (1995) and Ejiogu (1997) criticise the crash educational programme, which led to the production of teachers. They insist that it has a negative effect on the educational system giving the recurrence of disappointing results in SSCE; it appears that too many students do not have enough exposure to qualified teachers, especially in private secondary schools. They compare the present situation in our schools with what operates in our schools during the colonial era, when no attention was given to academic qualification of those that stood before the students to impart knowledge on

them. The effect was poor quality education as the majority of the beneficiaries were neither useful to themselves nor to the colonial administration. Fafunwa (2003) agrees with Oni and Ejiogu on the issue of time frame for teacher training on quality of teachers and their effectiveness. He emphasises that where the training is shoddy, this will eventually affects teachers' effectiveness and eventually the students' academic achievement.

Onjewu (2006), Fadokun (2005) and Okunrotifa (2007) did not consider teachers' qualifications' as a predictor of academic achievement; they emphasize more on teachers' attitude to work and students' state of preparedness. They add that attitude to work claim superiority over qualification as it affects students' achievement. Also, other researchers that do not attribute much to quality of teachers as an important variable to students' academic achievement are Fabunmi (2004) Omah (2002), Adu and Olatudun (2006), they found little evidence linking teachers' quality to students' academic achievement. They all criticise teachers' exposure to inadequate curriculum that should reveal their qualities in a way that it will have a positive effect on the performance of students.

Madibbo (2006) identifies two dimensions of quality in teachers training institutions. According to him, these two dimensions are internal and external qualities. The internal quality refers to those processes and practices designed and executed by the teacher training institutions to ensure that their products are of high quality and comparable to that of similar institutions in other countries. The external quality, on the other hand, refers to procedures carried out by accreditation bodies set up by the government.

The importance of teaching experience has been emphasized by a number of contemporary writers. Guay, Boivin and Hodges (2003) maintain that there is no substitute for personal experience. Oloyede and Oredein (2006) emphasize the generalizing power of human organism. They state that no situation reproduces itself in the exact same form or another. They hasten to add, however that recognition of the common features prepares the teacher to cope with new instance. They maintain that all other things being equal, it is generally agreed that the more experienced the teacher is, the more successful he is likely to be. There is an adage that says experience is the best teacher.

Darling-Harnmond (2003) Obanya (2002) and Ojeleye (2000) in their findings add that experienced teachers have been found to teach well in English and Mathematics than inexperience teachers. Osasona (2005) corroborates this as he states that an experienced teacher would know how to manage students to ensure learning takes place. Rice (2003) expresses the importance of experience in teaching, that a well experienced teacher demonstrates his skills in order to bring out the innate qualities of students. She states that the more one practices past learning, the more knowledge one would gain. In the case of the teacher, the implication therefore is that the more experienced a teacher is, the more effective he becomes. This supports Okafor (1990) that says the more experienced a teacher determines what students gain from him and this helps to enhance students' ability.

Erinosho (2004), Adeyanju (2003) and Bamisaiye (2007) in their various studies agree that teachers who are well experienced will surely employ means of communicating

their lessons to their students in a situation where instructional resources are not available; they are to improvise in order to ensure better students' academic achievement. Other studies found marginal relationship between teacher's experience and student's achievement. Graham and Juvonen (2001) conclude that teacher experience does not have a positive influence on student's academic achievement in senior schools. In their investigation of 70 schools in Botswana, they found slight relationship between teacher's experience and student's academic achievement in English and Mathematics ($r=.028$). They conclude that as the proportion of student increases, the effect of teacher's experience decreases.

Oloyede and Oredein (2007) report that the first three years of teaching experience and after 20 years of teaching there is low effectiveness for teachers in secondary schools. Okunrotifa (2007) corroborates Oredein and Oloyede in his findings that a highly experience teacher is generally older and more experienced in teaching field. He finds out that this type of teacher is less effective than the younger less experienced ones, who are less experience. Omah (2002) maintains that there is an overall negative relationship between teaching experience and students achievement based on his study of senior secondary final class students in English achievement in Basingstoke

Studies on teachers' commitment have produced mixed findings. Omah (2002), in his findings on teachers' commitment, states that it is uncommon to discover that teachers are sabotaging the efforts of government through their attitudes towards their profession. He looks at variables that may lead to lack of commitment of teachers to their duties, among which poor condition of service and lack of incentives rank higher than other variables in the study. He suggests that government should work towards

improving teachers' condition of service in order to motivate them to be committed to their jobs.

Other studies like Ciwar (2006) emphasize that lack of commitment of teachers to their jobs is as a result of poor salary income. Boluwaye (2007) in his study adds that teachers are overburdened with the overpopulation experienced in public schools and their salaries are incommensurate with the work they do. He adds that teachers work under a lot of pressure since many of the teachers do not have educational resources that will aid their teaching especially in an environment that is in conducive.

Bacharach, Bauer and Shebb (2001) claim that lack of educational resources for teaching has a direct negative effect on teachers' ability to perform and indirectly impacts on teachers' motivation and satisfaction. Macleans (2002) in his study on students' achievement using Year 10 English and Mathematics has found that, after combining teachers' commitment with educational resources in the teaching of English and Mathematics in Year 10 achievement, the explained variance ranged from 25-36%. His finding shows that teachers' commitment has a positive relationship with students' academic achievements.

Instructional Resources and Students' Academic Achievement

Many researchers have examined application of instructional materials during teaching and learning activities and their effect on student academic achievement all over the world. Egwim (2006) in his study multimedia in education states that deficiencies associated with print media, led to the emergence of non-book information sources otherwise called multimedia materials. Adeogun (2004) classifies instructional

resources in schools as learning resources which he justifies as those materials used in the process of instruction to supplement and complement the teacher's task. The tools for learning are the five senses. A learner makes use of his ears, eyes, sense of touch, smell and taste. The need to fashion appropriate methods of teaching for different categories of learners has led to adaptation of multimedia resources in the teaching and learning processes. Okoro (2000) characterizes multimedia as:

Information-bearing media that are not in the form of conventional book format are usually referred to as multimedia. This are information resources that are not in books or print format but which are capable of appealing to the eyes, ears, sense of touch, smell or taste, or a combination of more than one of these.(p.36)

Terms like media resources, audio-visuals, information technologies, are used interchangeably as multimedia. Additionally, instructional materials, learning-resources and teaching aids, though used mainly by teachers and other educators, also depict multimedia resources. Okoro further records the attempts made by different researchers to categorise multimedia resources into distinct compartments. Dike (1998) groups multimedia into high and low technology materials. However, it can be inferred from the works of Madu (2000) that multimedia materials are easily delineated into audios, visuals, and audio-visuals.

Many studies have looked into the effect of instructional resources on student academic achievement. Schneider (2002) and Sodimu (1998) indicate that people learn differently and this is the rationale for using instructional resources to cater for the unique learning styles of different categories of students. Fuller (1996), Newton (1997) and Adeogun (2001) discover a very strong positive relationship between instructional resources and students academic achievement. Adeogun also explains

that in many of our schools low level of instructional resources are visible and this may indirectly affect enhancement of students' academic achievement.

Experts in the field of educational technology have revealed the merits derivable from instructional facilities. Thomas and Martin (1999) state in their study on effectiveness of schools and education resources management, that unless an alternative is found for the process of teaching and learning, instructional facilities are indispensable.

Okebukola (1995) reiterates that there is an acute need of instructional resources to avail teachers the opportunity of learning how to use multimedia in situational delivery, explaining that the teacher in the 21st century classroom must be kept abreast of all the electronics gadgets necessary for effective classroom interaction, because the children of the 21st century will come from homes where parents will have satellites, computer networking and so on. If the teacher, who is supposed to be a master of all knowledge, is buried into textbooks and old research topics while the world is on the superhighway of informatics, then the teacher will not be qualified to teach the children of the 21st century.

UNESCO (2005) documents a wide range of educational innovations that facilitate teaching and learning activities and are categorized as printed matter, visual aids, audio-visual aids and audio aids. These range from chalkboard to satellites. For the purpose of this study, visual aids, audio aids and audio -visual aids are regarded as instructional resources.

Visual Aids

As the name indicates, visuals are materials that provide information which are perceived through the sense of sight. In other words visuals are multimedia materials that can only be appreciated by sighted persons. It is generally believed that visual sources of information create the greatest impact in the receptive organ. For the purpose of this study, textbooks, teachers' guide, chalkboard are regarded as visual aids.

Textbooks

These are instructional materials that appeal to students' perception and resources commonly used in classrooms that consist of printed materials, concrete materials, and educational technology. Hanushek (2001) contends that the most important instructional resources are textbooks, and they are regarded as the most versatile of all resources. According to his finding, textbooks pre-dominate other visual aids in both school assignment and homework.

Textbooks over the years have supported teachers in their teaching and students in their learning. In other words a well-written textbook could adequately impart knowledge just like a teacher. Textbooks have also been identified as indispensable to the teaching efforts of the teachers. Lockheed, Jencks and Mayer (1999) give an insight into the importance of textbooks to teachers and students, emphasizing that a good textbook ensures accurate teaching and learning and increases the teacher's ability to impart knowledge. They further explain that textbooks could be read with or without the presence of the teacher. In other words, a well-written book could enrich knowledge like any typical teacher. The learning content or plans of the curriculum

are brought alive in textbooks. This will enable the student to take advantage of what is expected of them in the curriculum.

Indispensable as the textbook may be in learning any discipline, it has been found by some studies that undue overdependence on them may have a detrimental effect on students' achievement. Ploghoft (2005) in his study asserts that no matter how indispensable the textbooks and journals may be the monopolies of textbooks and journals have to be cracked since teachers now abdicate their responsibilities to textbooks at the expense of original teaching method. He added that textbooks do not give room for flexibility, instead there is a mechanical division of the curriculum and no provision is made for individual differences in learners. Alabi (1997) and Sodimu (1998) in their findings reveal that inadequate supply of textbooks in schools is affecting teaching and learning activities adversely. They explain that high cost of textbooks has made it unaffordable to majority of secondary school students to buy. They recommend that textbooks should be used with utmost care especially when they are inadequate during teaching and learning interaction.

Teachers' Guide

Teachers' guide, if well integrated with the text books, it will help teachers boost students learning to higher cognitive level. Ezewu (1980) and Alele -- Williams (2004) also suggest the need for teachers guide in schools to improve teaching and learning circumstances and to optimise academic achievement of students. Mundangapfupfu (1997) opines that teachers' guide that are more effective, are guides that include information on what to teach and on how to teach it. Also teachers' guide is diagnostic tests that help teachers monitor students learning and modify the daily lessons

accordingly. He emphasises that many African countries are ignorant of the importance of teachers' guide towards quality teaching and learning and the few ones that are aware seldom use them.

UNESCO (1997) found that schools in Guinea – Bissau had no teachers' guide for any grades or subjects other than Grade One. The World Conference on Education for All (1990) also found that in Malawi only 15% of teachers had received teachers' guide for a subject other than English. Sofolahan (1989) reveals that in Nigerian Secondary Schools attempt was made to have teachers guide and this led to the publication of a student's textbook titled *Social Studies for Nigerian Secondary Schools* with a teacher guide that complimented it by the Institute of Education, University of Ife.

Chalkboard

Majasan (1995) and Babayomi (1999) underscore the use of chalkboard as one of the oldest instruments among the teaching materials utilized by teachers; it requires no special talent or skills to be able to use it but many teachers tend to forget to make maximum use of them. Nettleton (2002) explains that a teacher that is conversant with the chalkboard would certainly get his students acquainted with the order and logical presentation of things and their aesthetics. Abiala (1995) emphasises that the chalkboard has the advantage of low cost, is readily available and easy to maintain. He discloses that nowadays they come in various colours ranging from blue, white and green rather than the usual black. He also indicates that many of the private schools in Nigeria find it convenient and have adjusted to the use of coloured chalkboard, which is metal in nature, and rather than use the usual chalk to write on it, felt markers are

used. He indicates that only few public secondary schools could be found with coloured boards.

Audio Aids

The audio aids are communication systems or gadgets, which are used in sending and receiving messages or signals based on sound stimuli perceived through the ear. Davies (1999), Thomas and Martin (1999) describe audio aids as common devices that help to transmit human voices for the expressed purpose of instruction. The auditory aids include radio, tape-recorder and record player. One of the technologies widely used in the area of audio aids is the radio. School system in a number of African countries is regularly served by specially designed radio broadcasts. These broadcasts supplement the actual teacher. They provide the learner with new information in the areas where the teacher may not have direct sources of needed information; they also motivate the learner through production forms such as role play, dramatization and case study; it also assists the teacher to tackle unfamiliar topics through the way they present the materials.

Nacino – Brown (1998) emphasises that radio programmes enrich curriculum materials for learning. But its potentials are fully not yet utilized in schools. The usual complaints are poor electricity supply but this is not tenable; however, since it can be operated on batteries, it should be a versatile aid in the hands of a teacher to aid learning among the students during teaching and learning process.

Nkuuche (1999) states that in Nigeria, school radio broadcast are still in its infancy and teachers should be encouraged to use them to enrich their teaching ability. Another

instructional resource associated with the radio is the tape recorder. He explicates that both radio and tape recorder belong to the category of media, which operates at macro level, which is, they are produced centrally and distributed for use in various parts of the world. USAID (2004) stresses that where problems of obtaining live broadcast exist, programmes can be produced on tapes and made available for the teacher to use at his convenience. Thomas and Martin (1999) maintain that a sample of the teacher population has been considered during their design and production. Teachers are urged to utilize the tape recorder to improve their teaching ability since it enables them to know how they sound to their students.

Audio-Visual Aids

Audio-visual is a combination or fusion of both audios and visuals. Akude (2004), as the name implies, audio-visual materials are those information sources that appeal to the sense of sight and hearing at the same time. The use of audio-visual aids in schools teaches and clarifies concepts. Oshodi (1990) indicates that it helps teachers to supplement or reinforce, clarify, vitalise and emphasize instruction and thus enhance learning in the process of transmitting knowledge, ideas and attitudes. Audio-visual aids are very important instructional facilities because they combine the two functions of viewing and learning into one device.

Weiss (2002) find that students become intensely committed to a subject because they see in it activities or situations which stir their emotions. He states that the technology of audio-visual aids has presented educators with new opportunities of recording sound and vision to be used as medium of expressing thoughts and feelings. According to

him, audio-visual aids produce an exciting and valuable experience, which takes a long period before being lost for memory.

Experts in educational technology have developed items such as computers, television, videotape, projection and slides, and all these are to be used as media of expressing thoughts and feelings. Nettleton (2002) argues that audio – visual aids provide a multiple approach to learning since not all learners follow the same route to learn. While some are more receptive to their senses of sight, others are more responsive to other senses. In short Nettleton explains that these instructional resources present diverse channels of communication in the classroom teaching.

However, other studies, including Thomas and Martin (1998) and Akude (2004), indicate that effective integration of non-book resources into teaching-learning process is fraught with some impediments. They claim that there is no doubt that many non-book materials have been created to record information and facilitate teaching and learning. However, the truth is that the multimedia materials are yet to match the textbooks and journals in terms of popularity and ready availability. Akude emphasises that the scarcity of these resources are major problems in the developing countries of Africa, Asia and South America.

Quality of Physical/Material Resources and Students' Academic Achievement

The quality of educational resources affects the academic achievement of students. For the enhancement of academic achievement, learning must take place in a conducive environment where there are sufficient physical and material resources. Obanya

(2002) and Odubunmi (1993) opine that without adequate physical and material resources a worthwhile learning cannot take place. The physical and material resources must be effectively utilised to attain quality education and improve academic achievement of students.

Many research reports have examined physical resources in terms of school buildings, classroom blocks, libraries, laboratories, workshops, home economics room, clothing and textile room, computer room, playing ground and the like, while material resources are regarded as the students' chairs and lockers, teachers' chairs and tables, laboratory equipment and materials, workshop equipment and materials, book shelves and the like. Obanya (2004) in a study states that some of these resources are required towards ensuring quality education in secondary schools.

Adesina (1982) and Adeboyeje (1999) observe that one of the most important indices for educational quality is the availability of physical and material resources, which determines the quality of instruction and academic achievement of students. Okunola (1985) reveals that schools which are well equipped and utilize resources appropriately have good records of academic performance and attract more students. Adeboyeje (1999), lamenting on the state of school resources in the country and its overall effect on the students' performance, states that:

Secondary schools in developing countries are not evenly provided with these essential facilities and this situation has led to variation in academic performances of students both in internal and external examination. (p.90)

Ogunleye (1999) adds that most of the schools do not possess the sufficient laboratory and workshop equipment and infrastructure facilities. UNESCO (2002) in its findings

concludes that good-quality schools, in terms of facilities, perform better in external examinations.

Classrooms

A classroom should be spacious, well ventilated, attractive and screened so that learning activities are effective. Farrant (1995) describes a classroom that provides a truly educational environment as a place where children will learn consciously as well as unconsciously. Okunola (1989) emphatically states that a classroom that will enhance quality of education should be well ventilated, lit and orderly arranged and well monitored. Oni (1995) opines that for a classroom to enhance quality, it has to be spacious for easy movement of a teacher during teaching and learning activities. Many studies have condemned the size of classrooms in both public and private schools in Nigeria. Fabunmi (2007) in his findings submits that schools experience congestion that is affecting students' academic achievement in Oyo State. He states that the government's inability to produce adequate classroom size that will be adequately furnished is affecting students' academic achievement.

Urevbu (2005) asserts that schools in Nigeria present a sorry sight, with dilapidated buildings, dingy classrooms devoid of seats and desk. Sodimu (1998) condemns the classrooms built in Lagos State during the civilian administration in 1979. According to him these classrooms were without ceiling and were always very hot in the afternoon, which made it impossible for teaching, and learning activities to take place effectively. He describes the classroom situation in Nigeria in the words of Barnard (1960) as the latter describes the situation of schools in America in 1948 as follows:

...nearly six thousand schools out of 9368 schools visited were furnished with convenient seats and desks; nearly eight thousand had no facilities for ventilation; and upwards of six thousand without a privy of any sort; ... And it is in these miserable abode of accumulated dirt and filth, deprived of wholesome air, or exposed without adequate protection to the assault of the elements, with no facilities for necessary exercise or relaxation, no convenience for prosecuting their studies; crowded together on benches not admitting of a moment rest in any position, and debarred the possibility of yielding to the ordinary calls of nature with violence in roads upon modesty and shame; that upwards of two hundred thousand children, scattered over various parts of the state, are compelled to spend an average period of eight months during each year of their pupilage. (p.93)

Awosiyan (2006) describes the classroom situation in Lagos State secondary schools as deplorable on his exploratory visit to many of the schools. He states that children were too many in the available classroom and this sometimes lead to the collapse of such dilapidated buildings. He cites Temidire Junior High School at Ajegunle, where classrooms block collapsed as a result of a heavy downpour. He encourages the government to work on rehabilitation of these schools for the safety of the students. Enueme (2002) opined that inadequate classroom spaces, furniture and teaching methodologies contribute to poor quality of learning.

Laboratories and Workshops

Laboratories are necessary school plants in the study of science subjects. One of the objectives of teaching science in schools is to communicate the spirit of science and to ensure that students acquire the process skills of science (Ogunleye 1999). The New Lexicon Webster's Dictionary of the English Language (1991) defines a laboratory as a building or room equipped for conducting scientific research or for teaching practical science. Okebukola (1997) substantiates the importance of science laboratory in secondary schools as an important instrument of teaching science adding that it takes

priority over any other method of teaching since the instructional procedure is determined by individual experience under controlled conditions.

Ogunleye (1985) describes laboratory as a place where theoretical work are practiced for effective learning. He expatiates more on the importance of laboratories as a place in which activities such as observing, measuring, experimenting and recording take place. If laboratory is so significant in the teaching and learning process, it is also a determinant of students' academic achievement. Ango and Sila (1986) underscore the importance of laboratory as they state that laboratory stimulates learners' interest as they are made to personally engage in useful scientific activities and experimentation; also it affords the learners the basic skills and scientific method of problem solving.

Ogunleye (1999) observes that many secondary schools over the years remain without science laboratories while others are poorly equipped. Ajayi (1995) observes that students in schools with adequate equipment perform better than those with less or without laboratory equipment.

The New Lexicon Webster's Dictionary of the English Language (1991) defines a workshop as a building or room in which manufacturing or other forms of manual works are carried on. Workshop like laboratory should be a large open space for practical task. With the 6-3-3-4 system of education, subjects such as Introductory Technology, Technical Drawing, Electrical-Electronics, Woodwork and Metal work became necessary in schools.

Many studies assess the importance of workshops in secondary schools. Edigin (1994) observes that without adequate and well equipped workshop it would be difficult to

teach science, technical and vocational subjects effectively. He depicts the situation of equipment in many of the schools in Nigeria as follows:

In some places workshops to house the equipment do not exist, where in some there are workshops for the equipment there are no electricity; and lastly, electricity and workshops exist in some schools and the equipment have been installed. (p.137)

With the above facts, one can imagine the quality of teaching and learning that take place in the technical subjects without a workshop or an adequately furnished workshop. Also, it is possible to imagine the students' performance in both internal and external examination.

Library

Libraries are one of the most important educational services. Every Ministry of Education needs to provide funds for the establishment of libraries in all our educational institutions (NPE 2004). The New Lexicon Webster Dictionary defines a library as a room or building housing a collection of books, usually arranged according to some plans. Libraries are very vital in educational system of Nigeria today. The Ashby Commission (1960) remarked that a good library awakens the students' to the treasure of knowledge. The National Policy on Education (NPE 2004) makes it mandatory for Federal and State Ministries of Education to make funds available for the establishment of libraries at all levels of educational institutions.

Aina (1997), in a survey of library resource management in Lagos State Secondary Schools states that any community that knows the worth of a library would invest in it for the benefit of its people. The library is supposed to help in the development of students' creative ability by exposing them to a wide range of instructional materials.

However, the school is unconsciously killing the children's creative ability due to lack of adequate library services. Fayose (1995) corroborates this as she commented that even today the creative instinct is discouraged in the classrooms instead of being nurtured.

Sodimu (1998) observes that the purpose of a school library is to compliment, implement and supplement the total educational programmes of schools. Libraries are very essential for quality aspiring schools where students are encouraged to find more information on what has been taught in the classroom. Oyebade (1999) also indicates that the Lagos State Government guidelines on the establishment of schools emphasize a well-equipped library that would accommodate at least 100 students at a time. He further states that as important as a library is to student's academic life and performance, it is sad to note that there are many secondary schools without libraries, many schools have reading rooms in the real sense of it instead of libraries while some do not have.

Quality Control and Academic Achievement

In order to ensure quality in secondary schools, the administrative strategy to be used should be based on the basic principle of quality control. Quality control embraces the totality of teaching-learning environment. Oluyeni (1997) defines quality control as retroactive action that determines the quality of a product or a system after processing and during which wastage should have occurred and what is left is to reject or rectify it. Quality control in education is carried out through school inspection, supervision and monitoring. Aduloju (1994) defines quality control basically as a system for

setting standards and taking appropriate action to deal with deviations outside permitted tolerance.

Enemuo (2005) emphasises that quality cannot be attained without a systematic and continuous process of instruction supervision. He adds that supervision is a planned and coordinated efforts of supervisors to stimulate, help, advice, assist and guide teachers in their understanding of instructional performance of their functions. Dawkins (2002) defines quality control basically as a system for setting standards and taking appropriate action to deal with deviations outside permitted tolerance. The National Policy on Education (NPE 2004) emphasises the importance of quality control that schools are to be equipped with good teachers that would be monitored and supervised by inspectors from the Ministry of Education.

The inspectorate division in the Ministry of Education is the quality control organ of the state education system. Majasan (1997) defines inspection as an instrument with which the political and administrative authorities maintain a necessary contact to make sure that the system is working satisfactorily and efficiently for better students' academic performance. The responsibility of inspectorate division is to see to the day to day activities in schools as well as make known to teachers' and the school authorities a clear distinct educational aim.

Sodimu (1998) emphasises that inspectors provide pedagogical and supervisory support for schools and mobilize resources but have no role in distributing them. According to him, part of the responsibilities of an inspector is to make sure that

resources in schools are well utilized for the optimum academic achievement of the students. Statutorily, the major functions of the inspectorate department are as follows:

1. To provide the Commissioner for Education with necessary data and information for educational decisions and policies;
2. To see that minimum standards are maintained and that schools are run in accordance with government laid down policies and regulations, through regular inspection of the administration of all pre-primary, primary and post-primary schools at least once a year with a view to ascertaining the level of work done and suggesting measures for further improvement;
3. To ensure that the school curricula are suitable and adequate to meet the prescribed minimum standards;
4. To ascertain that the recommended textbooks and appropriate instructional materials are used;
5. To conduct courses and seminars/workshops for teachers, schools administrators and inspectors to enhance performance; and
6. To counsel teachers on various aspects of the duties.

Oni (1995) accentuates that inspection is an instrument with which the political and administrative authorities maintain a necessary contact with the school system and the community to ensure that the system is working satisfactorily and efficiently towards quality education. Dele-Giwa and Illo (2005) submit that for quality control to be effective, the Ministry of Education in collaboration with West African Examination Council prescribed the syllabuses in which standards for the students are laid down. According to them, students' inability to attain the standards is considered as a failure

because quality education is generally determined by the performance of students in an examination.

Phillip (1999) iterates that without having enough inspectors to carry out their special functions in schools, there cannot be quality education. Dele-Giwa and Illo in their findings also add that the problems militating against schools inspection are shortage of manpower available for the work. According to them, in most African countries the roles of inspectors tend to be ineffective due to severe resources constraints. In their findings they noted that the number of inspectors and monitoring officers in Lagos State are grossly inadequate compared with the number of schools, teachers and student population. With the inadequate number, officers who are newly employed with no practical experience on the job are being posted to the inspectorate unit of the Ministry of Education, adding that ensuring thorough supervision of schools requires regular visits of well-experienced officers.

Summary and Appraisal of Literature

The literature reviewed on the quality and utilization of educational resources and students' academic achievement in school revealed a lot of factors that could influence academic achievement from the external environment and within the school environment. Such factors as reviewed were concept of quality in education, quality in secondary schools, quality and utilization of educational resources (human, instructional, physical and material resources), teacher-student ratio and school-size. The heart of education is quality and it is the degree of excellence of any product. Quality is very important in any production of goods (Isyaku 1999). The definition of quality in the Encyclopaedia Americana connotes excellence.

Many studies were reviewed on the quality of education and students academic achievement in secondary schools. Ajomagberin (2004), NPE (2004) and Ejiogu (2004) express the importance of secondary education and affirm that the quality of secondary education affects directly or indirectly the input and output of the tertiary education, and the society at large. Palardy (2003), Majasan (1997) and Sofolahan (1988) share the same opinion that quality prepares students for the society through adequate teaching and learning process. The review of literature reveals that resources if well utilized affect students academic achievement positively.

Oritusin (2006), Suleiman (2006), Fagbamiye (2004) and Salami (2002) have many things in common in their judgement on the human resources situation in most schools. They were of the opinion that teachers' quality (experience, qualification and competence) determines the students' achievements and prepares them for challenges in the larger society. Teachers, without much ado are very important tools in the achievement of any country educational goals.

On instructional resources, the reviewed literature revealed that applicability of instructional resources during pure and applied sciences lessons enhances teachers' ability to dissemination knowledge to students during teaching and learning activities. The adequacy or inadequacy of physical and material resources on student academic achievement as reviewed show incongruence between the students' population and the available resources. The educational planners did not plan for the excess number of students and as such the resources available have been overstretched beyond limit and eventually this leads to over utilization.

The most relevant studies review on physical and material resources were those of Okunola (1989), Adeogun (2001) and Awosiyan (2006) that indicate the influence of classrooms, laboratory, workshop, library and textbooks on students academic achievement in schools. The non-utilization of these resources may affect students' achievement adversely. Okunola (1985) and Fabunmi (2007) in their studies assess the adequacy or otherwise of educational resources in Oyo State. While Okunola centre his study on utilization and projection trends in secondary schools, Fabunmi relate his own study to academic performance in Oyo State. Their findings indicate that poor academic performance may be due to inadequate educational resources to meet up with the students' population in Oyo State secondary schools.

The various studies leave a big gap which the present study tries to fill. Considering the limitations in scope reviewed, the present study attempts a more extensive work on educational resources availability situations and utilization in relation to students' academic achievements in Lagos State secondary schools. The study is equally expected to supply the missing gap of literature on the availability and utilization of educational resources and students academic achievements. It is also expected to determine the predictability and potency of the educational resources on students' academic achievement in Lagos State Senior Secondary Schools.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Introduction

This chapter describes in detail the research methodology adopted for the study. This includes research design, population, sampling techniques, sample, instrumentation, validation, procedure for data collection and administration of instruments and statistical methods of data analysis

Research Design

The study is a correlation study adopting a survey design. The choice was made because the study is expected to explore perceptions of principals, inspectors and teachers. Their perceptions will come in form of data from structured questionnaires to which they will respond.

Population

The population of this study is the entire English Language and Mathematics teachers (both subjects are compulsory for all students), principals and the inspectors of education in the six Education Districts of Lagos State. There were 293 public and 495 private senior secondary schools as at February 2007 and these schools constitute the target population for this study.

Sample and Sampling Procedure

A stratified random sampling technique was employed in the selection from public and private secondary schools, giving consideration to secondary schools with more than 10 years of establishment and those that are co-educational. A total of 29 public secondary schools were randomly selected from the existing 293 secondary schools while 49 private secondary schools were randomly selected from the 495 private secondary schools which formed the sample. In all 78 Senior Secondary Schools (10% of total secondary schools) and their principals included. Sixty-eight inspectors of education from the six Education Districts were selected through a stratified technique (table 1); giving consideration to at least 10 years experience and Bachelors degree in Education (B.ED) as the minimum educational qualification (the Inspectors of Education are common to both public and private secondary schools).

From the Lagos State secondary schools, 515 teachers were randomly selected (302 public teachers and 213 private teachers) out of the existing 5149 of which 1612 English and 1412 Mathematics teachers were from public secondary schools while 1070 English and 1055 Mathematics teachers were from senior secondary schools. All the six Education Districts were duly represented (list of all the zones in each Education District is in Appendix A, all the schools and the sampled ones are in Appendix B and C). The population of the English and Mathematics teachers obtained from the Ministry of Education and number of sampled English and Mathematics teachers are presented in table 1.

Table 1: Principals, Inspectors and Teachers in Public and Private Secondary Schools

Ed Dist	Sch Type	Total No of Schls	[No Sam-pled]	Total No of Eng Trs	[No Sam-pled]	Total No of Maths Trs	[No Sam-pled]	[No of Sam-pled] Prin	Total No of Insp	[No Sam-pled]
1.	Pub	27	3	162	16	135	14	3	110	11
	Pri	121	12	160	16	175	18	12	-	-
2.	Pub	41	4	246	25	240	24	4	105	10
	Pri	85	8	132	13	140	14	8	-	-
3.	Pub	59	6	208	21	204	20	6	108	11
	Pri	60	6	112	11	122	12	6	-	-
4.	Pub	46	5	276	28	214	21	5	120	12
	Pri	64	6	178	18	164	16	6	-	-
5.	Pub	64	6	384	38	304	30	6	119	12
	Pri	92	9	212	21	218	22	9	-	-
6.	Pub	56	6	336	33	315	32	6	118	12
	Pri	73	7	276	28	236	24	7	-	-
Total		788	78	2682	268	2467	247	78	680	68

Source: Ministry of Education, Lagos State (2007).

[] Sampled schools (modified from the list of Ministry of Education).

Source: Author.

Research Instruments

The following sets of instruments with the same subject matter were used to collect data for this study.

1. Teachers' Perception of Quality and Utilization of Educational Resources and Student Academic Achievement Questionnaire (TPQUERSAAQ)
2. Inspectors' Perception of Quality and Utilization of Educational Resources and Student Academic Achievement Questionnaire (IPQUERSAAQ)
3. Principals' Perception of Quality and Utilization of Educational Resources and Student Academic Achievement Questionnaire (PPQUERSAAQ).

The three questionnaires with the same subject-matter were developed for the principals, inspectors (administrators) and teachers. In addition the researcher obtained from the school records the School Certificate results for a period of four years (2002 to 2006) academic sessions to ascertain the students' academic achievement.

A set of three questionnaires consisted of Parts 1 to 4. The first part solicited for information on demographic data of the respondents such as years of working experience, qualifications which were authenticated through the use of the schools' nominal rolls, and general information about the schools. The second part focused on the quality, available and utilization of educational resources and students' academic achievements. The third part solicited for information on teachers' experience and commitment to the use of educational resources and students' academic achievement. The fourth part solicited for information on school-size and teacher- student ratio (class-size) and student academic achievement.

The Four-Point Likert scale of measurement was employed to capture responses to the three questionnaires, which ranged from Strongly Agree to Strongly Disagree. The achievements of students in SSCE (2002-2006) were obtained from the schools records and the aggregate scores were computed in two subjects' areas: English Language and Mathematics, which are prerequisites for admission into tertiary institutions or career opportunities. The expected grades for pass in SSCE range from A1 to C6, which are grades for admission. The primary measure of achievements for this study therefore was the proportion of all SSCE entries and the grades obtained at credit level.

Validity of Instrument

For the purpose of this study, the instruments were subjected to content and construct test to ascertain their validity. The instruments were developed by the researcher and subjected to validation in order to ensure that the questionnaires actually measured what they intended to measure, 10 copies were given to experts in the Departments of Educational Administration and Educational Foundations in the Faculty of Education, University of Lagos, for scrutiny and relevant comment on the relevance, simplicity and clarity of the items. The input of these experts led to inclusion of some other items expected to be in the questionnaires. After effecting the necessary corrections, the questionnaires were given back to those experts who confirmed their suitability.

Reliability of Instrument

In order to test the internal consistency of the instruments, test-retest method was applied. The pilot study was conducted on 30 teachers (private and public schools), 60 administrators (30 inspectors of education and 30 principals). Two weeks later, the instruments were re-administered to them. The data for the three questionnaires were analysed statistically and a Correlation Co-efficient (r) of 0.72 was obtained for the principals, 0.70 for inspectors and 0.59 for teachers. The pilot test was conducted to identify if no ambiguity exists in any of the questionnaires.

Administration of Instruments

The research instruments were administered on the inspectors of education and principals of schools that have been chosen through stratified technique as well as teachers that have been randomly selected from the six Education Districts. The

researcher and two research assistants who have been trained earlier administered the instruments on the respondents. Three hundred and two (302) questionnaires were administered to teachers' in 29 public senior secondary schools and only 290 were completely filled and returned. The 290 questionnaires returned comprised of responses from 153 Mathematics and 137 English teachers. Three hundred and thirteen teachers were administered questionnaires from 49 private secondary schools and only 200 questionnaires were completely filled and returned. The 200 questionnaires returned comprised of responses from 100 Mathematics and 100 English teachers. The total number of questionnaires which were completely answered and returned was 490 (95%) from the 515 administered. Sixty-eight questionnaires were given to the inspectors of education and only 60 (88%) were returned while the principals of public and private schools returned the entire 78 (100%) questionnaires completely answered.

The researcher, from the school records obtained 35,597 of students' presented for WAEC between 2002-2006 which was the data for academic performances of public secondary school students' in English and Mathematics for May / June West African School Certificate Examination 2002 – 2006 and 19,570 which was the data for academic performances of private secondary schools. Total enrolment for each year and number of students in each grade from A1 to P9 was recorded for each of English and Mathematics; but for the purpose of this research only students with credit passes were considered. These subjects have been selected as measures of performance because they are compulsory for all students. This is because these subjects require different skills that are mutually exclusive. English requires verbal skills, which can represent all disciplines in the humanities while Mathematics represents all discipline

that requires calculations mental skills such as technical subjects, social sciences, pure and applied sciences.

Method of Data Analysis

Some of the questions were positively constructed while others were negatively constructed. Part one in each of the instruments has questions on the demographic data; Part Two consisted of questions on quality, availability and utilization of educational resources and students academic achievement; Part Three contained questions on teachers experience and students academic achievement and commitment to use of educational resources and student academic achievement and Part four contained questions on class-size and school-size. The scoring of the instruments was based on Four-Point Likert scale. All positively coded questions were weighed with Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2 and Strongly Disagree (SD) =1. The questions, which were negatively coded, were weighed with Strongly Disagree (SD) =1, Disagree (D) = 2, Agree (A) = 3 and Strongly Agree (SA) = 4. The score on each variable being investigated were summed up. The respondents' responses were computed using frequency and percentages.

The data for this study were analyzed using descriptive statistics for the demographic data and the first three research questions while inferential statistics were used in analyzing all the hypotheses tested at 5% level of significance. For hypotheses one, two and three, t test was used to find out if there is any significant difference between each of the selected school variables and students' academic achievement. In order to find out if there is any significant relationship between quality and utilization of

educational resources and students' academic achievement, Pearson Product Moment Correlation (r) was calculated for hypotheses four to nine. And, also test of significance was applied to ascertain the significance of the correlation coefficient r between the two variables.

The selected variables, which formed the independent or predictive variables for this study, were educational resources such as teachers' characteristics (teachers' qualifications, teachers' experience and teachers' commitment) instructional, material, classroom, laboratories, workshops and libraries resources, school-size and teacher-student ratio (class-size). In order to analyze the demographic variables of the respondents, the use of frequency table and percentage were employed.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF RESULTS

Data Analysis and Results

Analysis of Demographic Data and Research Questions

Tables 2-8 present the statistical analysis of the demographic data and the only three research questions. Table 2 shows the distribution of respondents according to their status, qualifications and years of experience.

Table 2: Respondents by Status, Qualifications and Years of Experience.

Status		Frequency					%	
Inspector		60					9.55	
Principals (Public and Private)		78					12.42	
Teachers (Public)		290					46.18	
Teachers (Private)		200					31.85	
Total		628					100	

Status	Qualification							%
	NCE	B.A/B.SC/ with PGDE	HND with TTC/ PGDE	B.SC(Ed)/ B.A(Ed) with M.A /M.SC	B.SC(Ed)/ B.A(Ed) with M.ED	B.A/ B.SC/ HND	Ph.D	
Inspectors	-	15	-	17	22	6	-	9.55
Principals	-	15	10	18	27	8	-	12.42
Teachers (public)	43	35	62	70	37	40	3	46.18
Teachers (private)	80	8	25	25	13	49	-	31.85
Total	123	73	97	130	99	103	3	100

Status	Years of Experience			%
	1-10 Years	11-20 Years	21-35 Years	
Inspectors	8	35	17	9.55
Principals	-	55	23	12.54
Teachers (public)	85	138	67	46.17
Teachers (private)	97	73	30	31.85
Total	190	301	137	100

Source: Field Trip Analysis

The table presents 60 (9.55%) inspectors of education, 78 principals (12.42%), 290 (46.18%) teachers from public schools and 200 (31.85%) teachers from private schools respectively. In addition, the table exhibited the qualifications of the entire respondents accordingly. Three (.48%) had Doctor of Philosophy (PhD), 99 (15.7%) had Bachelors' degree in Education (B.ED) and Masters in Education (M.ED). One hundred and thirty (20.7%), had Bachelors in Education and Masters in Sciences or Arts. Ninety-seven (15.4%) had Higher National Diploma (HND) with either Postgraduate Diploma in Education (PGDE) or Teachers Technical Certificate (TTC). Seventy-three possessed Bachelors degree in either Sciences or Arts and PGDE (11.6%). One hundred and three (16.4%) either possessed Bachelors degree in Science or Arts courses or HND. Further, 123 (19.5%) had Nigerian Certificate in Education (NCE).

Similarly, the table also displayed the years of experience of the respondents which was segmented into three parts, 1-10, 11-20 and 21-35 years of working experience. Among the inspectors, 8 (13.3%) inspectors had between 1-10 years' of experience, 35 (58.3%) had between 11-20 and 17 (28.3%) had between 21-35 years of service. Also among the principals there were 55 (70.5%) with 11-20 years of working experience and 23 (29.5%) within 21-30 years of working experience. Among the teachers' 85 (29.3%) were within 1-10, 138 (45.6%) had between 21-30 and 67 (23.1%) had between 21-35 years of experience. In private secondary schools, 97 (48.5%) teachers had between 1-10, 73 (36.50%) teachers also had between 11-20, even as 30 (15%) had between 21-35 years of experience.

Research Question One: Are there differences in the availability of educational resources between public and private secondary schools in Lagos State?

To determine the differences in the availability of educational resources between public and private secondary schools percentages were employed. Table 3 reveals adequacy level of educational resources provided in Lagos State public and private secondary schools.

Table 3: Availability of resources between 2002 to 2006 academic years

S/N	School Type	Variable	Strongly Agree	Agree	Disagree	Strongly Disagree
1	Public	Irregular supply of	129(34%)	156(41%)	56(15%)	38(10%)
	Private	science equip	15(5%)	18 (6%)	259(84%)	17(5%)
2	Public	Insufficient	222(59%)	118(31%)	20(5%)	19(5%)
	Private	workshop equipment	12(4%)	12(4%)	251(81%)	34(11%)
3	Public	Shortage of science	220(58%)	140(37%)	10(3%)	09(2%)
	Private		08(3%)	17(6%)	258(83%)	26(8%)
4	Public	Shortage of technical	153(44%)	142 (41%)	36(10%)	19(5%)
	Private	teachers	12(4%)	08 (3%)	186(60%)	103(33%)
5	Public	Insufficient English	161(42%)	173(46%)	22(6%)	23(6%)
	Private	and Mathematics trs	13(4%)	04(1%)	256(83%)	36(12%)
6	Public	Lack of textbooks	142(38%)	188 (51%)	21(6%)	19(5%)
	Private		15(5%)	20 (6%)	172(56%)	103(33%)
7	Public	Having dilapidated	71(45%)	108 (29%)	100(26%)	0(0%)
	Private	classrooms	02(0.7%)	11(4%)	161(62%)	84(33%)
8	Public	Having overcrowded	201(53%)	150 (40%)	28(7%)	0(0%)
	Private	classrooms	10(3%)	08 (3%)	207(67%)	84(27%)
9	Public	Lack of adequate	166(44%)	171(45%)	22(6%)	20(5%)
	Private	laboratories and	21(7%)	16(5%)	246(80%)	26(8%)
		workshops				
10	Public	Obsolete equipment	136(36%)	210 (55%)	12(3%)	21(6%)
	Private	in laboratories and	14(5%)	26(8%)	202(65%)	67(22%)
		workshop				
11	Public	No functional library	234(62%)	123 (32%)	18(5%)	04(1%)
	Private		24(9%)	22(7%)	154(50%)	109(35%)
12	Public	Obsolete books	114(30%)	220 (58%)	26(7%)	19(5%)
	Private	available in the	08(3%)	08 (3%)	186(61%)	103(33%)
		libraries				

Sources: Field Trip Analysis

Table 3 reveals the responses to availability of educational resources in private and public secondary schools in Lagos State. In public secondary schools 129 (34%) respondents strongly agreed to irregular supply of science equipment, 156 (41%) agreed, 56 (15%) disagreed while 38 (10%) strongly disagreed to irregular supply of science equipment. In private schools, 15 (5%) of the respondent strongly agreed to irregular supply of science equipment, 18 (6%) agreed, 259 (84%) disagreed while 17 (5%) strongly disagreed to irregular supply of science equipment. Two hundred and twenty-two (59%) respondents in public secondary schools strongly agreed to insufficient workshop equipment, 118 (31%) agreed, 20 (5%) disagreed while 19 (5%) strongly disagreed. In private secondary schools 12 (4%) of the respondents strongly agreed to insufficient workshop equipment, 12 (4%) of them agreed, 251 (81%) disagreed while 34 (11%) strongly disagreed to insufficient workshop equipment. To ascertain shortage of science teachers, 220 (58%) respondents from public secondary schools strongly agreed, 140 (37%) agreed, 10 (3%) disagreed while 09 (2%) strongly disagreed. In private secondary schools 08 (3%) of the respondents strongly agreed, 17 (6%) of them agreed, 258 (83%) disagreed, while 26 (8%) strongly disagreed to shortage of science teachers. Furthermore, 153 (44%) respondents from public secondary schools strongly agreed to shortage of technical teachers, 142 (41%) agreed, 36 (10%) disagreed while 19 (5%) strongly disagreed. In private secondary schools 12 (4%) of the respondents strongly agreed, 08 (3%) of them agreed, 186 (60%) disagreed while 103 (33%) strongly disagreed to shortage of technical teachers.

On insufficient English and Mathematics teachers, 161 (42%) respondents from public secondary schools, strongly agreed, 173 (46%) agreed, 22(6%) disagreed while 23 (6%) strongly disagreed to use. In private secondary schools 13 (4%) of the

respondent, strongly agreed, 04 (1%) of them agreed, 256 (83%) disagreed while 36 (12%) strongly disagreed on insufficient English and Mathematics teacher. The table shows that 142 (38%) respondents from public secondary schools strongly agreed, 188 (51%) agreed, 21 (6%) disagreed while 19 (5%) strongly disagreed to lack of textbooks in public schools. In private secondary schools 15 (5%) of the respondent strongly agreed, 20 (6%) of them agreed, 172 (56%) disagreed while 103 (33%) strongly disagreed to lack of textbooks. Similarly, 166 (44%) respondents from public secondary schools strongly agreed to having dilapidated classrooms, 171 (45%) agreed, 22 (6%) disagreed while 20 (5%) strongly disagreed. Also, 21 (7%) of the respondent in private secondary schools strongly agreed to having dilapidated classrooms, 16 (5%) of them agreed, 246 (80%) disagreed while 26 (8%) strongly disagreed to having dilapidated classrooms.

Seventy-one (45%) respondents in public secondary schools strongly agreed to having overcrowded classrooms, 108 (29%) agreed, 100 (26%) disagreed while there was no response to strongly disagreed. However, in private secondary schools 02 (0.7%) of the respondent strongly agreed to overcrowded classroom, 11 (4%) of them agreed, 161 (62%) disagreed while 84 (33%) strongly disagreed to having overcrowded classrooms. Also in the same way, in public secondary schools 201 (53%) respondents strongly agreed to lack of adequate laboratories and workshops, 150 (41%) agreed, 28 (7%) disagreed while none responded to strongly disagreed. In private secondary schools 10 (3%) of the respondent strongly agreed, 08 (3%) of them agreed, 207 (67%) disagreed while 84 (33%) strongly disagreed to lack of adequate laboratories and workshops.

One hundred and thirty three (36%) respondents in public secondary schools strongly agreed to having obsolete equipment in laboratories and workshops, 210 (55%) agreed, 12 (3%) disagreed while 21 (6%) strongly disagreed. In private secondary schools 14 (5%) of the respondent strongly agreed, 26 (8%) of them agreed, 202 (65%) disagreed while 67 (22%) strongly disagreed to having obsolete equipment in laboratories and workshops. Furthermore, 234 (62%) respondents from public secondary schools strongly agreed to having no functional library, 123 (32%) agreed, 18 (5%) disagreed while 04 (1%) strongly disagreed. In private secondary schools 24 (9%) of the respondents strongly agreed, 22 (7%) of them agreed, 154 (50%) disagreed while 109 (35%) strongly disagreed to having no functional laboratories.

Consequently, in public secondary schools 114 (36%) respondents strongly agreed to having obsolete books in the libraries, 220 (58%) agreed, 26 (7%) disagreed while 19 (5%) strongly disagreed. In private secondary schools 08 (3%) of the respondent strongly agreed to having obsolete books in the libraries, 08 (3%) of them agreed, 186 (61%) disagreed while 103 (33%) strongly disagreed to having obsolete books in the libraries.

Research Question Two: What differences exist in the utilization of educational resources between public and private secondary schools in Lagos State?

To determine the differences that exist in the utilization of educational resources between public and private secondary schools percentages was employed. Table 4 reveals the responses to utilization of educational resources in Lagos State public and private secondary schools.

Table 4: Utilization of educational resources between 2002 to 2006 academic years

S/N	School Type	Variable	Strongly Agree	Agree	Disagree	Strongly Disagree
1	Public Private	Regular use of chalk board during teaching.	12(4%) 114(30%)	08 (3%) 220 (58%)	186(60%) 26(7%)	103(33%) 19(5%)
2	Public Private	Applicable teaching methods are used.	24(9%) 234(62%)	22(8%) 123 (32%)	154(50%) 18(5%)	109(33%) 04(1%)
3	Public Private	Appropriate instructional materials are used for teaching	136(36%) 202(65%)	210 (55%) 26(8%)	12(3%) 14(5%)	21(6%) 67(22%)
4	Public Private	Textbooks are seldom used to aid learning due to in availability	166(44%) 21(7%)	171(45%) 16(5%)	22(6%) 246(80%)	20(5%) 26(8%)
5	Public Private	Teachers productivity are not determined by audio-visual resources	142(38%) 15(5%)	188 (51%) 20 (6%)	21(6%) 172(56%)	19(5%) 103(33%)
6	Public Private	Teachers are indolent due to excessive reliance on instructional resources	201(53%) 10(3%)	150 (5%) 08 (3%)	28(7%) 207(67%)	0(0%) 84(27%)
7	Public Private	Teachers' inappropriate attitude towards use of lesson note may affect students achievement	171(45%) 135(44%)	108 (29%) 161(52%)	100(26%) 11(4%)	0(0%) 0(0%)
8	Public Private	Use of obsolete lesson note by teachers may be a disadvantage to students academic achievement	129(34%) 259(84%)	156(41%) 18 (6%)	56(15%) 15(5%)	38(10%) 17(5%)
9	Public Private	Instructional resources are the bedrock of student academic achievement.	161(42%) 256(83%)	173(46%) 04(1%)	22(6%) 13(4%)	23(6%) 36(12%)
10	Public Private	Use of experience teachers enhances students achievement	153(44%) 12(4%)	142 (41%) 08 (3%)	36(10%) 186(60%)	19(5%) 103(33%)
11	Public Private	Use of professional teachers to determine better students academic achievement	220(58%) 08(3%)	140(37%) 17(6%)	10(3%) 258(83%)	09(2%) 26(8%)
12	Public Private	Students are well seated during teaching and learning activities.	12 (3%) 251(79%)	20(5%) 12 (4%)	118(73%) 19(6%)	222(60%) 34(11%)

Source: Field Trip Analysis

In public secondary schools 12 (4%) respondents strongly agreed to regular use of chalkboard during teaching and learning activities, 08 (3%) agreed, 186 (60%)

disagreed while 103 (33%) strongly disagreed to regular use of chalkboard. In private schools, 114 (30%) of the respondent strongly agreed to regular use of chalkboard during teaching and learning activities, 220 (58%) agreed, 26 (7%) disagreed while 19 (5%) strongly disagreed to regular use of chalkboard. It seems that teachers in private schools agree to use of chalkboard regularly while those in public secondary schools do not agree.

Twenty-four (9%) respondents in public secondary schools strongly agreed to use of applicable teaching methods during teaching and learning activities, 22 (8%) agreed, 154 (50%) disagreed to use of applicable teaching methods during teaching and learning activities while 109 (33%) strongly disagreed. In private secondary schools 234 (62%) of the respondents strongly agreed to use of applicable teaching methods during teaching and learning activities, 123 (32%) of them agreed, 18 (5%) disagreed to use of applicable teaching methods during teaching and learning activities while four (1%) strongly disagreed.

To ascertain if appropriate instructional materials are used for teaching and learning activities, 136 (36%) respondents from public secondary schools strongly agreed, 210 (55%) agreed, 12 (3%) disagreed while 21 (6%) strongly disagreed to use of appropriate instructional materials for teaching and learning activities. In private secondary schools 202 (65%) of the respondents strongly agreed to use of appropriate instructional materials during teaching and learning activities, 26 (8%) of them agreed, 14 (5%) disagreed, while 67 (22%) strongly disagreed to use of appropriate instructional materials for teaching. It seems that in private secondary schools teachers

generally use appropriate instructional materials for teaching and learning activities more than those in public secondary schools.

Furthermore, 166 (44%) respondents from public secondary schools strongly agreed that textbooks are seldom used to aid teaching due to in availability, 171 (45%) agreed, 22 (6%) disagreed while 20 (5%) strongly disagreed. In private secondary schools 21 (7%) of the respondents strongly agreed that textbooks are seldom use to aid teaching due to in availability, 16 (5%) of them agreed, 246 (80%) disagreed while 26 (8%) strongly disagreed to seldom use of textbooks to aid teaching due to in availability. This seems that in private secondary schools teachers may utilize textbooks to aid teaching more than public secondary schools.

On whether teachers' productivity were not determined by use of audio-visual materials for teaching and learning activities, 142 (38%) respondents from public secondary schools, strongly agreed, 188 (51%) agreed, 21(6%) disagreed while 19 (5%) strongly disagreed to use of audio-visual materials as a determinant of teachers productivity. Fifteen (5%) of the respondent in private secondary schools, strongly agreed to audio-visual materials not being determinant of teachers productivity, 20 (6%) of them agreed, 172 (56%) disagreed while 103 (33%) strongly disagreed. It seems that teachers in public secondary schools generally believe that productivity is determined by audio-visual resources while those in private secondary schools do not agree with them.

The responses on teachers' becoming indolent due to excessive reliance on use of instructional resources as indicated in the table shows that 201 (53%) respondents from

public secondary schools strongly agreed, 150 (40%) agreed, 28(7%) disagreed while nobody responded to strongly disagreed. In private secondary schools 10 (3%) of the respondent strongly agreed to teachers' becoming indolent due to excessive use of instructional resources, eight (3%) of them agreed, 207 (67%) disagreed while 84 (27%) strongly disagreed. It appears that teachers in public secondary schools generally believe that teachers become indolent due to excessive use of instructional resources while those in private secondary schools do not agree with them.

One hundred and seventy one (45%) respondents in public secondary schools strongly agreed that inappropriate attitude of teachers to use of lesson note during teaching and leaning activities may affect students academic achievement, 108 (29%) agreed, 100 (26%) disagreed while there was no response to strongly disagreed. However, in private secondary schools 135 (44%) of the respondent strongly agreed to inappropriate attitude of teachers to use of lesson note during teaching and leaning activities may affect students academic achievement, 161(52%) of them agreed, 11(4%) disagreed while zero (0%) strongly disagreed.

Also in the same way , in public secondary schools 129 (34%) respondents strongly agreed that obsolete use of lesson note is a disadvantage to students academic achievement, 156 (41%) agreed, 56(15%) disagreed while 38 (10%) respondent strongly disagreed. In private secondary schools 259 (84%) of the respondent strongly agreed that obsolete use of lesson note is a disadvantage to students academic achievement, 18 (6%) of them agreed, 15 (5%) disagreed while 17 (5%) strongly disagreed.

Similarly, 161 (42%) respondents from public secondary schools strongly agreed to use of instructional resources as the bedrock of student academic achievement, 173 (46%) agreed, 22 (6%) disagreed while 23 (6%) strongly disagreed. Also, 256 (83%) of the respondent in private secondary schools strongly agreed to use of instructional resources as the bedrock of student academic achievement, 4 (1%) of them agreed, 13 (4%) disagreed while 36 (12%) strongly disagreed to use of instructional resources as the bedrock of student academic achievement. It seems that teachers in private secondary schools accept the use of instructional resources as the bedrock of student academic achievement more than public secondary schools.

One hundred and fifty three (44%) respondents in public secondary schools strongly agreed to use of experienced teachers enhances student academic achievement, 142 (41%) agreed, 36 (10%) disagreed while 19 (5%) strongly disagreed. In private secondary schools 12 (4%) of the respondent strongly agreed to use of experienced teachers enhances student academic achievement, 8 (3%) of them agreed, 186 (60%) disagreed while 103 (33%) strongly disagreed. The responses from public secondary schools gave an impression that use of experienced teachers enhances student academic achievement while the private secondary schools did not agree with them.

Furthermore, 220 (58%) respondents from public secondary schools strongly agreed to use of professional teachers' for better student academic performance, 140 (37%) agreed, 10 (3%) disagreed while 9 (2%) strongly disagreed. In private secondary schools 8 (3%) of the respondents strongly agreed to use of professional teachers' for better student academic performance, 17 (6%) of them agreed, 258 (83%) disagreed while 26 (8%) strongly disagreed. The table indicated more respondents in public

secondary schools agreed that professionalism in teaching is a determinant of students' better student academic achievements.

In public secondary schools 12 (3%) respondents strongly agreed that student are well seated during teaching and learning activities, 20 (5%) agreed, 118(32%) disagreed while 222 (60%) strongly disagreed. In private secondary schools 251 (79%) of the respondent strongly agreed that student are well seated during teaching and learning activities, 12 (4%) of them agreed, 19 (6%) disagreed while 34 (11%) strongly disagreed. It seems that private secondary schools may have adequate seats for students in their classrooms which made them to sit comfortably during teaching and learning activities more than public secondary schools.

Research Question Three: What are the levels of students' academic achievements in public and private secondary schools?

This research question seeks to determine the levels of students' academic achievements in SSCE between 2002 to 2006 academic sessions. Descriptive statistics was used to determine the level of students' academic performance. Tables 5-8 show the level of students' academic achievements between 2002 to 2006.

Table 5: Students' Academic Achievements in SSCE 2002-2003

Students Academic Achievement	School Type				Total
	Public	%	Private	%	
5 credits and above (including Eng and Maths)	608	(6.55)	781	(27)	1,389
4 credits (including Eng and Maths)	610	(6.57)	524	(18)	1,134
Less than 4 credits	8062	(86.9)	1562	(54.5)	9624
Total	9280	(100)	2867	(100)	12,147

Source: Field Trip Analysis

Table 5 shows the academic achievements of students in SSCE 2002 to 2003 sessions between public and private secondary schools in Lagos State. The result shows that out of the 9280 students presented for the SSCE in public schools, 608 (6.55%) had 5 credits and above, 610 (6.57%) had 4 credits while 8062 (86.9%) had less than 4 credits. The table again shows 2867 students were presented for SSCE in private schools, 781(27%) had 5 credits and above, 524 (18%) had 4 credits while 1562 (54.5%) had less than 4 credits.

Table 6: Students' Academic Achievements in SSCE 2003-2004

Students Academic Achievement	School Type				Total
	Public	%	Private	%	
5 credits and above (including Eng and Maths)	530	(5.8)	793	(15.8)	1,323
4 credits (including Eng and Maths)	639	(7.03)	201	(4.02)	840
Less than 4 credits	7924	(87.1)	4001	(80.1)	11,925
Total	9093	(100)	4995	(100)	14,088

Source: Field Trip Analysis

Table 6 shows the academic achievements of students in SSCE 2003 to 2004 sessions between public and private secondary schools in Lagos State. The result shows that out of the 9093 students presented for the SSCE in public schools, 530 (5.8%) had 5 credits and above, 639 (7.03%) had 4 credits while 7924 (87.1%) had less than 4 credits. The table again shows 4995 students were presented for SSCE in private schools, 793(15.8%) had 5 credits and above, 201 (4.02%) had 4 credits while 4001 (80.1%) had less than 4 credits.

Table 7: Students' Academic Achievements in SSCE 2004-2005

Students Academic Achievement	School Type				Total
	Public	%	Private	%	
5 credits and above (including Eng and Maths)	610	(6.9)	1131	(22.7)	1,741
4 credits (including Eng and Maths)	645	(7.3)	917	(18.4)	1,562
Less than 4 credits	7570	(85.8)	2936	(58.9)	10,506
Total	8825	(100)	4983	(100)	13,808

Source: Field Trip Analysis

Table 7 shows the academic achievements of students in SSCE 2004 to 2005 sessions between public and private secondary schools in Lagos State. The result shows that out of the 8825 students presented for the SSCE in public schools, 610 (6.9%) had 5 credits and above, 645 (7.3%) had 4 credits while 7570 (85.8%) had less than 4 credits. The table again shows 4983 students were presented for SSCE in private schools, 1131(22.7%) had 5 credits and above, 917 (18.4%) had 4 credits while 2936 (58.9%) had less than 4 credits.

Table 8: Students' Academic Achievements in SSCE 2005-2006

Students Academic Achievement	School Type				Total
	Public	%	Private	%	
5 credits and above (including Eng and Maths)	546	(6.5)	1057	(21.4)	1,603
4 credits (including Eng and Maths)	689	(8.2)	862	(17.5)	1,551
Less than 4 credits	7122	(85.2)	3011	(61.1)	10,133
Total	8357	(100)	4930	(100)	13,287

Source: Field Trip Analysis

Table 8 shows the academic achievements of students in SSCE 2005 to 2006 sessions between public and private secondary schools in Lagos State. The result shows that out of the 8357 students presented for the SSCE in public schools, 689 (8.2%) had 5 credits and above, 862 (17.5%) had 4 credits while 7122 (85.2%) had less than 4 credits. The table again shows 4930 students were presented for SSCE in private schools, 1057(21.4%) had 5 credits and above, 862 (17.5%) had 4 credits while 3011 (61.1%) had less than 4 credits. It may be inferred that in the four years, the students' achievements were poor generally in the two schools going by the number of students that scored below four credits.

Hypotheses Testing

Hypothesis One: There is no significant difference in the availability of educational resources between public and private secondary schools.

In order to ascertain if there is no significant difference in the availability of educational resources between public and private secondary schools in Lagos State, t-test was computed. Table 9 explains the difference.

Table 9: Availability of Educational Resources between public and private secondary schools

Variable	\bar{X}	Sd	N	df	t-cal	Remark
Public	21.31	3.99	29	76	8.10	Ho Rejected
Private	35.65	11.29	49			

$\alpha = 0.05$, t critical = 2.0

The result in Table 9 shows that in the mean score of 35.65 for private schools was higher than 21.31 for public schools. However the t calculated of 8.10 was greater than

the critical t of 2.0 given 0.05 alpha level with 76 degrees of freedom. Thus, the null hypothesis is rejected which implies that there is a significant difference in the availability of educational resources in public and private secondary schools.

Hypothesis Two: There is no significant difference in the utilization of educational resources between public and private secondary schools.

In order to ascertain if there is no significant difference in the utilization of educational resources between public and private secondary schools in Lagos State, t -test statistics was computed. Table 10 explains the difference.

Table 10: Utilization of Educational Resources between public and private secondary schools

Variable	\bar{X}	Sd	N	Df	t-cal	Remark
Public	16.51	3.5	29	76	6.92	Ho Rejected
Private	27.44	7.51	49			

$\alpha = 0.05$, $t_{\text{critical}} = 2.0$

The result in Table 10 shows that the mean score of 27.44 for private schools was higher than 16.51 for public schools. However the t calculated of 6.92 was greater than the critical t of 2.0 given 0.05 alpha level with 76 degrees of freedom. Thus, the null hypothesis is rejected which implies that there is a significant difference in the utilization of educational resources between public and private secondary schools and that utilization of educational resources in private school is higher than those of the public schools.

Hypothesis Three: There is no significant difference in student academic achievements between public and private secondary schools.

In order to ascertain if there is no significant difference in student academic achievement between public and private secondary schools in Lagos State, t-test was computed. Table 7 explains the difference.

Table 11: Students Academic Achievements between public and private secondary schools

Variable	\bar{X}	Sd	N	Df	t-cal	Remark
Public	55.68	7.3	29	76	28.02	Ho Rejected
Private	156.85	156.85	49			

$\alpha = 0.05$, t critical = 2.0

The result in Table 11 shows that the mean score of 156.85 for private schools was higher than 55.68 for public schools. Also, the t calculated of 28.02 was greater than the critical t of 2.0 given 0.05 alpha level with 76 degrees of freedom. Thus, the null hypothesis is rejected which implies that there is a significant difference in student academic achievements between public and private secondary schools and that academic achievement in private school is higher than that of public schools.

Hypothesis Four: There is no significant relationship between availability of educational resources and students' academic achievements in Lagos State secondary schools.

In order to confirm if there is a significant relationship between availability of educational resources and students' academic achievements in Lagos State secondary

schools, Pearson Product Moment Correlation (r) was calculated. Also, to ascertain the significance of the correlation coefficient (r) between the two variables, t statistics was computed as shown in table 12 below:

Table 12: Availability of Educational Resources and Students' Academic Achievements

Variable	\bar{X}	Sd	n	Df	r cal	t cal	Remark
Provision of Educational Resources	30.2	12.29	78	76	0.5	5.033	Ho rejected
Students' Academic Achievement	53.7	18.57					

$\alpha = 0.05$, $t_{\text{critical}} = 1.937$

The result on table 12 shows the test for the existence of significant correlation between provision of educational resources and students academic achievement as the calculated value (5.033) for r_{cal} is greater than the t_{critical} (1.937). Hence the null hypothesis is rejected. This implies that there is significant relationship between availability of educational resources and students' academic achievements.

Hypothesis Five: There is no significant relationship between utilization of educational resources and students' academic achievements in Lagos State secondary schools.

In order to confirm if there is a significant relationship between utilization of educational resources and students' academic achievements in Lagos State secondary schools, Pearson Product Moment Correlation (r) was calculated. Also, to ascertain the significance of the correlation coefficient, r between the two variables, t statistics was computed as shown in Table 13.

Table 13: Utilization of Educational Resources and Students' Academic Achievements

Variable	\bar{X}	Sd	n	Df	r cal	t cal	Remark
Utilization of Educational Resources	23	8.48	78	76	0.026	0.23	Ho accepted
Students' Academic Achievement	53.7	18.57					

$\alpha = 0.05$, t critical = 1.937

The result on table 13 shows test for the existence of significant correlation between utilization of educational resources and students' academic achievement as the calculated t (0.23) for r cal (0.026) is less than the critical t (1.937). Hence the null hypothesis is accepted which implies that there is no significant relationship between utilization of educational resources and students' academic achievements.

Hypothesis Six: There is no significant relationship between teachers' commitment to use of educational resources and students' academic achievements.

In order to confirm if there is no significant relationship between teachers commitment to use of educational resources and students' academic achievements in Lagos State secondary schools, Pearson Product Moment Correlation (r) was calculated. Also, to ascertain the significance of the correlation coefficient, r between the two variables, t statistic was computed as show in Table 14.

Table 14: Teachers' Commitment and Students' Academic Achievements

Variable	\bar{X}	Sd	N	Df	r cal	t cal	Remark
Teachers' Commitment	41.50	5.09	78	76	0.234	2.09	H ₀ rejected
Students' Academic Achievement	53.78	18.57					

$$\alpha = 0.05, t_{\text{critical}} = 1.937$$

The result on table 14 shows test for the existence of significant correlation between teachers' commitment and students' academic achievement as the calculated t (2.09) for r_{cal} (0.234) is greater than the critical t (1.937). Hence the null hypothesis is rejected which implies that there is a significant relationship between teachers' commitment to use of educational resources and students' academic achievements.

Hypothesis Seven: There is no significant relationship between teachers' years of working experience and students' academic achievements.

In order to confirm if there is no significant relationship between teachers' years of working experience and students' academic achievements in Lagos State secondary schools, Pearson Product Moment Correlation (r) was calculated. Also, to ascertain the significance of the correlation coefficient, r between the two variables, t statistic was computed as shown in Table 15.

Table 15: Teachers' Years of Working Experience and Students' Academic Achievements

Variable	\bar{X}	Sd	N	Df	r cal	t cal	Remark
Teachers' Working Experience	27.85	7.43	78	76	0.523	5.350	H ₀ rejected
Students' Academic Achievements	53.78	18.57					

$$\alpha = 0.05, t_{\text{critical}} = 1.937$$

The result on table 15 shows test for the existence of significant correlation between teachers' years of working experience and students' academic achievement as the calculated t (5.350) for r cal (0.523) is greater than the critical t (1.937). Hence the null hypothesis is rejected which implies that there is a significant relationship between teachers' years of working experience and students' academic achievements.

Hypothesis Eight: There is no significant relationship between school-size and students' academic achievements.

In order to confirm if there is no significant relationship between school-size and students' academic achievements in Lagos State secondary schools, Pearson Product Moment Correlation (r) was calculated. Also, to ascertain the significance of the correlation coefficient, r between the two variables, t statistic was computed as shown in Table 16.

Table 16: School-Size and Students' Academic Achievements

Variable	X	Sd	n	Df	r cal	t cal	Remark
School Size	24.62	6.22	78	76	0.227	2.032	Ho rejected
Students' Achievements	53.78	18.57					

$\alpha = 0.05$, t critical = 1.937

The result on table 16 shows test for the existence of significant correlation between school size and students' academic achievement as the calculated t (2.032) for r cal (0.227) is greater than the critical t (1.937). Hence the null hypothesis is rejected which implies that there is a significant relationship between school-size and students' academic achievement.

Hypothesis Nine: There is no significant relationship between teacher-student ratio and students' academic achievements.

In order to confirm if there is no significant relationship between teacher-student ratio and students' academic achievements in Lagos State secondary schools, Pearson Product Moment Correlation (r) was calculated. Also, to ascertain the significance of the correlation coefficient, r between the two variables, t statistic was computed as shown in Table 17.

Table 17: Teacher-Student Ratio and Students' Academic Achievements

Variable	X	Sd	n	Df	r cal	t cal	Remark
Student-teacher ratio	28.60	8.04	78	76	0.816	12.306	Ho Rejected
Students' Achievements	53.78	18.57					

$\alpha = 0.05$, t critical = 1.937

The result on table 17 shows test for the existence of significant correlation between teacher-student ratio and students' academic achievement as the calculated t (12.306) for r cal (0.816) is greater than the critical t (1.937). Hence the null hypothesis is rejected which implies that there is significant relationship between teacher-student ratio and students' academic achievements.

Summary of the Findings

From the data analysis carried out in the study and the result presented in tables 3 to 17, the summary of the findings are as follows:

1. That the situations of availability of educational resources in private secondary schools are slightly better than that of public secondary schools.
2. That private secondary schools are better when it comes to utilization of educational resources than public secondary schools.
3. That student's academic achievement as a result of SSCE 2002-2006 were generally poor in public and private secondary schools but better in private than public.
4. A significant difference exists in availability of educational resources in Lagos State public and private secondary schools.
5. Significantly a difference exists in the utilization of educational resources in public and private secondary schools.
6. A significant difference occurs in students' academic achievements between public and private secondary schools SSCE 2002-2006 results.
7. A significant relationship exists between availability of educational resources and student academic achievement.
8. Significantly, a relationship exists between utilization of educational resources and students' academic achievement.
9. A relationship exists significantly between teachers' commitment to use of educational resources and students' academic achievement.

10. A significant relationship occurs between teachers' years of working experience and students' academic achievement.
11. A significant relationship occurs between school-size and students' academic achievement.
12. Significantly, a relationship is ascertained between teacher-student ratio and students' academic achievements.

CHAPTER FIVE

DISCUSSION OF FINDINGS, IMPLICATIONS, CONCLUSION AND RECOMMENDATIONS

Introduction

This chapter discusses findings as they relate to the nine hypotheses tested. It also embraces contributions to knowledge, implication of the findings for practice, implications for further research, conclusion and recommendations.

Discussion of Findings

This study finds out if a significant difference exists in the availability of educational resources between public and private secondary schools. It discovers the existing difference between public and private secondary schools. It also reveals the unavailability of educational resources in most of public secondary schools, while there are inadequate resources in private secondary schools.

This finding found on high quality standards in secondary schools, as it shows that educational resources is pertinent to quality education and student academic achievement, especially in SSCE. Thus, when exposed to an environment rich in resources, this gives the teachers the opportunities to operate and also allows the students to learn better. This study also adds that students' academic achievement cannot be separated from availability of educational resources, as they help teachers to be more productive during teaching and learning activities.

Ajayi (2005) and Ajomagberin (2004) link the decline in students' academic achievement to the non-availability of teaching facilities such as library, laboratories, classroom, and instructional facilities, among others. This finding agrees with them as it reveals inadequacy of these facilities in public and private secondary schools of Lagos State. The finding further shows that the utilization of educational resources are important to students' academic achievement. It also adds that when these resources are applied during classroom activities, they help to stimulate students' interest to learn better. This study predicates the findings of Okebukola (2000) who states that a well equipped laboratory is important for teaching pure science courses and it takes priority over and above any other method of teaching sciences. The finding of this study corroborates Oni (2000) which opined that schools should be appropriately furnished with educational resources and utilize them well, in order to ensure better students academic achievement. This study states that optimal student academic performance may not be achieved if resources are not used.

It will be difficult to achieve a great performance of students, if quality educational resources are not utilized in the classrooms. Fagbamiye (2006) indicates that most times, the utilization of educational resources in schools are not addressed by the educational administrators. This is an important factor that cannot be ignored. This study reveals the importance of resources utilization and student's academic achievements in both public and private secondary schools and it corroborates Fagbamiye's finding. Adeogun (2001) in his finding also discovers how important educational resources are to public and private secondary schools and how the non-utilization is limiting teachers performance and also reduces the rate of students academic achievements in SSCE.

Abolade (2003), in his findings, indicates that as teachers utilize teaching aids to support themselves during teaching, they have more confidence in themselves and the students are equally stimulated as they learn. This finding shows that in an appropriate situation where resources are utilized, they help to improve students' academic achievement. This finding disagrees with Okoro's (2000) posture that educational resources reduce teachers' workload and renders them indolent in their daily activities. This is because resources help to aid teaching and this enables the students to learn fast as they explore their environment.

This finding also reveals that the performance of students from private secondary schools was a little better than that of the public secondary schools, even in spite of the resources in these schools. It corroborates Fabunmi, Brai-Abu and Adeniji (2007) in their findings as they inform that public secondary schools hardly use resources to aid teaching. This finding also corroborates the finding of Macleans (2005) that effective teaching and learning in the classrooms cannot take place if the basic resources are not applied during teaching and learning process. It also agrees with Oni (2000) that a learning environment that is devoid of learning resources will result in poor student academic achievement. This study informs that student' academic achievements in SSCE 2002-2006 were generally poor in both schools Appendix E).

As regards the relationship between teachers' commitment to use of educational resources and students' academic achievement, this finding reveals that the teacher's use of educational resources during teaching and learning process contributes a lot to the improvement of student academic achievement. It shows variations in the

commitment of private and public secondary schools teachers. The private secondary school teachers make use of resources to explain what they are teaching the students better than their counterparts in the public secondary schools.

Also this finding did not agree with Bryk, Lee and Holland (1993) that private secondary school teachers are more committed to their jobs based on the satisfaction they gained from their employer, which contributes to their commitment to the use of resources during teaching and learning activities. This study acknowledges that what brings satisfaction to one teacher may not do so to another teacher and therefore, satisfaction is relative. If private secondary school teachers feel better satisfied with their conditions of service than public secondary schools teachers, especially in terms of remunerations, this should have a positive effect on the students' academic achievements between 2002-2006 academic years. However, the result did not justify the level of teachers' satisfaction.

Also, this study corroborates Boluwoye (2007) in the area of teachers commitment to use of educational resources that class-size contributes to teachers commitment to work and use of resources. He adds that no matter how competent or motivated a teacher may be, inadequate resources to cope with large class-size will certainly prevent him from accomplishing his goal. This is in line with the finding of Bacharach, Bauer and Shebb's (2001) that inability to use educational resources during teaching has a direct negative impact on the teachers ability to perform and an indirect effect on teachers' competence and commitment. No matter how competent a teacher may be, lack of resources will dampen his interest and commitment.

This study agrees with Macleans (2002) in his findings that students' achievement depends on teachers' commitment to use of educational resources to enhance their teaching skills. The finding shows that teachers, who utilize resources regularly during teaching and learning activities, show their commitment to their jobs and their students benefit more from them. This shows that commitment is one of the best predictors of students' academic achievement. This study also shows that commitment to the use of educational resources is not prevalent in Lagos State public and private secondary schools and this hinders better students' academic achievement.

Also, this study shows that lack of commitment to educational resources is not a matter of teachers' disinterestedness, but due to the inability of government to supply these resources and train these teachers on how to use them to teach their students. This corroborated the findings of Okebukola and Jegede (2002) that the poor academic achievement of students is not as a result of teachers' lack of interest in the use of resources, but government inability to make these resources available for teaching and learning activities. Also, the finding of this study agrees with Ejiogu (1993) in a paper titled "The Nigerian Teacher: More sinned against than sinned" which stated that teachers are those men whose lives are spent in guiding, directing and influencing the thoughts, feelings and behaviour of their students'. In a situation where commitment is lacking, the quality of education and student achievement will be in jeopardy. This finding shows that interest and commitment of teachers have a higher correlation with students' academic achievement.

The result of this study confirms previous findings on the effect of teachers' years of working experience and students' academic achievement. , Bamsaiye (2007),

Adeyanju (2005) and Erinoshio (2001) in their findings reveal that an experienced teacher knows the strength and weakness of his student and he applies appropriate methods to bring out the good qualities in each student so as to enhance the students' academic achievement. This study corroborates their findings and states that teachers' working experience counts a lot and is very vital to students' academic achievements. Husen (2006) also indicates in his findings that an experienced teacher demonstrates his skills during teaching in order to bring out the innate qualities of his students'. The study also supports Okafor (2003) which says that the more experienced a teacher determines what his student gains from him and this enhances students' ability to perform well in examinations. This study also supports an adage that says experience is the best teacher.

This study also shows that there is a correlation between teachers' years of working experience and students' academic achievement. No matter how little, this is an important factor. This finding reveals that in spite of the correlation between teachers' years of working experience and student academic achievement, the achievement of students in public and private secondary schools between 2002 and 2006 academic years remained constantly poor. The teachers' years of working experience is expected to be a catalyst for better students' academic achievement.

Also, this study discovers a significant relationship between school size and students' academic achievement in Lagos State public and private secondary schools. An expectation based on recent literature was that students in smaller schools experience better academic achievement than their counterparts in larger schools. This study supports some previous studies in a similar direction. Howley and Bickel (2006), Lee and Smith (2002) have found that small school size is associated with higher

achievement of students. Although the evidence is not strong, a consensus seemed to exist in their findings that if a large school is broken into smaller units, students would learn better. However, this study agrees with them that to have a better student academic achievement small schools size should be considered. At the same time, this study reveals that even private secondary schools have large school sizes that are almost the same as public secondary schools and this equally has an adverse effect on students' academic achievement in SSCE. To put this a little differently, these researchers have found that the larger the school size, the more negative impact it will have on the distribution and use of educational resources, which eventually will affect students' academic achievement.

This study also finds that public secondary schools have large schools size with low rate of resources utilization which affects teachers' productivity and students learning output adversely. The overpopulation of schools gives room for ineffective teaching and learning that affects student's academic achievement adversely.

Levine (2002), Rumberger (2000), Mc Neal (1997) and Rumberger and Thomas (2000) in their findings discover that inadequate use of resources affect students' academic achievement negatively in both public and private secondary schools. This study corroborates their findings that in an appropriate situation where resources are adequately available and utilized, they contribute greatly to students' academic achievement.

Lee and Smith (1997) in their study on school-size add that in a small school, personal interaction and social intimacy are fostered among teachers and students. Driscoll and Svory (2003) agree that teachers' in small-populated schools work together and enjoy

team teaching in order to improve students' academic achievement. This finding also agrees with the findings of Lee and Smith on school size that small school size enable teachers to interact on matters affecting their work and improve their productivity. Also this finding agrees with Rumberger and Palardy (2001) in their study on school size and academic achievement that small schools correlate with higher achievement than large schools. They also add that large school size is a malignant to students' academic achievement.

This finding negates some findings that support large school size in terms of students' academic achievement. Among such studies are Howley and Bickel (2002), Palardy (2003) using student's achievement in high school, they found that large and extra large schools perform better than small and medium size schools. Conant (2000) supports large schools in terms of provision of rich curricula. Berkey (1996) maintains that if students' services, staff development and curricula are properly managed, large schools can be as efficient and effective in ensuring a good learning outcome as small schools. This study shows a significant relationship between school size and student academic achievement. It reveals that in public and private secondary schools, the sizes are large and educational resources available are over-stretched and over-utilized and this affects student academic achievement negatively. This indicates that there is a significant relationship between school size and students' academic achievements.

This study also finds a relationship between teacher-student ratio and student academic achievement. There are contrary findings on the relationship between teacher-student ratio and student's academic achievement. Arum (1996) in his findings opines that with the methodological problems, research has generally demonstrated the influence of

teacher-student ratio on students' academic achievement in variety of educational setting.

This study shows that large class size is malignant to student academic achievement. It corroborates Boluwoye (2007) on factors affecting student achievement in SSCE which stated that achievement falls where large class size hinders teacher-student interaction. Also, this study adds that large class-size in public and private secondary schools affect teacher-student interaction adversely during teaching and learning activities. The teachers do not have the opportunities to give personal or individual attention to each student and this jeopardizes the intimacy that should be fostered between the teachers and their students.

There is a consensus in the findings of many researchers that the lower the class size or teacher-student ratio, the better the student academic achievement. Boluwoye stated that the lower the teacher-student ratio, the more the communication between the learner and the teacher. Fabunmi (2000) agrees that student achievement decreases as class size increases. Spady and Marx (2003) in their study emphatically state that class size is very important where student academic performance is concerned. A situation where a large class exists, this may affect the performance of student school work and this may subsequently cause academic failure.

This finding reveals that the teacher-student ratio in public and private secondary schools has gone beyond the ratio of 1:40 as stipulated by the National Policy on Education (NPE 2004) giving consideration to effective applicability of educational resources during teaching and learning activities. It corroborates the finding of Brown (2000) that identifies the level and kind of stress experienced by teachers who are faced

with overcrowded classes. He adds that an overcrowded class stresses teachers more during teaching and learning activities. It also makes teaching boring and ineffective and it also makes behavioural objectives unattainable, reduces class control and finally affects students' academic achievement. This study emphasizes on inadequate educational resources to cope with the large class size and burdensome schedule of teachers' which can lead to teachers' poor output and the poor academic achievement of teachers.

Also, this finding corroborates the finding of Fabunmi, Brai-Abu and Adeniji (2006) where a positive relationship was established between teacher-student ratio and student academic achievement. They state that student-teacher ratio is one of the factors that have strong and direct influence on student academic achievement. They also add that schools with large class size or teacher-student ratio record poor academic achievement mostly, while better student academic achievement is associated with small class size.

The All Nigerian Conference of Principals of Secondary Schools (ANCOPSS) in line with the National Policy on Education gave a maximum recommendation of 40 students to a teacher for effective management and classroom control. The finding of this study reveals that public and private secondary schools have gone beyond 1-40 ratio stipulated in NPE and which is the recommendation of ANCOPSS and this indirectly affects student academic achievement.

Contributions to Knowledge

- This study revealed inadequate government supply of educational resources (tangible and intangible inputs) required for an optimal student academic achievement in Lagos State. Therefore, it provides a conceptual framework for

policy makers to develop a new policy so as to incorporate donor agencies and regulatory authorities in the allocation of adequate educational resources, their maintenance and utilization in Lagos State secondary schools. Among such regulatory authorities are town planners whose contribution should bring about reduction of class size to ratio 1-40 through modification of bungalow classroom blocks to storey building classroom blocks such that resources will be optimal for students' academic achievement.

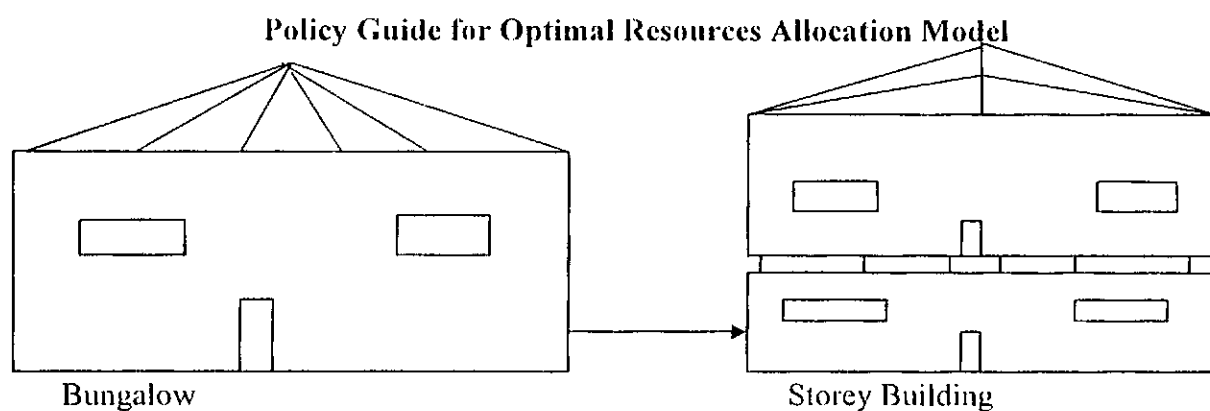


Fig 2: Modification of bungalow to storey building classroom blocks.
Source: Author.

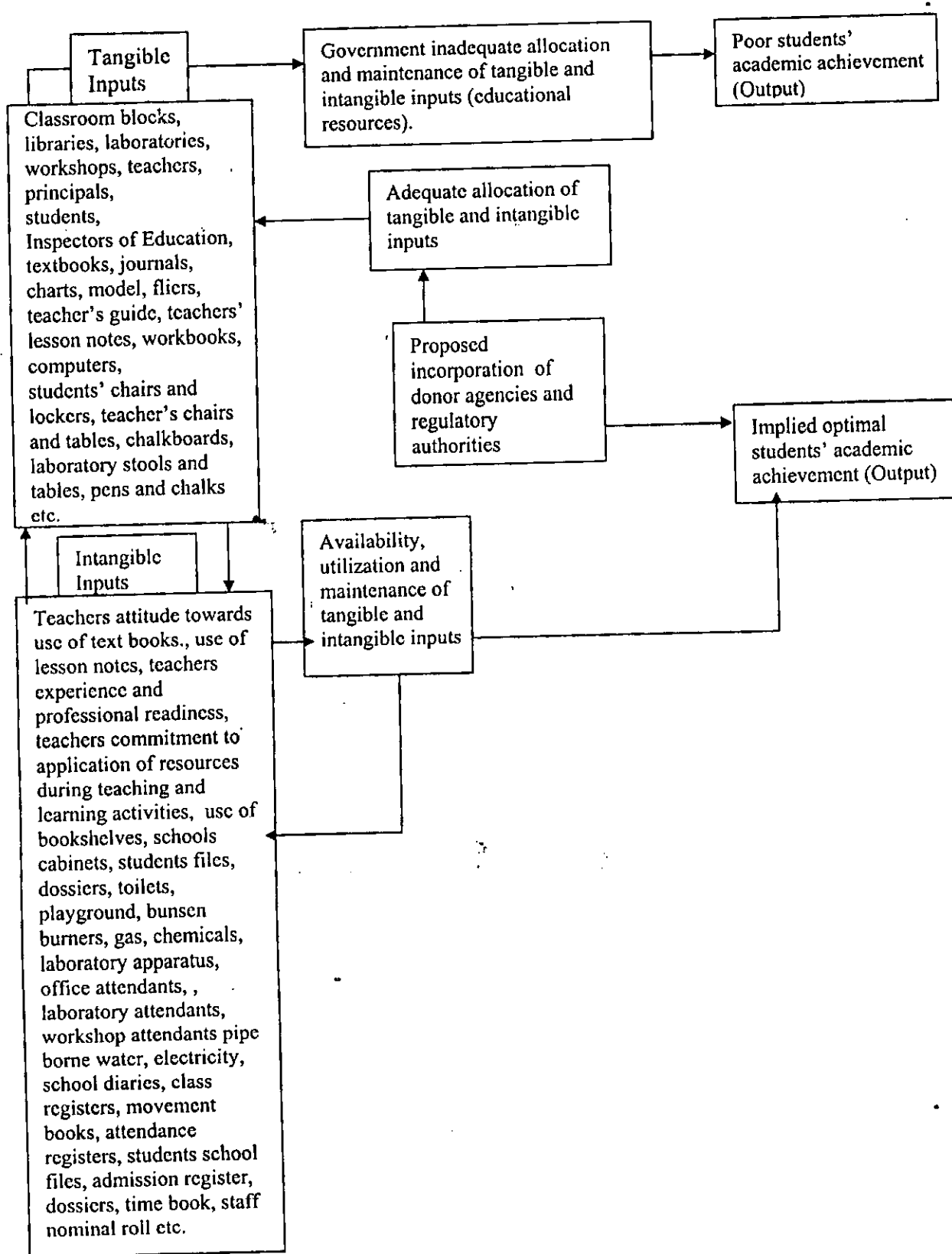


Fig 3: Proposed Conceptual Model for Optimal Resources Allocation, Utilization and Maintenance in the School System.

- The high rate of poor academic achievement of students as found in this study may constitute a menace to the society as students who cannot continue their education due to poor academic achievement in SSCE may become miscreants or dregs of the society and be roaming the streets aimlessly. Thus, this study gives direction and signals to policy makers and educational planners to incorporate in policy decision making, the re-education or rehabilitation of such students in the existing vocational schools so as to make them become self-reliant and functional in the society. This aspect has not been given a thought by the policy makers and has been neglected by the educational planners for a long time.
- This study contributes immensely to policy decisions on enhancement of students academic achievement such that educational planners will set up an assessment team that will conduct standardized test for all the students in public and private senior secondary schools in Lagos State prior to SSCE examination. This assessment team will evaluate students' readiness for SSCE examination as well as consider the teachers effectiveness during teaching and learning activities.
- Another major contribution is the fact that policy makers will become more professionally- minded when recruiting teachers by involving the Teachers Registration Council of Nigeria (TRCN). This body will conduct professional examination, induct successful teachers and award them their professional licenses. This has not been considered during recruitment exercise in the past when teachers' employments were based solely on academic certificates and not professional certificates from the TRCN.

Implications for Practice

The poor quality of secondary education is having an adverse effect on student academic achievement and it is a common disturbing phenomenon in Nigeria today.

Over the years there has been a lot of public outcry on student poor academic achievement in SSCE. While poor student academic achievement was attributed to unavailability and utilization of educational resources in this study, others believe that student inadequate preparation for examination was a major factor to poor academic achievement. However, the main agitation of everybody is on how to improve the quality of education and student academic achievement. The quality of education is a pride of any nation.

This study reveals that the quality of education in secondary schools stem from utilization of educational resources which has been identified as the most important of all indicators. Therefore, this means that there cannot be quality education without availability and appropriate utilization of educational resources. To successfully improve the quality of education, this study states that there must be a positive effect of educational resources on students' academic achievement.

This study also indicates shortage of professional graduate teachers in private secondary schools while in public secondary schools the number of professional graduate teachers' available is not commensurate with the students' population. This is a disturbing situation since professional teachers are very fundamental to quality of education and student academic achievement. Also, where teachers are not professional graduates their competence may be in doubt and this may consequently affect student academic achievement.

Educational administrators should ensure that private secondary schools employ professional graduate teachers to teach senior secondary classes. They should also endeavour to work towards having enough teachers that can cope with the student population in these schools. There is the need for teachers to update themselves in their area of discipline, so as to keep abreast of what operates in their field across the globe. Teachers should realize that the world is a global village and knowledge should be enriched on daily basis. Teachers should be encouraged to be computer literate so as to source for information that will be relevant to their discipline and enhance their performance inside and outside the classrooms. Also teachers should be fully equipped for challenges in their various disciplines through periodic training and retraining on the application of educational resources in their day-to-day teaching activities.

This study further reveals that where teachers' rights are being ignored, it will certainly affect their commitment to use of educational resources. The responses from private secondary school teachers' show more commitment than public secondary school teachers and, this is quite ironical since they also responded negatively to better remuneration and conditions of service. Educational administrators are hereby encouraged to improve upon teachers' condition of service in public secondary school and ensure the teachers' condition of service in private secondary schools is re-examined and monitored.

The finding of this study also shows that there is an urgent need to equip public secondary schools in Lagos State with adequate educational resources since private schools that could boast of having educational resources were sparingly equipped. It therefore becomes incumbent on the Lagos State government to ensure allocation of

adequate resources and maintain these resources in public and private secondary schools, in order to enhance academic achievement which determines what students become in life.

This study further reveals that both public and private secondary schools exceed 1-40 teacher-student stipulated ratio in NPE and this might have an adverse effect on academic achievement of students. There is an urgent need for educational administrators to ensure compliance with the stipulated ratio for better student's academic achievement.

There is also the need for the state government to make available adequate educational resources that will be applicable to the number of students in the classrooms and teachers should be encouraged to use them for the purpose of bringing out the students innate qualities for better student's academic achievement. Also, the government needs to improve on physical and material resources especially the classroom buildings towards reduction of class-size or teacher-student ratio. The government should make sure that classes are not overpopulated and they should endeavour to reduce class size to the stipulated 1-40 ratio. This will help them to know the number of teachers required for the number of students available and will also help them to recruit additional teachers where necessary so that the quality of education will not be in jeopardy.

Also, this study shows that public secondary schools have more experienced teachers than private secondary schools; still public secondary schools students achievements in 2002-2006 SSCE (APPENDIX E) were poorer than private secondary schools

achievement. In a normal situation, one would expect that with experienced teachers in public secondary schools, SSCE results should be better than that of private secondary schools. Teachers should be able to use their experience to improvise unavailable school resources for the sake of quality of education and better student academic achievement. Furthermore, it is worthy of note that teacher's experience comes into play where student population has exceeded the stipulated ratio.

In a related development, this study shows that private secondary schools experienced large school size. However, in public secondary schools the sizes were larger. There is no doubt that if this trend should persist in these schools, without making adequate provision for educational resources to cater for the population, students academic achievements will certainly be affected negatively. The state government should realize that inadequate resource affect teachers' efforts to perform efficiently. The government should therefore consider splitting large schools into two or three smaller units in order to give adequate attention to academic work.

Implications for Further Research

In view of the limitation of this study, there is the need for a study like this to be replicated in other states of the southern, northern and eastern parts of Nigeria. Future research should consider other variables such as pre-entry qualification of students and academic achievement, socio-economic background and student academic achievement etc. The student academic achievement is of great importance in the education sector, for the government, stakeholders and the general public. Further research on factors that can bring about effective student academic achievement would be a worthwhile academic exercise.

Research work is also required to investigate the extent to which government policies and programmes make or mar educational activities.

Conclusion

The central theme of this study was to investigate the quality and utilization of educational resources and student academic achievement in Lagos State public and private secondary schools. Within the limit of the investigation from the data collected and the result obtained, some conclusions can be made. It is pertinent to note that only hypothesis five out of the nine hypotheses tested has no significant effect on students' academic achievement in 2002-2006 SSCE. It is evident that the achievement of students in public secondary schools were poorer than that of the private secondary schools with the summary in Appendix E.

It is also evident that almost all the public secondary schools investigated are in dire need of well equipped laboratories, workshops, libraries and classrooms, while in private secondary schools the resources are sparingly available and the ones available have not had positive impact on student academic achievement. It is unequivocally stated that educational resources are not only inadequate in public secondary schools; most of the ones available are not in good conditions for carrying out instructions during teaching and learning activities and they are not in use. The availability and utilization of these resources in both public and private secondary schools require government attention and intervention for the sake of ensuring quality of education and improving student academic achievement.

Also it is pertinent to state that teachers with Bachelors degree in education (B.ED) are inadequate in private secondary schools and this contradicts the National Policy on Education (NPE) stipulated guideline that only professional degree holders should teach SSCE classes. The public secondary schools that complied with this guideline also did not have enough teachers to teach the large students population in these classes. The private secondary schools employ mostly graduates who are NCE holders. This study reveals that policy makers are yet to comply with the NPE stipulated guideline on who to teach SSCE classes in both public and private secondary schools.

There is the need for government to improve on staff development through organizing periodic training, conferences, seminars and workshops for teachers in their various areas of discipline so that they can acquire new knowledge that will help to improve their functional skills. This will enable them to be more proactive in their manner of disseminating knowledge to students during teaching and learning activities. Also, government should organize training for teachers on information technology to enable them acquire more knowledge in their various disciplines through the use of internet and they will be able to compete with their counterparts in the Western countries.

On the issue of commitment, most of the public secondary school teachers are not committed to the use of educational resources as expected due to unavailability of these resources and the poor conditions of the available ones. It should be realised that resources are to augment the teachers' prowess during teaching and learning process. It is expected that in the absence of resources or inadequacy of educational resources, teachers should be able to look for means of improvising for the sake of their students. Okunola (2002) reported that children learn best when they can actively explore an

environment rich in material resources, that is, when they are able to interact with their teachers and operate resources relating to matters being taught.

It is also evident that teachers in public secondary schools expressed dissatisfaction with their jobs as many responded to poor motivation from government. This in a way contributed to poor teachers' commitment. The private schools teachers are more committed as shown in their responses, not because they were better remunerated but because they needed to keep their jobs since the slogan in private schools is "hire and fire".

This study reveals that there are more experienced teachers in public schools but the effect of their experience did not manifest in the 2002-2006 SSCE academic achievements, while private secondary schools with the few experienced teachers during 2002-2006 academic sessions have a better students academic achievement. Furthermore, the issue of superfluous class size in public and private secondary schools has affected quality of education adversely with the poor students academic achievements recorded between 2002 to 2006 academic years. This requires the attention of not only the government and stakeholders but also all concerned citizens to come together and to work collectively in order to ensure improvement of quality of education and student academic achievement.

Recommendations

On the basis of the findings of this study the following recommendations are made so as to improve student academic achievement through availability and utilization of quality educational resources. The government needs to make sure that adequate

educational resources are available in public and private secondary schools, in order to ensure enhancement of quality education and ensure improvement in student academic achievement. With students' population increase in public and private secondary schools, existing educational resources need to be improved upon so that they can be appropriately utilized during teaching and learning process. Also, educational administrators need to make sure that quality educational resources are supplied into these schools and they should also monitor their maintenance so as to be sure that resources supplied are of good quality and can withstand the test of time. The government should endeavour to ensure that adequate laboratory equipment are put in place for students offering courses in pure sciences, while workshops equipment should be put in place also for students offering courses in applied sciences. This will greatly help the students carry out instructions during practical lessons.

Also, for teachers' to be committed, government should endeavour to organize for teachers' in-house training, conferences, seminars and workshops where they can gain more knowledge in their areas of discipline. Also, with the information technology teachers are to be trained so that they can explore the internet for more training and more information relating to their discipline.

Furthermore government should ensure that both public and private secondary schools have libraries that are well established and furnished with computers and current reference books relating to arts, social sciences, pure and applied sciences so as to be able to get more information whenever it is necessary. The All Nigeria Conference of Principals of Secondary School, Lagos State chapter (ANCOPSS) should join hands with policy makers in formulating policies that will affect the secondary schools in all

areas of operations, especially on matters concerning teachers' productivity, since teachers are the core operators in the school system. Also, the schools authorities should encourage teachers to organize group discussions for their students twice a week where treated topics would be revisited and discussed extensively.

In the area of teachers' commitment, government should consider better remuneration for teachers so as to motivate them to be more committed to their statutory duties as this will serve as a motivator for them. Also, giving teachers incentives to acknowledge their good work, reduction of class size in public schools (a large class size is malignant to student academic achievement) and appropriate supply of educational resources will increase teachers' commitment to their duties. Also, teacher-student positive relationship should be established and fostered to maintain good classroom discipline. Teachers also should provide welfare support to students not only during teaching and learning process but also when students are disturbed psychologically so that this will not affect them academically. This kind of relationship will encourage the students to see their teachers as friends and confidants and will enhance the students' academic achievements.

To improve students' academic achievement, educational administrators should set up guidelines on how often assignments and projects are to be given to students. The assignment and projects have their own contributions to students' academic achievements and this is the reason why NPE lays great emphasis on it. Teachers' should also be monitored for effectiveness and efficiency as they carry out their statutory activities both inside and outside the classrooms. Teachers should make

necessary corrections on any assignment or project given to students so that students can understand better.

Also, government should encourage setting up an assessment team that will conduct two mock examinations for students in public and private secondary schools, one at the end of SS 2 and the second one as the second term examination in SS3. The outcome of these examinations will encourage the students to be more determined to achieve better results in SSCE. It will also assist the schools to know the strengths and weaknesses of students and how to sustain their strengths and improve on their weaknesses towards SSCE. This will also help the students to concentrate more on their weak areas

The inspectors should get more acquainted with the laid down guidelines of the Ministry of Education and intensify their efforts in monitoring the operations in schools. There should be routine check up or impromptu inspection for check and balances in schools. The government should strive to provide and regulate appropriate classroom size for proper management; this will enable teachers to have free movement in supervising students' work during teaching and learning activities.

Furthermore, the educational planners and policy makers should work in conjunction with teachers who are custodian of knowledge and maintain positive relationship with them towards betterment of quality education and student academic achievement. Educational planners should also consider teachers for better conditions of service that will motivate their interest in the job.

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APPENDIX A

PRINCIPALS' PERCEPTION OF QUALITY OF EDUCATIONAL RESOURCES AND STUDENTS' ACADEMIC ACHIEVEMENT (PPQERSAA) QUESTIONNAIRE

Kindly supply the under listed information which is required to carry out a research work on Quality and Utilization of Educational Resources and Students' Academic Achievement.

Thank you.

PART I: PERSONAL INFORMATION

1. Type of School: Public ☐ Private ☐
2. Gender: Female ☐ Male ☐
3. Age of Respondents: Below 30 ☐ 31 – 40 ☐ 40 – 49 ☐ 50-60 ☐
4. Educational Qualifications: Please tick the one that is most applicable to you.
 - i NCE ☐
 - ii B.A/B.Sc with PGDE ☐
 - iii IIND with TTC/PGDE ☐
 - iv B.Sc (Ed)/B.A. (Ed) with M.Ed ☐
 - v B.A/ B.Sc/IIND ☐
 - vi Ph.D ☐
5. Year of Working Experience as a Principal: 1- 10 ☐ 11- 20 ☐ 21 - 30 ☐
31- above ☐
6. School size: 500-1000 ☐ 1000- 2000 ☐ 2000 and above ☐

7. Class Size: 1- 40 ☐ 41 - 80 ☐ 81 - 120 ☐ 120 – above ☐

8. Age of School: 1-15 years ☐ 16 - 30 years ☐

PART II: QUALITY, AVAILABILITY AND UTILIZATION OF

EDUCATIONAL RESOURCES AND STUDENT ACADEMIC ACHIEVEMENT

9. Kindly respond to the statements on availability of educational resources and students academic achievement

S/N	Educational resources	Strongly agree	Agree	Disagree	Strongly disagree
1	Irregular supply of Sciences equipment hampers the teaching of science subjects.				
2	There is irregular supply of workshops equipment.				
3	Inadequate science teachers are a great disadvantage to science teaching and learning.				
4	In adequate personnel to handle teaching of technical subjects is affecting the achievement of students.				
5	There are insufficient teachers to teach Mathematics and English.				

6	Textbooks have been inadequate for students during the teaching and learning activities.				
7	Having dilapidated classrooms				
8	Having overcrowded classrooms				
9	Lack of adequate laboratories and workshops				
10	Obsolete equipment in laboratories and workshops				
11	There is no functional library in my school.				
12	Library in my school have obsolete books.				

10. Kindly respond to statement on utilization of educational resources in schools and students academic achievement

S/N	Utilization of Educational resources	Strongly Agree	Agree	Disagree	Strongly Disagree
1	Teachers in my school use chalk board regularly during teaching and learning activities to enable students understand their lessons.				
2	Teachers in my school use teaching method that is applicable to each subject				

	matter in order to stimulate students' interest.				
3	Teachers in my school use appropriate educational resources that will bring out the quality of their lesson and enhances students' ability.				
4	Textbooks are seldom used to aid learning due to in availability				
5	Teachers skills and productivity may not necessarily be determined by use of audio-visual resources.				
6	Teachers rely too much on Instructional resources to the extent that they hardly perform without it.				
7	Teachers do not prepare their lesson notes towards teaching and learning activities.				
8	Use of obsolete lesson note by teachers is a great disadvantage to student academic achievement.				
9	Instructional resources are of importance to academic achievement.				

10	Teachers who are experience teach better that those without experience.				
11	Professional teachers are more determined in ensuring better students academic achievement.				
12	Students are well seated during the teaching and learning activities.				

11. Kindly respond to statements on quality of teachers' and students academic achievement in public schools.

S/N	Quality of Educational resources	Strongly Agree	Agree	Disagree	Strongly Disagree
1	Use of well qualified teachers enhances students' academic achievement.				
2	Teachers' participation in conferences, workshops, seminars and in service training increases their productivity.				
3	Ability to deliver a good lesson lies with higher educational qualifications.				
4	Having professional teachers to teach in schools improves students' academic achievement.				

5	Additional qualification may not contribute to teachers productivity and improve student academic achievement.				
6	NCE teachers as professionals should be used in teaching senior secondary schools in order to ensure quality education.				
7	Professionally qualified teachers who participate in conferences, workshops and seminars in their area of specialization have an advantage to ensure better students academic achievement.				
8	Graduate teachers who are not professionals use appropriate teaching methods to teaching students and this affects students' achievement adversely.				
9	Teachers' inability to use internet and current books in order to improve their lessons gives obsolete information to students and this affect student's achievement.				

**PART III: TEACHERS' COMMITMENT TO EDUCATIONAL RESOURCES
AND EXPERIENCE EFFECT ON STUDENTS' ACADEMIC
ACHIEVEMENT**

12. Rate the effect of teachers experience on students' academic achievement.

S/N	Teachers experience	Strongly agree	Agree	Disagree	Strongly Disagree
1	Teachers experience does not count as observed in my school when it comes to teachers productivity towards enhancement of students academic achievement.				
2	Inadequate experience teachers are a great disadvantage for student academic achievement in my school.				
3	Teachers in my school enjoy in service training, seminars, work shops and conferences during the holiday in order to improve their proficiency in their area of discipline.				
4	In experience teachers are hazardous to student academic achievement.				
5	Teachers in my schools who are used to giving extra lessons to students improve students' academic achievement.				
6	In spite of insufficient resources in my school				

	teachers still improvised to enhance students' ability to learn and improve on their academic achievement.				
7	Lack of motivation by the authority has reduced teachers' efficiency hence the low academic achievement of students in the last four academic sessions (2002-2006).				
8	Teachers other areas of interest are having conflict with their primary duties.				
9	Improvement of welfare packages will improve teachers' attitude to work and this will affect the academic achievement of the students.				

13. Please rate teachers' commitment to student academic achievement

S/N	Teachers Commitment	Strongly agree	Agree	Disagree	Strongly disagree
1	Poor remuneration of teachers is causing lack of interest in their jobs.				
2	Teachers are well remunerated and this has enhances their interest in teaching and is affecting student achievement positively.				

3	Use of incentives encourages teachers to work with determination.				
4	Conducive environment is an added advantage to teachers' commitment to teaching and learning activities and increases student academic achievement.				
5	Weekly preparation of lesson notes with relevant materials shows the commitment of teachers to their work and this also improves students' achievement.				
6	Introduction of welfare packages help to stimulate teachers' interest in their jobs.				
7	Teachers' lack of motivation has contributed to their low morale.				
8	Government poor treatment of teachers discourages teachers from teaching and this indirectly affects the students output.				
9	Appreciation of teachers by the school authorities and government stimulates their interest to work hard and improve on student academic achievement.				

10	Continuous exit of teachers from this noble job may be due to unfriendly working condition.				
11	Teaching is being used as stepping stones to other prestigious job because teachers are not treated well.				
12	If teachers are treated well they are prompt in giving attention to every detail that will improve their skills and ensure better student academic achievement				
13	Teaching-Learning activities are supervised regularly to ensure adequate knowledge is being passed on to students during teaching and learning activities.				

PART FOUR: SCHOOL SIZE AND CLASS SIZE EFFECT ON STUDENTS'

ACADEMIC ACHIEVEMENT

Please rate the following statements on school-size and student academic achievement

S/N	School-size	Strongly agree	Agree	Disagree	Strongly Disagree
1	Large populated school affects teachers' productivity and students' academic achievement due to teachers' inability to have personal relationship with students.				
2	Inadequate resources are very common to large populated schools.				
3	In appropriate control of teachers and students activities are synonymous to large populated schools.				
4	Students in large populated schools hardly perform well in the SSCE.				
5	Teachers' willingness to teach in large school is low.				
6	Management of large schools is an enormous task.				
7	Small populated schools can be well managed.				
8	Teachers are willing to discharge their duties ultimately where small schools are concerned.				

9	Educational resources are use optimally in small schools.				
10	Academic achievement in small populated schools is enhanced because of teacher's personal relationship with each student.				

15. Please rate the statements on class size and students academic achievement in school

S/N	Class-size	Strongly agree	Agree	Disagree	Strongly Disagree
1	Classrooms are too congested and this is affecting teachers' coordination of students during teaching and learning relationship.				
2	Large size of the classrooms is affecting adequate use of educational resources.				
3	Large class-size prevents teachers' personal contact with each student.				
4	Large class-size prevents teachers from reaching out to individual students during the teaching and learning activities.				
5	Giving consideration to 1-40 teacher-student ratio will enhance teachers productivity and optimizes student academic achievement.				
6	Increase in class-size reduces teachers' productivity and decreases students' achievement.				
7	Small class-size increases effective communication				

	between the teachers and the students.				
8	Large class-size is a malignant to student academic achievement.				
9	Small class-size enhances individualize instructions and personal involvement with student.				
10	Teachers' ability to impart knowledge adequately is greater in the small class-size.				
11	Teachers work load are reduced with small class-size.				
12	Teachers are unable to perform his responsibilities well in a large class-size.				
13	Classes in my school are alright in terms of teacher -student ratio.				
14	Each student is well seated and well focused while the lessons are going on.				
15	Having large class-size serves as a deterrent to student academic achievement.				
16	Teacher-Student ratio is a determinant of academic achievement.				

Thank you.

**INSPECTORS' PERCEPTION OF QUALITY OF EDUCATIONAL
RESOURCES AND STUDENTS ACADEMIC ACHIEVEMENT
(IPQERSAA) QUESTIONNAIRE**

Kindly supply the under listed information which is required to carry out a research work on Quality and 'Utilization of Educational Resources and Students' Academic Achievement

Thank you.

PART I: PERSONAL INFORMATION:

1. Type of Education District
2. Gender: Femal Male
3. Age of Respondents Below 30 ☐ 31 – 40☐ 40 – 50☐ 50-60 ☐
4. Educational Qualifications: Please tick the one that is most applicable to you.
 - i NCE ☐
 - ii B.A/B.Sc with PGDE ☐
 - iii HND with TTC/PGDE ☐
 - iv B.Sc (Ed)/B.A. (Ed) with M.Ed ☐
 - v. B.A/ B.Sc/HND☐ vi. Ph.D ☐
5. Year of Working Experience as an Inspector: 1- 10☐ 11- 20☐ 21 - 30 ☐
31 – above ☐
6. School size: Public 500-1000 ☐ 1000- 2000 ☐ 2000 and Above ☐
7. School size Private: 500-1000 ☐ 1000- 2000 ☐ 2000 and Above☐
8. Size: Public 1- 40 ☐ 41 – 80 ☐ 81 – 120 ☐ 120 – above ☐
9. Class Size: Private 1- 40 ☐ 41 – 80 ☐ 81 – 120 ☐ 120 – above ☐

**PART 11: QUALITY, AVAILABILITY AND UTILIZATION OF
EDUCATIONAL RESOURCES AND STUDENT ACADEMIC
ACHIEVEMENT**

10 a. Kindly rate the statements on availability of educational resources and students academic achievement in public schools.

S/N	Educational resources	Strongly agree	Agree	Disagree	Strongly disagree
1	Irregular supply of Sciences equipment hampers the teaching of science subjects.				
2	The supply workshops equipment is not regular.				
3	In adequate science teachers is a great disadvantage to science teaching and learning.				
4	In adequate personnel to handle teaching of technical subjects is affecting the achievement of students.				
5	There insufficient teachers to teach Mathematics and English.				
6	Textbooks have been inadequate for students during the teaching and learning activities.				
7	Classrooms are dilapidated which may be hazardous to both teachers and students.				
8	The classrooms are overcrowded				

9	Lack of adequate laboratories and workshops				
10	Equipment in both the laboratories and workshops are obsolete and not even enough for the students offering these subjects.				
11	There is no functional library in the school.				
12	Library has obsolete books.				

10b . Kindly rate the statements on provision educational resources and students academic achievement in public schools.

S/N	Educational resources	Strongly agree	Agree	Disagree	Strongly disagree
1	Irregular supply of Sciences equipment hampers the teaching of science subjects.				
2	The supply workshops equipment is not regular.				
3	In adequate science teachers is a great disadvantage to science teaching and learning.				
4	In adequate personnel to handle teaching of technical subjects is affecting the achievement of students.				
5	There insufficient teachers to teach Mathematics and English.				

6	Textbooks have been inadequate for students during the teaching and learning activities.				
7	Classrooms are dilapidated which may be hazardous to both teachers and students.				
8	The classrooms are overcrowded				
9	Lack of adequate laboratories and workshops				
10	Equipment in both the laboratories and workshops are obsolete and not even enough for the students offering these subjects.				
11	There is no functional library in the school.				
12	Library has obsolete books.				

11a. Please rate the statements on utilization of educational resources and students academic achievement in public schools.

S/N	Utilization of Educational resources	Strongly Agree	Agree	Disagree	Strongly Disagree
1	Teachers use chalk board regularly during teaching and learning activities to enable students understand their lessons.				
2	Teachers vary teaching method to suit their subject matter in order to stimulate students' interest.				
3	Teachers use appropriate educational resources that will bring out the quality of their lesson and enhances students' ability.				

4	Teachers seldom use textbooks due to in availability.				
5	Teachers' skills and productivity may not necessarily be determined by use of audio-visual resources.				
6	Teachers rely too much on Instructional resources to the extent that they hardly perform without it.				
7	Teachers do not prepare their lesson notes towards teaching and learning activities.				
8	Use of obsolete lesson note by teachers is a great disadvantage to student academic achievement.				
9	Instructional resources are of importance to teaching and learning activities.				
10	Teachers who are experience teach better that those without experience.				
11	Professional teachers are more determined in ensuring better students academic achievement.				
12	Students are well seated during the teaching and learning activities.				

11b. Please rate the statements on utilization of educational resources in schools and students' academic achievement in private schools.

S/N	Utilization of Educational resources	Strongly Agree	Agree	Disagree	Strongly Disagree
1	Teachers use chalk board regularly during teaching and learning activities to enable students understand their lessons.				
2	Teachers vary teaching method to suit their subject matter in order to stimulate students' interest.				
3	Teachers use appropriate educational resources that will bring out the quality of their lesson and enhances students' ability.				
4	Teachers seldom use textbooks due to in availability.				
5	Teachers' skills and productivity may not necessarily be determined by use of audio-visual resources.				
6	Teachers rely too much on Instructional resources to the extent that they hardly perform without it.				
7	Teachers do not prepare their lesson notes towards teaching and learning activities.				
8	Use of obsolete lesson note by teachers is a great disadvantage to student academic achievement.				
9	Instructional resources are of importance to teaching and learning activities.				
10	Teachers who are experience teach better that those without experience.				

11	Professional teachers are more determined in ensuring better students academic achievement.				
12	Students are well seated during the teaching and learning activities.				

12a. Kindly respond to statements on quality of teachers' and students academic achievement in public schools.

S/N	Quality of Educational Resources	Strongly Agree	Agree	Disagree	Strongly Disagree
1	Use of well qualified teachers enhances students' academic Achievement.				
2	Teachers' participation in conferences, workshops, seminars and in service training increases their productivity.				
3	Ability to deliver a good lesson lies with higher educational qualifications.				
4	Having professional teachers to teach in schools improves students' academic achievement.				
5	Additional qualification may not contribute to teachers' productivity and improve student academic achievement.				
6	NCE teachers as professionals should be used in teaching senior secondary schools in order to ensure quality education.				
7	Professionally qualified teachers who participate in conferences, workshops and seminars in their area of specialization have an advantage to				

	ensure better students academic achievement.				
8	Graduate teachers who are not professionals use appropriate teaching methods to teaching students and this affects students' achievement adversely.				
9	Teachers' inability to use internet and current books in order to improve their lessons gives obsolete information to students and this affect students' achievement.				

12b. Kindly respond to statements on quality of teachers and students academic achievement in private schools

S/N	Quality of Educational resources	Strongly Agree	Agree	Disagree	Strongly Disagree
1	Use of well qualified teachers enhances students' academic achievement.				
2	Teachers' participation in conferences, workshops, seminars and in service training increases their productivity.				
3	Ability to deliver a good lesson lies with higher educational qualifications.				
4	Having professional teachers to teach in schools improves students' academic achievement.				
5	Additional qualification may not contribute to teachers productivity and improve student academic achievement				

6	NCE teachers as professionals should be used in teaching senior secondary schools in order to ensure quality education.				
7	Professionally qualified teachers who participate in conferences, workshops and seminars in their area of specialization have an advantage to ensure better students academic achievement.				
8	Graduate teachers who are not professionals use appropriate teaching methods to teaching students and this affects students' achievement adversely.				
9	Teachers' inability to use internet and current books in order to improve their lessons gives obsolete information to students and this affect student's achievement.				

**PART 111: TEACHERS COMMITMENT TO EDUCATIONAL RESOURCES
AND EXPERIENCE EFFECT ON STUDENT ACADEMIC
ACHIEVEMENT**

13a. Rate the effect of teachers experience on academic achievement in public schools.

S/N	Teachers experience	Strongly agree	Agree	Disagree	Strongly Disagree
1	Experience does not count when it comes to teacher productivity towards enhancement of students' academic achievement.				

2	Inadequate experience teachers are a great disadvantage for student academic achievement in my school.				
3	Teachers in my school enjoy in service training, seminars, work shops and conferences during the holiday in order to improve their proficiency in their area of discipline.				
4	In experience teachers are hazardous to student academic achievement.				
5	Teachers who are used to giving extra lesson students improve students' academic achievement.				
6	In spite of insufficient resources teachers still improvised to enhance students' ability to learn and improve on their academic achievement.				
7	Lack of motivation by the authority has reduced teachers' efficiency hence the low academic achievement of students in the last four academic sessions (2002-2006).				
8	Teachers other areas of interest are having conflict with their primary duties.				

13b. Rate the effect of teachers experience on academic achievement in private schools.

S/N	Teachers experience	Strongly agree	Agree	Disagree	Strongly Disagree
1	Experience does not count when it comes to teacher productivity				

	towards enhancement of students' academic achievement.				
2	Inadequate experience teachers are a great disadvantage for student academic achievement in my school.				
3	Teachers in my school enjoy in service training, seminars, work shops and conferences during the holiday in order to improve their proficiency in their area of discipline.				
4	In experience teachers are hazardous to student academic achievement.				
5	Teachers who are used to giving extra lesson students improve students' academic achievement.				
6	In spite of insufficient resources teachers still improvised to enhance students' ability to learn and improve on their academic achievement.				
7	Lack of motivation by the authority has reduced teachers' efficiency hence the low academic achievement of students in the last four academic sessions (2002-2006).				
8	Teachers other areas of interest are having conflict with their primary duties.				

14a. Please rate statements on teachers' commitment to student academic achievement in public schools.

S/N	Teachers' commitment	Strongly agree	Agree	Disagree	Strongly disagree
1	Poor remuneration of teachers is causing lack of interest in their jobs.				
2	Teachers are well remunerated and this has enhances their interest in teaching and is affecting student achievement positively.				
3	Use of incentives encourages teachers to work with determination.				
4	Conducive environment is an added advantage to teachers' commitment to teaching and learning activities and increases student academic achievement.				
5	Weekly preparation of lesson notes with relevant materials shows the commitment of teachers to their work and this also improves students' achievement.				
6	Introduction of welfare packages help to stimulate teachers' interest in their jobs.				
7	Teachers' lack of motivation has contributed to their low morale.				

8	Government poor treatment of teachers discourages teachers from teaching and this indirectly affects the students output.				
9	Appreciation of teachers by the school authorities and government stimulates their interest to work hard and improve on student academic achievement.				
10	Continuous exit of teachers from this noble job may be due to unfriendly working condition.				
11	Teaching is being used as stepping stones to other prestigious job because teachers are not treated well.				
12	If teachers are treated well they are prompt in giving attention to every detail that will improve their skills and ensure better student academic achievement.				
13	Teaching-Learning activities are supervised regularly to ensure adequate knowledge is being passed on to students during teaching and learning activities.				

14b. Please rate statements on teachers' commitment to student academic achievement in private schools.

S/N	Teachers' commitment	Strongly agree	Agree	Disagree	Strongly disagree
1	Poor remuneration of teachers is causing lack of interest in their jobs.				
2	Teachers are well remunerated and this has enhances their interest in teaching and is affecting student achievement positively.				
3	Use of incentives encourages teachers to work with determination.				
4	Conducive environment is an added advantage to teachers' commitment to teaching and learning activities and increases student academic achievement.				
5	Weekly preparation of lesson notes with relevant materials shows the commitment of teachers to their work and this also improves students' achievement.				
6	Introduction of welfare packages help to stimulate teachers' interest in their jobs.				
7	Teachers' lack of motivation has contributed to their low morale.				
8	Government poor treatment of teachers discourages teachers from teaching and this indirectly affects the students output.				

9	Appreciation of teachers by the school authorities and government stimulates their interest to work hard and improve on student academic achievement				
10	Continuous exit of teachers from this noble job may be due to unfriendly working condition.				
11	Teaching is being used as stepping stones to other prestigious job because teachers are not treated well.				
12	If teachers are treated well they are prompt in giving attention to every detail that will improve their skills and ensure better student academic achievement.				
13	Teaching-Learning activities are supervised regularly to ensure adequate knowledge is being passed on to students during teaching and learning activities.				

PART FOUR: SCHOOL SIZE AND CLASS SIZE EFFECT ON STUDENT

ACADEMIC ACHIEVEMENT

15a. Please rate the following statements on school-size and student academic achievement in public schools.

S/N	School-size	Strongly agree	Agree	Disagree	Strongly Disagree
1	Large populated school affects teachers' productivity and				

	students' academic achievement due to teachers' inability to have personal relationship with students.				
2	Inadequate resources are very common to large populated schools.				
3	In appropriate control of teachers and students activities are synonymous to large populated schools.				
4	Students in large populated schools hardly perform well in the SSCE.				
5	Teachers willingness to teach in large school is low.				
6	Management of large schools is an enormous task.				
7	Small populated schools can be well managed.				
8	Teachers are willing to discharge their duties ultimately where small schools are concerned.				
9	Educational resources are use optimally in small schools.				
10	Academic achievements are enhanced in small populated schools because of teachers' personal relationship with each student.				

15b. Please rate the following statements on school-size and student academic achievement in private schools.

S/N	School-size	Strongly agree	Agree	Disagree	Strongly Disagree
1	Large populated school affects teachers' productivity and students academic achievement due to teachers inability to have personal relationship with students.				
2	Inadequate resources are very common to large populated schools.				
3	In appropriate control of teachers and students activities are synonymous to large populated schools.				
4	Students in large populated schools hardly perform well in the SSCE.				
5	Teachers' willingness to teach in large school is low.				
6	Management of large schools is an enormous task.				
7	Small populated schools can be well managed.				
8	Teachers are willing to discharge their duties ultimately where small schools are concerned.				
9	Educational resources are use optimally in small schools.				
10	Academic performances in small populated schools are enhanced because of teachers' personal relationship with each student.				

16a. Please rate the statements on class-size and students academic achievement in public school.

S/N	Class-size	Strongly agree	Agree	Disagree	Strongly Disagree
1	Classrooms are too congested and this is affecting teachers' coordination of students during teaching and learning relationship.				
2	Large size of the classrooms is affecting adequate use of educational resources.				
3	Large class-size prevents teachers' personal contact with each student.				
4	Large class-size prevents teachers from reaching out to individual students during the teaching and learning activities.				
5	Giving consideration to 1-40 teacher-student ratio will enhance teachers productivity and optimizes student academic achievement.				
6	Increase in class-size reduces teachers' productivity and decreases students' achievement.				
7	Small class-size increases effective communication between the teachers and the students.				
8	Large class-size is a malignant to student academic achievement.				
9	Small class-size enhances individualize instructions and personal involvement with student.				

10	Teachers' ability to impart knowledge adequately is greater in the small class-size.				
11	Teachers work load are reduced with small class-size.				
12	Teachers are unable to perform his responsibilities well in a large class-size.				
13	Classes in my school are alright in terms of teacher-student ratio.				
14	Each student is well seated and well focused while the lessons are going on.				
15	Having large class-size serves as a deterrent to student academic achievement.				
16	Teacher-student ratio is a determinant of academic achievement.				

16b. Please rate the statements on class size and students academic achievement in private school

S/N	Class- size	Strongly agree	Agree	Disagree	Strongly Disagree
1	Classrooms are too congested and this is affecting teachers' coordination of students during teaching and learning relationship.				
2	Large size of the classrooms is affecting adequate use of educational resources.				

3	Large class-size prevents teachers' personal contact with each student.				
4	Large class-size prevents teachers from reaching out to individual students during the teaching and learning activities.				
5	Giving consideration to 1-40 teacher-student ratio will enhance teachers productivity and optimizes student academic achievement.				
6	Increase in class-size reduces teachers productivity and decreases students achievement.				
7	Small class-size increases effective communication between the teachers and the students.				
8	Large class-size is a malignant to student academic achievement.				
9	Small class-size enhances individualize instructions and personal involvement with student.				
10	Teachers' ability to impart knowledge adequately is greater in the small class-size.				
11	Teachers work load are reduced with small class-size.				
12	Teachers are unable to perform his responsibilities well in a large class- size.				

13	Classes in my school are alright in terms of teacher-student ratio.				
14	Each student is well seated and well focused while the lessons are going on.				
15	Having large class-size serves as a deterrent to student academic achievement.				
16	Teacher-Student ratio is a determinant of academic achievement.				

Thank you.

**TEACHERS' PERCEPTION OF QUALITY OF EDUCATIONAL RESOURCES
AND STUDENTS ACADEMIC ACHIEVEMENT
(TPQERSAA) QUESTIONNAIRE**

Kindly supply the under listed information which are required to carry out a research work on Quality and Utilization of Educational Resources and Students' Academic Achievement

Thank you.

PART 1: PERSONAL INFORMATION:

1. Type of School: Public ☐ Private ☐
2. Gender: Female ☐ Male ☐
3. Age of Respondents Below 30 ☐ 31 – 40 ☐ 40 – 50 ☐ 50-60 ☐
4. Educational Qualifications:
 - i NCE ☐
 - ii B.A/B.Sc with PGDE ☐
 - iii IIND with TTC/PGDE ☐ ☐
 - iv B.Sc (Ed)/B.A. (Ed) with M.Ed
 - v B.A/ B.Sc/IIND ☐
 - vi Ph.D ☐

Please tick the one that is most applicable to you.

5. Year of Teaching Experience: 1- 10 ☐ 11- 20 ☐ 21 – 30 ☐ 31 and above ☐
6. School size: 500-1000 ☐ 1000- 2000 ☐ 2000 and above ☐
7. Age of School: 1-15 years ☐ 16 - 30 years ☐
8. Class-Size: 1- 40 ☐ 41 – 80 ☐ 81 – 120 ☐ 120 – above ☐

**PART II: QUALITY, AVAILABILITY AND UTILIZATION OF
EDUCATIONAL RESOURCES AND STUDENT ACADEMIC
ACHIEVEMENT**

9. Kindly respond to the statements on provision of educational resources and students academic achievement.

S/N	Educational resources	Strongly agree	Agree	Disagree	Strongly disagree
1	Irregular supply of Sciences equipment hampers the teaching of science subjects.				
2	Workshop equipment is insufficient for the use of students and it is affecting academic achievement.				
3	Shortage of science teachers is affecting science teaching and learning.				
4	Technical subjects are suffering from lack of teachers and this is affecting the achievement teachers.				
5	In my school Mathematics and English teachers are not sufficient to cope with the number of students offering them.				
6	Lack of text books is hindering enhancement of student academic achievement during the teaching and learning activities.				
7	Classrooms are dilapidated.				
8	The classrooms are overcrowded				
9	Classrooms are dilapidated and may be hazardous to both teachers and				

	students during teaching and learning activities.				
10	Lack of adequate laboratories and workshops				
11	Equipment in both the laboratories and workshops are obsolete and not even enough for the students offering these subjects.				
12	There is no functional library in my school.				
13	Library in my school have obsolete books.				

10. Please respond to statement on utilization of Educational resources in schools and students academic performance

S/N	Utilization of Educational resources	Strongly Agree	Agree	Disagree	Strongly Disagree
1	I use chalk board regularly during teaching and learning activities to enable students understand their lessons.				
2	I use teaching method that is applicable to each subject matter in order to stimulate students' interest.				
3	I in my school use appropriate educational resources that will bring out the quality of their lesson and enhances students' ability.				
4	Textbooks are seldom used to aid learning due to in availability				

5	My skills and productivity may not necessarily be determined by use of audio-visual resources.				
6	I rely too much on Instructional resources to the extent that they hardly perform without it.				
7	I do not prepare their lesson notes towards teaching and learning activities.				
8	Use of obsolete lesson note by teachers is a great disadvantage to student academic achievement.				
9	Instructional resources are of importance to teaching and learning activities.				
10	Teachers who are experience teach better that those without experience.				
11	Professional teachers are more determined in ensuring better students academic achievement.				
12	Non-professional teachers affect the students output.				
13	Students are well seated during the teaching and learning activities.				

11. Kindly respond to statements on quality of teachers and students academic achievement

S/N	Quality of Educational resources	Strongly Agree	Agree	Disagree	Strongly Disagree
1	Use of well qualified teachers enhances students' academic achievement.				
2	Teachers' participation in conferences, workshops, seminars and in service training increases their productivity.				
3	Ability to deliver a good lesson lies with higher educational qualifications.				
4	Having professional teachers to teach in schools improves students' academic achievement.				
5	Additional qualification may not contribute to teachers' productivity and improve student academic achievement.				
6	NCE teachers as professionals should be used in teaching senior secondary schools in order to ensure quality education.				
7	Professionally qualified teachers who participate in conferences, workshops and seminars in their area of specialization have an advantage to ensure better students academic achievement.				
8	Graduate teachers who are not professionals use appropriate teaching methods to teaching students and this				

	affects students' achievement adversely.				
9	Teachers' inability to use internet and current books in order to improve their lessons gives obsolete information to students and this affect student's achievement.				

**PART 111: TEACHERS COMMITMENT TO EDUCATIONAL RESOURCES
AND EXPERIENCE EFFECT ON STUDENT ACADEMIC ACHIEVEMENT**

12. Rate the effects of teachers experience on academic achievement

S/N	Teachers experience	Strongly agree	Agree	Disagree	Strongly Disagree
1	Teachers experience does not count as observed in my school when it comes to teachers' productivity towards enhancement of students' academic achievement.				
2	Inadequate experience teachers are a great disadvantage for student academic achievement in my school.				
3	Teachers in my school enjoy in service training, seminars, work shops and conferences during the holiday in order to improve their proficiency in their area of discipline.				
4	In experience teachers are hazardous to student academic achievement.				
5	Teachers in my schools who are used to giving extra lessons to students				

	improve students' academic achievement.				
6	In spite of insufficient resources in my school teachers still improvised to enhance students' ability to learn and improve on their academic achievement.				
7	Lack of motivation by the authority has reduced teachers' efficiency hence the low academic achievement of students in the last four academic sessions (2002-2006).				
8	Teachers other areas of interest are having conflict with their primary duties.				
9	Improvement of welfare packages will improve teachers attitude to work and this will affect the academic achievement of the students.				

Please rate the statements on teachers' commitment to student academic achievement

S/N	Teachers Commitment	Strongly agree	Agree	Disagree	Strongly disagree
1	Poor remuneration of teachers is causing lack of interest in their jobs.				
2	Teachers are well remunerated and this has enhances their interest in teaching and is affecting student achievement positively.				
3	Use of incentives encourages teachers to work with determination.				

4	Conducive environment is an added advantage to teachers' commitment to teaching and learning activities and increases student academic achievement.				
5	Weekly preparation of lesson notes with relevant materials shows the commitment of teachers to their work and this also improves students' achievement.				
6	Introduction of welfare packages help to stimulate teachers' interest in their jobs.				
7	Teachers' lack of motivation has contributed to their low morale.				
8	Government poor treatment of teachers discourages teachers from teaching and this indirectly affects the students output.				
9	Appreciation of teachers by the school authorities and government stimulates their interest to work hard and improve on student academic achievement.				
10	Continuous exit of teachers from this noble job may be due to unfriendly working condition.				
11	Teaching is being used as stepping stones to other prestigious job because teachers are not treated well.				
12	If teachers are treated well they are prompt in giving attention to every detail that will improve their skills and				

	ensure better student academic achievement.				
13	Teaching-Learning activities are supervised regularly to ensure adequate knowledge is being passed on to students during teaching and learning activities.				

**PART FOUR: SCHOOL SIZE AND CLASS SIZE EFFECT ON STUDENT
ACADEMIC ACHIEVEMENT**

Please rate the following statements on school-size and student academic achievement

S/N	School-size	Strongly agree	Agree	Disagree	Strongly Disagree
1	Large populated school affects teachers productivity and students academic achievement due to teachers inability to have personal relationship with students.				
2	Inadequate resources are very common to large populated schools.				
3	In appropriate control of teachers and students activities are synonymous to large populated schools.				
4	Students in large populated schools hardly perform well in the SSCE.				
5	Teachers' willingness to teach in large school is low.				
6	Management of large schools is an enormous task.				
7	Small populated schools can be well managed.				
8	Teachers are willing to discharge their				

	duties ultimately where small schools are concerned.				
9	Educational resources are use optimally in small schools.				
10	Academic performances in small populated schools are enhanced because of teachers' personal relationship with each student.				

Please rate the statements on class-size and students academic achievement in school

S/N	Class-size	Strongly agree	Agree	Disagree	Strongly Disagree
1	Classrooms are too congested and this is affecting teachers' coordination of students during teaching and learning relationship.				
2	Large size of the classrooms is affecting adequate use of educational resources.				
3	Large class-size prevents teachers' personal contact with each student.				
4	Large class-size prevents teachers from reaching out to individual students during the teaching and learning activities.				
5	Giving consideration to 1-40 teacher-student ratio will enhance teachers productivity and optimizes student academic achievement.				
6	Increase in class-size reduces teachers' productivity and decreases students' achievement.				

7	Small class-size increases effective communication between the teachers and the students.				
8	Large class-size is a malignant to student academic achievement.				
9	Small class-size enhances individualize instructions and personal involvement with student.				
10	Teachers' ability to impart knowledge adequately is greater in the small class-size.				
11	Teachers work load are reduced with small class-size.				
12	Teachers are unable to perform his responsibilities well in a large class size.				
13	Classes in my school are alright in terms of teacher-student ratio.				
14	Each student is well seated and well focused while the lessons are going on.				
15	Having large class-size serves as a deterrent to student academic achievement.				
16	Student-teacher ratio is a determinant of academic achievement.				

Thank you.

APPENDIX B

LIST	OF	SEVENTY EIGHT SCHOOL	SAMPLED	SCHOOLS
S/N	Education District One	School	Date of Establishment	Type of school
1	Alimosho	Alimosho Snr Gram School	1980	Public
2		Awori Ang Comp High Sch	1973	Private
3		Doregos Private Academy	1990	Private
4		Igando Comm High	1980	Private
5		Sunbean Comp Coll	1992	Private
6	Ifako-Ijaiye	Keke Snr High School	1982	Public
7		Lagos African Church Gram School	1969	Private
8		The Lagos African Church Gram School	1969	Private
9		Vetland Gram School	1980	Private
10		Somori Comp High School	1980	Private
11	Agege	State Snr High School	1983	Public
12		Oyewole Anwar-ul-Islam Model College	1948	Private
13		Loro Gram School	1980	Private
14		Onipetesi High School	1984	Private
15		Oniwaya High School	1979	Private

S/N	Education District Two	School	Date of Establishment	Type of School
1	Ikorodu	Maya Comm Snr Gram School	1982	Public
2		Majidun Snr Gram School	1980	Public
3		Ikorodu High School	1971	Private
4		Luwasa High School	1980	Private
5		Reri Secondary School	1983	Private
6	Kosofe	Ajao Estate High School	1980	Public
7		Ayedere Ajibola High School	1980	Private
8		Maryland Comp School	1969	Private
9		Orishigun High School	1981	Private
10	Somolu	Eva Adelaja Girls Snr Gram School	1964	Public
11		Gbagada Gram School	1980	Private
12		C.M.S. Gram School	1857	Private
13		National College	1955	Private

S/N	Education District Three	School	Date of Establishment	Type of School
1	Ibeju	Comm Snr High School Lekki	1979	Public
2		Magbon Alade Snr Gram School	1978	Public
3		Ibeju Snr High School	1978	Public
4	Lagos Island	Dolphin Snr High School	1980	Public
5		Eko Akete Snr Gram School	1981	Public
6		Lafiaji Snr Sec School	1980	Private
7	Epe	Ajebo High School	1980	Private
8		Ogunmodede College	1980	Private
9		St Patricks Gram School	1974	Private
10	Etiosa	Akande Dahunsi Mem Gram School	1981	Private

S /N	Education District Four	School	Date of Establishment	Type of School
1	Surulere	Aguda Gram School	1980	Public
2		Coker Snr Sec School	1982	Public
3		Lagos Ang Girls Gram School	1955	Private
4	Mainland	Coker Sec School	1982	Private
5		Eletu-Odibo Snr High School	1980	Public
6		Fazil-Omar Snr High School	1982	Public
7		St Timothy College	1959	Private
8		Mobolaji Bank Anthony	1981	Private
9		Apapa Snr High School	1980	Public
10	Apapa	An-najat International School	1986	Private
11		Starlight College	1992	Private

S/N	Education District Five	School	Date of Establishment	Type of School
1	Ajeromi-Ifeelodun	Mokoya Snr High School	1983	Public
2		Gaskiya College	1963	Public
3		CEC Trinity Sec School	1974	Private
4		Ilopebay College	1987	Private
5		Oluwa Memorial	1987	Private
6	Amuwo-Odofin	Festac Snr College	1978	Public
7		Dr Lucas Mem Snr High School	1990	Public
8		Igbologun Sec School	1986	Private
9		Satellite Secondary School	1980	Private
10		Imoye High School	1980	Private
11	Badagry	Ikoga Snr Gram School	1980	Public
12		Iworo Ajido Model College	1977	Private
13	Ojo	Egan High School	1980	Public
14		Awori College	1974	Private
15		Army Cantonment Secondary School	1988	Private

S/N	Education District Six	School	Date of Establishment	Type of School
1	Oshodi	Isolo Comp Snr High School	1981	Public
2		Bolade Snr Gram School	1981	Public
3		Apata Mem High School	1980	Private
4		A-Z International School	1984	Private
5		Ronik Comp School	1993	Private
6	Mushin	Eko Boys Snr High School	1913	Public
7		Ilupeju Snr Gram School	1960	Public
8		Igbo-Owu Sec	1983	Private

9		School		
		Ilupeju College	1960	Private
10	Ikeja	Agidingbi Snr	1980	Public
		Gram School		
11		Ikeja Snr High	1977	Public
		School		
12		Victory Gram	1990	Private
		School		
13		Vivian Fowler	1991	Private
		Mem College		

APPENDIX C
ALL THE EDUCATION DISTRICTS AND THE SAMPLED ZONES

S/N	Education District	Name of Zones	Number of Zones	Sampled
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1.	District one	Alimosho	3	3
		Agege		
		Ifako-Ijaye		
2.	District two	Somolu	3	3
		Kosofe		
		Ikorodu		
3.	District three	Lagos Island	4	4
		Epe		
		Ibeju-Lekki		
4.	District four	Etio-osa	3	3
		Mainland		
		Surulere		
5.	District five	Apapa	4	4
		Ajeromi-		
		Ifelodun		
6.	District six	Amuwo	3	3
		Badagry		
		Ojo		
		Oshodi		
		Mushin		
		Ikeja		

APPENDIX D
ALL THE EDUCATION DISTRICTS, TOTAL NUMBER OF SENIOR
SECONDARY SCHOOLS AND SAMPLED SCHOOLS

S/N	Education District	School Type	Total Number of Schools	Sampled
1.	District one	Public	27	3
		Private	121	12
2.	District two	Public	41	9
		Private	85	6
3.	District three	Public	59	6
		Private	60	6
4.	District four	Public	46	5
		Private	64	6
5.	District five	Public	64	6
		Private	92	9
6.	District six	Public	56	6
		Private	73	7

APPENDIX E

Summary of Students' Academic Performance

Summary of students' academic performance in S.S.C.E in 2002/2003 academic session

S/N	School	Total no of candidates enrolled	5credits with English and Mathematics	4 credits with English and Mathematics	Total Passes at credit level	Percentage
1	Public	316	46	22	68	22
2	Public	298	46	22	68	19
3	Public	305	03	28	31	1.0
4	Public	294	05	32	37	13
5	Public	333	12	28	40	12
6	Public	320	11	25	36	12
7	Public	313	18	26	44	14
8	Public	303	13	15	28	9.2
9	Public	298	26	11	37	12
10	Public	280	16	28	44	16
11	Public	315	22	12	24	11
12	Public	361	16	25	41	11
13	Public	345	26	18	44	13
14	Public	316	24	17	41	13
15	Public	256	23	19	42	16
16	Public	380	19	18	37	10
17	Public	356	18	24	42	12
18	Public	283	28	26	54	19
19	Public	296	31	12	43	15

20	Public	312	30	18	48	15
21	Public	379	21	19	40	11
22	Public	356	23	19	42	12
23	Public	296	31	12	43	15
24	Public	312	30	18	48	15
25	Public	294	05	32	37	13
26	Public	266	18	32	50	19
27	Public	284	10	21	31	11
28	Public	307	21	23	44	14
29	Public	253	16	08	24	09
30	Private	105	20	18	38	36
31	Private	96	18	16	34	35
32	Private	85	25	12	37	44
33	Private	78	13	08	21	27
34	Private	102	21	12	33	32
35	Private	111	18	16	34	31
36	Private	120	20	18	38	32
37	Private	94	17	27	44	47
38	Private	98	16	23	39	40
39	Private	115	27	28	55	48
40	Private	102	21	18	39	38
41	Private	76	18	14	32	42
42	Private	89	18	10	28	31
43	Private	82	13	11	24	29
44	Private	72	14	16	30	42
45	Private	118	28	17	45	38
46	Private	102	16	28	44	43

47	Private	118	24	26	50	42
48	Private	125	32	30	62	50
49	Private	140	28	36	64	46
50	Private	65	20	08	28	43
51	Private	60	18	12	20	50
52	Private	58	14	10	24	41
53	Private	68	28	12	40	59
54	Private	75	13	14	27	36
55	Private	77	16	12	28	36
56	Private	91	28	11	39	43
57	Private	85	18	14	32	38
58	Private	135	46	16	62	46
59	Private	120	38	18	56	47
60	Private	88	12	24	36	41
61	Private	140	48	12	60	43
62	Private	90	15	22	37	41
63	Private	76	16	18	34	45
64	Private	65	13	22	35	54
65	Private	125	22	14	36	29
66	Private	127	49	21	70	55
67	Private	125	38	22	60	48
68	Private	87	13	12	25	29
69	Private	72	11	13	24	33
70	Private	82	11	16	27	33
71	Private	76	24	16	40	53
72	Private	78	22	16	38	49
73	Private	98	31	22	53	54

74	Private	102	33	42	75	73
75	Private	85	18	21	39	46
76	Private	121	56	18	74	61
77	Private	136	44	12	56	41
78	Private	120	38	18	56	47

Source: School Records (Summary sheets of the S.S.C.E results of all the sampled schools)

Total enrolled in public schools = 9,280; Private schools=2,867

Total passes with 5 credits' and percentages in English and Mathematics:

Public schools: 608 (7%); Private schools: 781 (27%)

Total passes with 4 credits' and percentages in English and Mathematics:

Public schools: 610 (7%); Private schools: 524 (18%)

Summary of students' academic performance in S.S.C.E in 2003/2004 academic session

S/N	School	Total no of candidates enrolled	5 credits with English and Mathematics	4 credits with English and Mathematics	Total Passes at credit level	Percentage
1	Public	286	28	16	44	15
2	Public	302	12	14	26	09
3	Public	342	20	19	39	11
4	Public	291	17	20	37	13
5	Public	278	14	28	42	15
6	Public	312	25	12	37	12
7	Public	316	12	27	39	12

8	Public	307	21	18	39	13
9	Public	266	18	15	33	12
10	Public	284	10	32	42	15
11	Public	275	21	21	42	15
12	Public	253	16	27	43	17
13	Public	280	25	12	37	13
14	Public	245	19	26	45	18
15	Public	262	17	27	44	17
16	Public	269	12	12	24	09
17	Public	270	22	21	43	16
18	Public	237	15	13	28	12
19	Public	247	17	27	44	18
20	Public	231	18	25	43	19
21	Public	523	29	34	63	12
22	Public	449	27	36	63	14
23	Public	421	20	27	47	11
24	Public	357	18	31	49	14
25	Public	387	23	21	44	11
26	Public	398	12	18	30	08
27	Public	284	10	19	29	10
28	Public	383	22	18	40	10
29	Public	338	10	23	33	09
30	Private	78	17	12	29	37
31	Private	58	20	02	22	38
32	Private	68	15	22	37	54
33	Private	84	15	11	26	31
34	Private	88	18	10	28	32

35	Private	93	18	22	40	44
36	Private	90	15	08	23	26
37	Private	120	38	18	56	47
38	Private	82	21	13	34	42
39	Private	101	16	28	44	44
40	Private	119	24	26	50	42
41	Private	96	20	18	38	40
42	Private	76	24	14	38	50
43	Private	89	18	02	20	23
44	Private	98	18	23	41	42
45	Private	140	48	12	60	43
46	Private	87	13	12	25	29
47	Private	77	18	14	32	42
48	Private	112	19	16	35	31
49	Private	119	29	17	46	39
50	Private	96	20	06	26	27
51	Private	108	27	18	45	42
52	Private	117	29	28	57	49
53	Private	112	15	16	31	28
54	Private	98	28	23	51	52
55	Private	88	12	16	28	39
56	Private	78	33	02	35	45
57	Private	126	31	0	31	25
58	Private	121	25	17	42	35
59	Private	120	23	03	26	22
60	Private	126	29	08	37	29
61	Private	92	12	01	13	14

62	Private	86	35	0	35	41
63	Private	122	32	02	34	30
64	Private	122	38	02	40	33
65	Private	120	38	17	55	47
66	Private	118	24	02	26	22
67	Private	105	21	03	24	23
68	Private	108	23	0	23	21
69	Private	176	28	2	30	17
70	Private	148	36	2	38	26
71	Private	81	21	3	24	30
72	Private	109	42	0	42	38
73	Private	118	28	6	34	29
74	Private	105	26	2	28	27
75	Private	140	22	2	24	17
76	Private	115	27	1	28	24
77	Private	85	18	0	18	21
78	Private	102	21	2	23	23

Source: School Records (Summary sheets of the S.S.C.E results of all the sampled schools)

Total enrolled in public schools = 9,093; Private schools=4995

Total passes with 5 credits' and percentages in English and Mathematics:

Public schools: 530 (6%); Private schools: 793 (16%)

Total passes with 4 credits' and percentages in English and Mathematics:

Public schools: 639 (7%); Private schools: 201 (4%)

Summary of students' academic performance in S.S.C.E in 2004/2005 academic session

S/N	School	Total no of candidates enrolled	5credits with English and Mathematics	4 credits with English and Mathematics	Total Passes at credit level	Percentage
1	Public	316	46	22	68	21
2	Public	298	31	25	56	19
3	Public	305	03	28	31	10
4	Public	294	05	19	24	08
5	Public	333	12	32	44	13
6	Public	320	11	28	39	12
7	Public	313	18	24	42	13
8	Public	303	13	14	27	09
9	Public	298	32	21	53	18
10	Public	280	16	28	44	16
11	Public	315	22	33	55	18
12	Public	361	16	22	38	11
13	Public	345	26	34	60	17
14	Public	316	24	14	38	12
15	Public	256	23	17	40	16
16	Public	380	19	29	48	13
17	Public	356	18	19	37	10
18	Public	283	28	16	44	16
19	Public	296	31	18	49	17
20	Public	312	30	28	58	19
21	Public	346	29	21	50	15

22	Public	306	16	22	38	12
23	Public	324	18	21	39	12
24	Public	316	12	27	39	12
25	Public	313	25	12	37	12
26	Public	295	22	10	32	11
27	Public	292	18	20	38	13
28	Public	305	25	22	47	15
29	Public	343	21	19	40	12
30	Private	105	20	18	38	36
31	Private	96	18	16	34	35
32	Private	85	25	12	37	44
33	Private	78	13	08	21	30
34	Private	102	21	12	33	32
35	Private	111	18	16	34	31
36	Private	120	20	18	38	32
37	Private	94	17	27	44	47
38	Private	98	16	23	39	40
39	Private	115	27	28	55	48
40	Private	102	21	18	39	38
41	Private	76	18	14	32	42
42	Private	89	18	10	32	29
43	Private	82	13	11	24	29
44	Private	72	14	16	30	42
45	Private	118	28	17	45	38
46	Private	102	16	28	44	43
47	Private	118	24	26	50	42
48	Private	125	32	30	62	50

49	Private	140	28	36	64	46
50	Private	78	17	12	29	37
51	Private	58	20	02	22	38
52	Private	68	15	22	37	54
53	Private	84	25	11	36	43
54	Private	88	18	10	28	32
55	Private	93	18	22	40	43
56	Private	90	15	08	23	26
57	Private	120	38	18	56	47
58	Private	82	21	13	34	42
59	Private	101	16	28	44	44
60	Private	119	24	26	50	42
61	Private	96	20	18	38	40
62	Private	76	24	14	38	50
63	Private	89	18	02	20	23
64	Private	98	18	23	41	42
65	Private	140	48	12	60	43
66	Private	87	13	12	25	29
67	Private	77	18	14	32	42
68	Private	112	19	16	35	31
69	Private	119	29	17	46	39
70	Private	176	28	34	62	35
71	Private	126	33	30	63	50
72	Private	92	29	21	50	54
73	Private	109	41	26	67	73
74	Private	112	29	37	66	59
75	Private	101	16	28	44	44

76	Private	140	48	12	60	43
77	Private	119	29	17	46	39
78	Private	102	16	28	44	43

Source: School Records (Summary sheets of the S.S.C.E results of all the sampled schools)

Total enrolled in public schools = 8,825; Private schools=4,983

Total passes with 5 credits' and percentages in English and Mathematics:

Public schools: 610 (7%); Private schools: 1,131 (23%)

Total passes with 4 credits' and percentages in English and Mathematics:

Public schools: 645 (7%); Private schools: 917 (18%)

Summary of students' academic performance in S.S.C.E in 2005/2006 academic session

S/N	School	Total no of candidates enrolled	5credits with English and Mathematics	4 credits with English and Mathematics	Total Passes at credit level	Percentage
1	Public	263	18	18	36	14
2	Public	280	16	14	30	11
3	Public	276	22	22	44	16
4	Public	248	20	18	38	15
5	Public	245	19	17	36	15
6	Public	302	21	23	44	15
7	Public	286	28	36	64	22
8	Public	305	15	24	39	13
9	Public	298	26	33	59	20
10	Public	316	23	29	52	17

11	Public	312	17	20	37	12
12	Public	330	10	33	43	13
13	Public	273	25	33	58	21
14	Public	280	25	25	50	18
15	Public	278	14	21	35	13
16	Public	247	21	30	51	21
17	Public	231	17	31	48	21
18	Public	342	20	22	42	12
19	Public	320	11	25	36	11
20	Public	312	18	22	40	13
21	Public	312	17	31	48	15
22	Public	330	10	21	31	09
23	Public	273	25	25	50	18
24	Public	280	25	22	47	17
25	Public	278	14	18	32	12
26	Public	247	21	22	43	17
27	Public	231	17	19	36	16
28	Public	342	20	17	37	11
29	Public	320	11	18	29	09
30	Private	96	20	18	38	40
31	Private	108	18	16	34	32
32	Private	117	25	12	37	32
33	Private	112	13	08	21	19
34	Private	98	21	12	23	33
35	Private	88	18	16	34	37
36	Private	78	20	18	38	49
37	Private	126	17	27	44	35

38	Private	121	16	23	39	32
39	Private	120	27	28	55	46
40	Private	126	21	18	39	31
41	Private	92	18	14	32	35
42	Private	46	13	10	23	37
43	Private	122	14	11	25	21
44	Private	122	28	16	44	36
45	Private	120	16	17	33	27
46	Private	118	24	28	52	44
47	Private	105	32	26	58	55
48	Private	176	28	30	58	33
49	Private	65	20	36	56	86
50	Private	60	18	08	26	43
51	Private	58	14	12	26	45
52	Private	68	28	10	38	56
53	Private	75	13	12	25	33
54	Private	91	28	11	39	43
55	Private	85	18	14	32	38
56	Private	135	46	16	62	46
57	Private	120	38	18	56	47
58	Private	88	12	24	36	41
59	Private	140	48	12	60	43
60	Private	90	15	22	37	41
61	Private	76	16	18	34	45
62	Private	65	13	22	35	53
63	Private	125	22	14	36	29
64	Private	127	49	21	70	55

65	Private	125	38	22	60	48
66	Private	87	11	12	23	26
67	Private	72	13	13	26	18
68	Private	89	18	10	28	32
69	Private	94	17	27	44	47
70	Private	118	28	17	45	38
71	Private	101	16	28	44	44
72	Private	87	13	12	25	31
73	Private	112	19	16	35	31
74	Private	105	20	18	38	36
75	Private	94	17	27	44	47
76	Private	102	21	12	33	32
77	Private	108	23	18	41	38
78	Private	77	16	12	28	13

Source: School Records (Summary sheets of the S.S.C.E results of all the sampled schools)

Total enrolled in public schools = 8,357; Private schools=4,930

Total passes with 5 credits' and percentages in English and Mathematics:

Public schools: 546 (7%); Private schools: 1,057 (21%)

Total passes with 4 credits' and percentages in English and Mathematics:

Public schools: 689 (8%); Private schools: 862 (18%)

APPENDIX F

Pictures Depicting Types of Secondary Schools Buildings in Lagos State

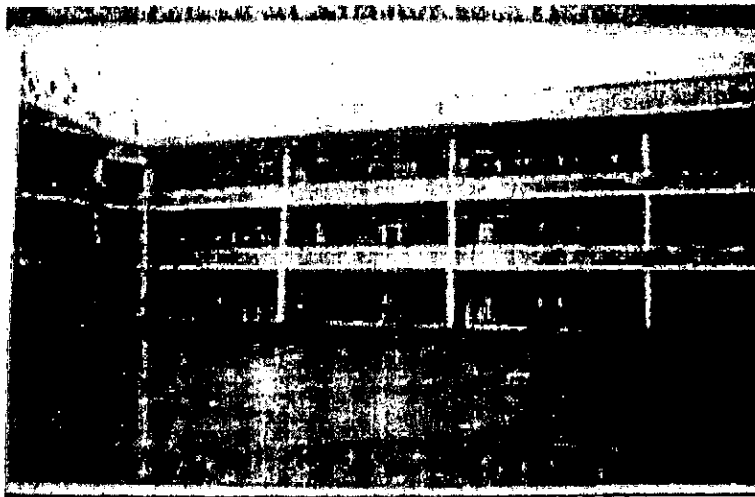
Secondary Schools



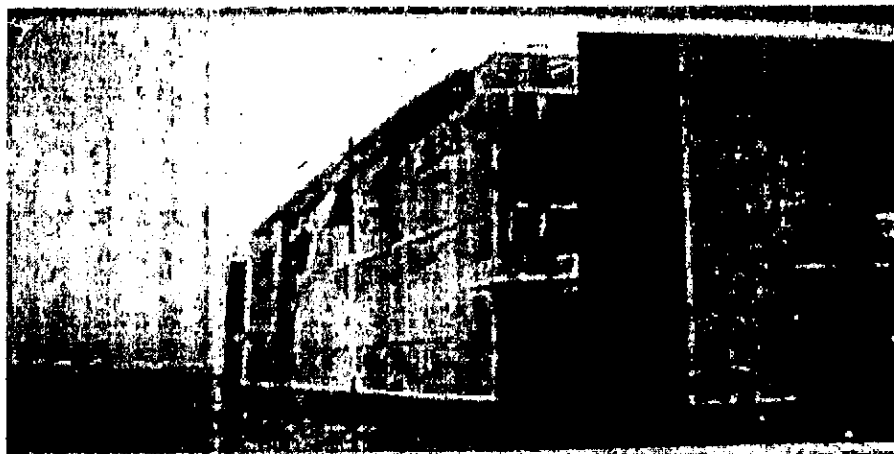
Collapsed Make-shift Building (Functional buildings)



Make-shift building (Functional building)



Prototype Building



Millennium Schools Building