COMPARATIVE STUDY OF PUPILS' ACADEMIC PERFORMANCE IN SOCIAL STUDIES IN SELECTED PUBLIC AND PRIVATE PRIMARY SCHOOLS IN KANO STATE

BY

SULAIMAN MAMUDA INDABAWA

DEPARTMENT OF EDUCATIONAL FOUNDATION AND CURRICULUM, AHMADU BELLO UNIVERSITY, ZARIA-NIGERIA

February, 2014

COMPARATIVE STUDY OF PUPILS' ACADEMIC PERFORMANCE IN SOCIAL STUDIES IN SELECTED PUBLIC AND PRIVATE PRIMARY SCHOOLS IN KANO STATE

BY

SULAIMAN MAMUDA INDABAWA

M.ED/EDUC/1977/2009-2010

A THESIS SUBMITTED TO THE SCHOOL OF POST GRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA-NIGERIA

IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF MASTERS DEGREE IN CURRICULUM AND INSTRUCTION DEPARTMENT OF EDUCATIONAL FOUNDATION AND CURRICULUM, AHMADU BELLO UNIVERSITY, ZARIA-NIGERI

February, 2014

DECLARATION

I declare that the work in the thesis entitled COMPARATIVE STUDY OF PUPILS ACADEMIC PERFORMANCE IN SOCIAL STUDIES IN SELECTED PUBLIC AND PRIVATE PRIMARY SCHOOLS IN KANO STATE has been performed by me in the Department of Educational Foundation and Curriculum, Ahmadu Bello University, Zaria-Nigeria.

SULAIMAN MAMUDA INDABAWA _____ _____

Name of student **Signature** **Date**

CERTIFICATION

This thesis entitled COMPARATIVE STUDY OF PUPILS' ACADEMIC PERFORMANCE IN SOCIAL STUDIES IN SELECTED PUBLIC AND PRIVATE PRIMARY SCHOOLS IN KANO STATE by Sulaiman Mamuda Indabawa meets the regulations governing the award of the degree of Masters in Education Curriculum and Instruction of Ahmadu Bello University, Zaria and is hereby approved for its contributions to knowledge and literary presentation.

_____ _____

Dr. (Mrs.) H. O. Yusuf Date

(Chairman, Supervisory Committee)

_____ _____

Dr. A. Guga Date

(Member, Supervisory Committee)

_____ _____

Dr. B. A .Maina Date

(Head of Educational Foundation and Curriculum)

_____ _____

Prof A.A. Joshua Date

(Dean, Post Graduate School)

DEDICATION

This work is dedicated to the former Minister for Solid Mineral Resources Engr. Dr. Bala Borodo, who is also the present Federal Commissioner Revenue Mobilization Kano Representative for his support and encouragement towards my M.ED degree programme.

ACKNOWLEDGEMENT

First and foremost, I thank the Almighty God for His provision, protection and guidance throughout the period of my course.

This thesis was successfully completed with help, cooperation and contributions of a number of people.

I acknowledge with profound gratitude and appreciation to my first supervisor Dr. (Mrs.) H. Yusuf for her corrections, suggestions and advise to the work. Her valuable corrections and frank suggestions made the completion of this work possible. In fact, I am very grateful for her concern and encouragement.

My gratitude also goes to my second supervisor Dr. A. Guga whose corrections, suggestions, observations and advice made the completion of this thesis possible. I am indeed very grateful.

I acknowledge with sincere gratitude the roles played by able members of the proposal and internal defense panel, namely late. Prof. M.Ben Yunusa, Dr. B. A Maina, Dr. (Mrs.) H.Yusuf, Dr. A. Guga, Dr. Muhammad AbdulFata and Dr. Abdullahi Aliyu Dada for their meaningful contributions.

I am also very grateful to Sani Ahmad Lawan (Senior Lecturer College of Arts, Science and Remedial Studies, Kano, for his support and encouragement to my M.ED Studies. I also thank my Brother Mukhtar Mamuda (Barisi) for his great contributions to the success of my study. My sincere gratitude goes to Abubakar Akilu whose contributions to my course of study cannot be quantified. I am indeed very grateful.

My special gratitude goes to my wife Sha'awa Rabi'u and my children: Zainab Sulaiman, Khadija Sulaiman (Nana) and Maryam Sulaiman (Kairat) who gave their time for this programme, May Allah reward them abundantly Amin.

Finally, I thank the head teachers, teachers and pupils of both public and private primary schools that were selected for the research. I thank you very much for your cooperation.

ABSTRACT

This research work entitled Comparative Stud of Pupils' Academic Performance in Social Studies in Selected Public and Private Primary Schools in Kano State uses student's and teacher's questionnaire as instruments for data collection. The two types of schools i.e. public and private primary schools were used to compare the academic performance of public and private school pupils. ANOVA statistic which is the analysis of variance was used to analyze the scores of 384 pupils. Teacher questionnaire was used to find out the differences of school facilities, qualified teachers and welfare of teachers among the public and private primary schools. The research population of this study consisted of pupils, Teachers and Head teachers was eighty thousand (80,000) and a sample of three hundred and eighty four was drawn from a population of eighty (80,000) thousand. The researcher used stratified and proportionate sampling technique in the selection of sample. Test items were used. The answers obtained from five research questions and five hypotheses were tested. The statistical Techniques used in analyzing the Data collected were ANOVA and CHI-SQUARE because the researcher used two research instruments. The first statistical technique was used to analyze the scores of the pupils of public and private primary schools. The findings showed that there were no significant differences in the academic performance of male and female pupils in social studies in public and private primary schools. Chi-square was also used to test the other three research hypotheses and it was discovered that there were no significant differences in terms of school facilities and teacher welfare in public and private primary schools. However, based on the data collected and analyzed, it was found that private primary schools are having more qualified teachers than the public primary schools. Based on the research findings, the researcher made some recommendations, among which are: government should provide teachers with necessary incentives so as to motivate them for greater input to the teaching/learning activities, and create a forum where all stakeholders in the business of education will be meeting to discuss areas of problems in primary education in the state and proper solutions to the problems.

LIST OF ABBREVIATIONS

S & TQ	-	Student and teachers questionnaire
N P E	-	National Policy on Education
P E	-	Physical Education
N T I	-	National Teachers Institute
NECO	-	National Examinations Council
WAEC	-	West African Examinations Council
S E L	-	Social and Emotional learning
G P A	-	Grade Point Average
C M S	-	Christian Missionary Society
N C E	-	National Certificate in Education

OPERATIONAL DEFINITION OF TERMS

1. **Public Schools:** These are schools owned by the government
2. **Private School:** These are schools that belong to private individuals/organization
3. **Stakeholders:** Those who have a role or share, interest in the business of education
4. **Personnel:** Workers or staff
5. **Skills:** An acquired ability or intellectual ability.
6. **Implementers:** These include teachers, principal supervisors and the ministry of education.

TABLE OF CONTENTS

Title page - - - - - - - - - i

Declaration - - - - - - - - - ii

Certification - - - - - - - - - iii

Dedication - - - - - - - - - iv

Acknowledgement - - - - - - - - vi

Abstract - - - - - - - - viii

List of Abbreviations - - - - - - - - ix

Operational Definition of Terms - - - - - x

List of Tables - - - - - - - - xi

Table of contents - - - - - - - xii

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study - - - - - - 1

1.2 Statement of the Problem - - - - - - 3

1.3 Objectives of the Study - - - - - - 4

1.4 Research Questions - - - - - - 4

1.5 Research Hypotheses - - - - - - 5

1.6 Significance of the Study - - - - - - 6

1.7 Basic Assumptions - - - - - - - 9

1.8 Scope of the Study - - - - - - - 9

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.1 Introduction - - - - - - - - 10

2.2 Conceptual Framework - - - - - - 10

2.3 The Concept of Academic Performance- - - - - 12

2.4 Learning Environment as a Factor of Differences in Academic Performance Among Learners - - - - - - 14

2.5 Objectives of primary Education in Nigeria - - - 23

2.6 Problems of Primary Education in Nigeria - - - 25

2.7 Poor Supervision of Instruction and Pupils' Academic Performance -- 27

2.8 Teachers' Qualification and Pupils' Academic Performance -- - 20

2.9 Instructional Facilities and Pupils' Academic Performance - - - -37

2.10 Social and Emotional Learning Development and Pupils' Academic Performance - - - - - - - - - 40

2.11 Physical Development and Pupils' Academic Performance - - - - 42

2.12 Presenting the Lesson - - - - - - 43

2.13 The Current Situation of Teaching/Learning of Social studies in Public and Private Schools- - - - - - 45

2.14 Empirical Studies - - - - - - 48

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction - - - - - 52

3.2 Research Design - - - - - - 52

3.3 Target Population - - - - - 53

3.4 Sample and Sampling techniques - - - - - 54

3.5 Instrumentation - - - - - - 55

3.5.1 Validation of Research Instrument - - - - 55

3.5.2 Pilot Study - - - - - - - 56

3.5.3 Reliability of the Instrument - - - - - 56

3.6 Procedures for data Collection - - - - 56

3.7 Procedure for data Analysis - - - - - - 57

CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION

4.1 Introduction - - - - - - - - 58

4.2 Data analysis of pupils' answers to Research Questions - - 60

4.3 Testing of Research Hypotheses - - - - - 60

4.4 Summary of Findings - - - - - - - - 69

4.5 Discussion of Major Findings - - - - - 71

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction - - - - - - - 76

5.2 Summary - - - - - - 76

5.3 Conclusion - - - - - - - 77

5.4 Recommendations - - - - - - - 79

5.5 Suggestions for further studies - - - - - 80

5.6 Implications of the study to Curriculum planners - - 81

5.7 Contributions to knowledge - - - - - - - 81

References - - - - - - - 83

Appendix i - - - - - - - 91

Appendix ii - - - - - - - 102

Appendix iii -- - - - - - - 108

Appendix iv - - - - - - 109

Appendix v - - - - - - - 110

Appendix vi - - - - - - - 111

Appendix vii - - - - - - - 121

Appendix viii - - - - - - - - 124

Appendix ix - - - - - - - - 134

Appendix x - - - - - - - - 137

Appendix xi - - - - - - - - 143

`Appendix xii - - - - - - - - 146

LIST OF TABLES

Table 3.1 The Distribution of the Target Population used for the Study - -53

Table 3.2 Population of teachers used in the public and private primary schools in the three different educational zones - - - - - 54

Table 4.1 Mean and Standard Deviation of Pupils in Dala Local Government Area- 58

Table 4.2 Mean and Standard Deviation of pupils in the two schools studied in Rano Local government area - 59

Table 4.3 Mean and Standard Deviation of Pupils in two Schools studied in Rimin Gado Local Government Area. - 59

Table 4.1 Summary of the Scores Obtained by Male Pupils of Private and Public Schools in Dala Local Government Area - -- - - 61

Table 4.2 Summary of the Scores Obtained by the Female Pupils of Private and Public schools in Dala Local Government Area - - - 62

Table 4.3 Summary of the Scores Obtained by Male pupils of Private and Public primary schools in Rano Local Government area - - 62

Table 4.4 Summary of the Scores Obtained by Female Pupils of Private and Public Primary schools in Rano local government, area - - 63

Table 4.5 Summary of the scores Obtained by male pupils of private and public primary schools in Rimin Gado local government area - - - 63

Table 4.6 The summary of the scores Obtained by female pupils of private and public primary schools in Rimin Gado local government area - - 64

Table: 4.1. Table below shows the number of private and public Schools' teachers who have chosen "Yes and NO" - - - - - 65

Table 4.2 Chi-square Statistics Showing the Opinions of Private and Public Primary School Teachers on the Better School Facilities in Private and Public Primary Schools - - - - - - - - - - 66

Table 4.3 Indicating the Percentage of Private and Public Primary School Teachers that have chosen "Yes" and "No" About Qualified Teachers in Private and Public Primary Schools - - - - - - - - - - 66

Table 4.4Chi-square statistics Showing Opinions of Private and Public Primary School Teachers on the Availability of Qualified Teachers in Private and Public Primary Schools in three Different Local Governments - - - - - - - - - - - 67

Table 4.5 Showing the Statistical Percentage of Primary Teachers of Private and Public Schools that have chosen "Yes" and "No" About the Welfare of Teachers in Private and Public Schools - - - - - - 68

Table 4.6 Chi-square Statistics Showing Opinions of Private and Public School Teachers on Teachers' Welfare in Private and Public Primary Schools- 69

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

The overall objective in every teaching –learning interaction as usually required is to bring about harmonious development of the individual and acquisition of the desired knowledge, values and skills to enable him/her function in a particular way. The process of teaching needs to be supervised for effective teaching- learning process. The syllabus and curriculum system must be given special care and consideration so as to achieve the desired objectives. Thus, when curriculum system is ensured in every school, there will be positive developments that will bring permanent change in the behaviour of the learner signifying that learning has taken place.

However, human societies differ in the way they teach their children values, norms and skills, while others impart skills in formal way, through organized system, that is a well recognized system approved by the ministry of education. Others prefer more traditional ways in inculcating such desired values, notwithstanding the particular society in which learning takes place, and methodology used, a number of variables interact together to bring about a stable and permanent changes in behaviour.

Thus, the study intends to investigate the comparative academic achievement of primary schools in social studies in selected public and private schools in three different educational zones of Kano state.

The study also intends to look at these variables, the learner, the teacher and the learning environment, because learning can only take place where there is a learner and the learner has to be physically, mentally, socially and morally ready to learn. Thus, when the learner is not fit to learn due to some health problems or interest, then the objectives of teaching and learning are hampered.

Consequently, besides the two important variables mentioned in teaching-learning process, the environment in which learning takes place has to be conducive for learning. In formal learning, schools are not just a place to learn, to read and write but also receive complete education. Therefore, schools have to provide suitable environment for effective and proper development of the learner so as to acquire the desired skills, but where the school environment is deficient or lacking in the materials required for effective learning, the designed objectives could not be achieved.

The facilities required for effective teaching – learning are: adequate classroom space, curriculum system, experienced teachers, teaching –learning materials such as text books, boards, chalks, visual aids etc.Although all primary schools in Dala, Rimin Gado and Rano educational zones are under the direct supervision of the state primary Education Board, but a number of differences exist in their performance in social studies among the primary school pupils across the zones.

This study was carried out in order to address the importance of school facilities and equipments that need to be made available in both public and private primary schools in the study area. The absence or shortage of facilities and equipments in the primary

schools particularly in these three different educational zones would be a stumbling block and impediment towards the excellent academic performance of the primary school pupils. It is in view of this that a decision was taken to make a research on the performance of primary school pupils in social studies in public and private schools in three different educational zones.

1.2 Statement of the problem

It is important to note that meaningful conclusions cannot be attained in every work without a defined focus. Thus, the researcher intends to find out the problems militating against effective teaching and learning of social studies in public and private schools in three different educational zones. Some of the problems are: the roles of teachers, the environment in which learning takes place, lack of supervision, lack of adequate teaching-learning materials, instructional school facilities and lack of qualified teachers in teaching the subject of social studies at the primary school level so as to have sound justification of improving learning environment, teaching-learning materials and supervision of instruction in three educational zones, and Kano state at large.This research therefore intends to find out if there are significant differences in the academic performance of primary school pupils of private and public primary schools in social studies.

1.3 Objectives of the study

This study sets out to achieve the following objectives:

1. To find out if there is significant difference in the academic performance of male pupils of private and public schools in social studies in Kano State

2. To find out if there is significant difference in the academic performance of female pupils of private and public schools in social studies in Kano State

3. To find out if there are significant differences in terms of school equipment/facilities between the private and public primary schools in Kano State

4. To find out if there are significant differences in terms of qualification of teachers in private and public primary schools in Kano State

5. To find out if there are significant differences in terms of teacher welfare package(s) in private and public primary schools in Kano State

1.4 Research questions

1. Is there any significant difference in the academic performance of male pupils in public and private primary schools?

2. Is there any significant difference in academic performance of female pupils in public and private primary schools?

3. Do private primary schools have better equipment/facilities than the public primary schools?

4. Do private primary schools have more qualified teachers than the public primary schools?

5. Do the private primary school teachers have better welfare than the public primary school teachers?

1.5 Research Hypotheses

1. There is no significant difference in the academic performance of male pupils of public and private primary schools.

2. There is no significant difference in the academic performance of female pupils of private and public primary schools.

3. There are no significant differences in the school facilities provided by private and public primary schools.

4. There are no significant differences in terms of qualification of teachers in private and public primary schools.

5. There are no significant differences in the teacher welfare provided by primary school teachers of private and public schools.

1.6 Significance of the study

The main aim of carrying out research in education is to bring about positive improvement in the practice of education through finding new knowledge or information. Therefore, this research is important in many areas to the following stakeholders in the business of education for obtaining good output in primary education in Dala , Rimin Gado and Rano educational zones and the state at large.

This study is significant and beneficial to the teachers in many areas. The research will make the teachers conscious of the current status of primary school pupils' academic performance in both public and private schools within these three Educational zones studied. The study will also expose to them the factors responsible for the differences in academic performance of the pupils in public and private primary schools if there is any difference and suggest the possible ways to be followed to remedy the situation. At the same time, the research will reveal to them the significance of facilities required for effective teaching- learning like adequate classroom space, curriculum system, experienced and qualified teachers, game fields, teachers' development etc,

The study is also important to students in their learning process. The research will make them know the level of their academic performance especially in social studies subjects. Thus, the students through this research will be able to grasp certain areas of their considerable effort and excellent academic performance in the subject they study, and also be aware of their deficiencies in certain areas of their social studies subject. The study is also paramount importance to students because the acquisition of

the suitable levels of literacy manipulative, communicative and good life skills, values and norms will serve as bed-rock, for laying a sound foundation for their future learning, improvement and development.

The study is very crucial to the curriculum planners. The curriculum planners are professional individuals who are well trained in curriculum management, they are active participants in the field of curriculum and they are responsible for curriculum planning as regards to contents and implementation procedures. Therefore, curriculum planning has been seen as a collection of readings that presents the knowledge, skills and alternative strategies needed by curriculum planners and teachers at all levels of education from early childhood through adulthood.

Thus, the curriculum planners through this study will come to know whether the curriculum system of private primary schools in the areas studied is in line with public primary schools curriculum system or not, so that a good action would be taken to ensure similar curriculum system. However, if the curriculum system particularly in social studies is similar in both public and private primary schools in the study area, then the curriculum planners will have a thorough knowledge on the current curriculum system of public and private primary schools in the study areas. The study will also reveal to them the process involved of curriculum implementation in these selected public and private primary schools in the three different Educational zones.

The research is also useful and beneficial to the federal, state and local government education policy makers. The policy makers in education include: the

minister of education, commissioners of education, local government education secretaries and so on. Therefore, the outcome of this research will give them a clear picture of the level of academic performance of public and private primary school pupils. Having known the academic performance of primary school pupils especially in social studies, the policy makers can create or formulate new educational policy that will ensure the same curriculum system in both public and private primary schools in the study areas, and Kano state in general so as to achieve similar objectives in both public and private primary schools in Dala, Rimin Gado and Rano Educational zones. The study will make it clear to them the major factors responsible for affecting the pupils' academic performance of both public and private primary schools within the study areas, so that appropriate actions would be taken to resolve the condition.

The public in the business of education are also expected to benefit from this study for obtaining good output in primary education in the Dala, Rimin Gado and Rano Educational zones, and Kano state at large. It has been aware that the concern of most public today is mainly on what they can do to help children to acquire a sound primary education because of its place of influencing an individual's performance in later academic life. This research will therefore help the general public in knowing the ways to improve academic performance of learners in three different educational zones. It has been observed that qualitative education is mostly desired by the general public. The study will also reveal to the general public the significance of providing enough school facilities that will facilitate the teaching- learning process so as to have effective and a sound knowledge of primary school base.

1.7 Basic Assumptions

The research is based on the assumption that:

1. Private and public schools have effective teachers of social studies.

2. Private and public primary schools in Kano state have adequate supply of instructional materials for effective teaching of social studies subject.

3. Both private and public primary school pupils in Kano state perform well in social studies subject.

4. Both private and public primary schools in Kano state are having good and qualified teachers of social studies subject.

1.8 Scope of the study

The scope of this study is limited to finding out the comparative academic performance of primary school pupils in social studies in six (6) different primary schools selected from three different educational zones of Dala, Rimin Gado and Rano local governments. The research is delimited to male and female pupils, teachers and head teachers. Therefore, teachers and pupils of social studies are covered by the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

In this study related literature was reviewed under the following: conceptual frame work, the concept of academic performance, learning environment as a cause of difference in academic performance among learners, factors enhancing pupil's performance in learning process, objectives of primary education in Nigeria, problems of primary education in Nigeria, teachers qualifications and pupils' academic performance, instructional facilities and pupils academic performance, learning environment and pupils' academic performance, emotional, psychological and physical development and pupils' academic performance, supervision and pupils' academic performance the current situation of teaching/learning Social studies in public and private schools, the empirical studies and summary.

2.2 Conceptual Frame work

The physical setting for learning affects the learners, within the context of study, this is made up of the classroom, the library, laboratory, social relationships between learners and general atmosphere under which the learning is taking place. Therefore, the setting is usually expected to be attractive and enough so as to make children wish to spend long hours there. Imogie (1998) puts it that schools are not just a place to learn how to read and write but also where to receive complete education. This therefore involves complete modification of behaviour to adjust properly to the environment and

contribute in its positive development. All in all, it can be said that the survival of the individual greatly depends on learning, because it is through it he manipulates the environment for his betterment.

Learning environment consists of all the influences that affect the child's development i.e. the classroom, psychological environment and community environment etc, the social context in which teaching and learning are done is also an important issue to be considered. Learning is a continuous process and is brought about by interaction with the environment, Lahey (2001) explained that, many factors produce those changes, but are of the most important in the process of learning. Learning does not occur on its own, it comes through interaction with other persons or things within the environment, and this may therefore be intended or spontaneous.

Thus, learning will proceed smoothly and enthusiastically if pupils see the relationship between them and their teachers as non-threatening, warm and loving. They should see themselves as participating actively in the process of learning and also in some decisions that affect them. N.T.I (2002) described learning as a change in behaviour for better or worse. Consequently, many factors come together to make effective learning amongst which is learning environment. However, Imogie (1998) further asserts that the environment must be taken further control of manipulated and adjusted in order for the learning to take place. Environment can facilitate learning process effectively. This position maintained that learning environment is very crucial in bringing about continuous change in behaviour; Dala, Rimin Gado and Rano educational

zones are some of the educational zones in Kano state. Many primary schools are found in the zones, comprising of government owned schools (public schools) and private schools owned by individuals, group or organizations etc. This study intends to examine by making comparison whether academic performance of pupils in social studies in those primary schools is influenced by qualified teachers, instructional facilities and adequate supervision.

2.3 The Concept of Academic Performance

The term academic performance refers to how well a student does in school. Poor grades are considered as bad academic performance. It also refers to how students deal with their studies and how they cope with or accomplish different tasks given to them by their teachers. Academic performance generally means how students are accomplishing their tasks and studies, but there are quite a number of factors that determine the level and quality of students' academic performance.

In educational institutions, success is measured by academic performance, or how well a student meets standards set out by institution. As career competition grows ever fiercer in the working world, the importance of students' doing well in school has caught the attention of parents and government education departments alike. Although, education is not the only road to success in the working world, much effort is made to identify, evaluate and encourage the progress of students in schools. Parents care about their child's academic performance because they believe that good academic results will provide more career choices and job security.

Academic performance in school is evaluated in a number of ways. For regular grading, students demonstrate their knowledge by taking written and oral tests, performing presentations, turning in homework and participating in class activities and discussions. Therefore, teachers evaluate in the form of letter or number grades and side notes to describe how well a student has done. School though invested in fostering good academic habits for the same reason, are also often influenced by concerns about the school's reputation and the possibility of monetary aid from government institutions which can hinge on the overall performance of the school.

In the past, academic performance was often measured more by ear than today. Teachers' observations made up the bulk of the assessment, and today's summation or numerical method of determining how well a student is performing is fair recent invention. Grading systems came into existence in America in the late Victorian period.

The researcher viewed academic performance as a basic process of adopting and improving the quality and progress of students' performance, what is learned can be measured either by those things that have been observed in the behaviour of the individual or those that can be inferred. There is continuity in learning and it builds on experienced in which it takes place, i.e. the school and is the focus of discussion in this study.

2.4 Learning Environment as Factor of Differences in Academic Performance Among Learners

The concept of learning environment is very broad and its effects on learning cannot be over-emphasized. Akinboye et al (1981) explained that the physical environment is complex, its effect on learning are also complex. In the physical environment there are forces such as temperature, pressure and humidity which affect the individual and consequently his learning. He further stressed that leaning is a product of an individual's interaction with his environment; this position maintained that, a conducive environment is necessary for effective learning. However, when the environment appears to be harsh not conducive for teaching and learning then learning is adversely affected.

Learning environment therefore refers to the total surrounding where learning takes place. The classroom, is the pupils temporary home and his immediate learning environment and it must appear very comfortable, colorful, clean and educationally attractive. A good learning environment is characterized by some of the following depending on the immediate community, subjects demand etc.

There is the need of well spaced classrooms for effective teaching and learning to take place. Instructional spaces such as classrooms, libraries, laboratories and technical workshops are so importance in teaching –learning. The extent to which these spaces could enhance effective teaching and learning depends on their location within the school premises, their structure and facilities. It is not unlikely that well planned

instructional spaces in terms of location, size, structure and facilities will facilitate teaching and learning process and as well enhance good academic performance of the pupils.

It is important at this juncture to note that well spaced and adequate classroom will facilitate and make effective teaching and learning process, but when there are no adequate lighting and ventilation in the classrooms, the pupils cannot perform better, and there are instances where classrooms are located very close to the technical workshops.

Consequently for effective teaching and learning to take place, there must be well equipped laboratories. According to Bajah (1997), laboratories are essential in the teaching and learning of science subjects. It has been observed that laboratories are not well planned in some of the secondary schools. Apart from the fact that the required facilities are not in the laboratories, and some of the laboratories are not spacious, not properly located while some do not have cross ventilation and adequate lighting, such laboratories may not enhance effective teaching and learning thereby impeding the students' academic performance.

Thus, there is also the need for well equipped library for effective teaching and learning to take place. The importance of school library in teaching and learning cannot be over- emphasized. Fuller (1986) and Popoola (1989) found that school library significantly influences students' academic performance. It appears that some secondary school lack adequate library facilities. In some cases school libraries are not spacious enough and not well located within the school premises. In some cases, the libraries do

not have adequate lighting and ventilation that could make them comfortable for the students and teachers to use, in such case effective teaching and student academic performance may be affected.

The researcher is of the view that if well spaced classrooms, adequate and suitable furniture, well equipped laboratories and libraries, proper instructional materials i.e. books, teaching aids and so on and so forth, are adequately supplied and provided in schools, there could be effective and successful teaching and learning thereby enhancing students academic performance.

The need for a good learning environment is emphasized by Edward (1975), when he says "Attention must be given to the position of furniture in relation to light, to movement and to supervision, he further stressed that sinks and water and plenty of storage cupboards, should be provided to create conducive learning environment. The individual's learning is affected by the physical setting of learning i.e. classroom, library, and laboratories and other places where formal learning takes place. The setting therefore must be attractive enough to make children wish to spend long hours.

Consequently, most primary schools do not meet these requirement especially those in the rural areas of Kano state. Thus, greater parts of these primary schools have their roofs blown-off by the wind therefore children under this condition are forced to study without being free from the effect of weather, rain, sun, and wind. In a situation where the physical comfort of the children is not guaranteed, it is then not ideal for learning N.T.I (2000) puts it together that a conducive teaching learning environment is

a pre- requisite for effective learning. This variable of interest is lacking in most school in Kano state which is the basis of the study.

According to Hamza (1990) academic performance refers to the extent of a child performance during or after instructional process. This is determined by the productivity output of child learning experience which is measured by the quality of scholarly work that produces at specific period of time.

However, individual authorities differ on the factors enhancing academic performance, some emphasized the importance of parental background as it can be seen in words of Badejo, (1986) when she observed that the way and manner a child is brought up determined the ability of the child. This means that, the children whose parents are highly placed in terms of socio-economic aspects are exposed too much experience which enhance academic performances more than the children in rural areas who are less privilege socio-economically. Thus, most children in urban areas are exposed to modern media electronics like television, computers, internet etc, and all these give greater opportunity to urban children to accumulate many experiences when compared to their counterparts in rural areas.

It was found out that social and emotional learning can enhance academic performance of the pupils Therefore, various terms are used to describe, social and emotional learning (SEL) including personal and social development, emotional literacy, emotional intelligence, social and emotional competence and social emotional and behavioral skills. (Department for education and skills U.K 2000), social emotional is a

process for students develop knowledge, understanding and skills that support learning. It is now well established in the research that social and emotional skills are integral parts of academic success.

Thus, a recent meta-analysis of 207 students of social and emotional learning programs conducted by CASEL (Durlak et,al, 2003), found that students who participated in social and emotional learning programs improve significantly in their social and emotional skills and their attitudes to themselves, others and school. They display more classroom pro-social behaviours and few disrupt and aggressive behaviours and scored higher on standardized achievement tests relative to peers not receiving the program

Research on the benefit of developing children emotional and behavioral skills, (Weave and gray, 2003) explained that emotional and social competencies have been more influential than cognitive abilities for personnel, career and scholastic success. Research demonstrate that educational gains from program that teaches social and emotional competence include improved school attendance, higher motivation and higher morale social and emotional competencies becoming increasingly central in workplaces with growing emphases on team work, communication and management skills (Goleman, 1996)

Consequently, several reviews reported that social and emotional learning results in improved behaviour in students. Therefore, programs intended to teach social

competencies were shown to be effective in decreasing early behaviour problems (wells 2000).

Another factor that enhances academic performance among learners according to some findings is gender. That is to say that there are indications of gender bias in examination performance i.e. male tend to perform higher than females in examination due to certain extraneous factors (Kabir 2009), In the same way to maintain the view that past performance was found to be related to future performance. This is also by Kalil (2008) where he maintained that students past performance in '0' level examination was found to be related to their future performance

The concept of learning environment is very broad and its effect on learning cannot be over-emphasized. Akinboye e tal (1981) maintained that the physical environment is complex; its effects on learning are also complex. In the physical environment there are forces such as temperature, pressure, and humidity which affect individual and consequently his learning. He further stressed that learning is a product of an individual's interaction, with his environment. This position maintained that, a conducive environment is necessary for effective learning.

However, when the environment appears to be harsh, not conducive for learning, then learning is adversely affected. Learning environment therefore refers to the total surrounding where learning takes place. The classroom is the pupil's temporary home and his immediate learning environment and it must appear comfortable, colorful, clean, and educationally attractive. The need for good learning environment is emphasized by

Edward (1975) when he says, "Attention must be given to the position of furniture in relations to light, to movement and to supervision. Therefore, the individual's learning is affected by the physical setting of learning i.e. classrooms, library, laboratories, and other places where formal learning takes place. The setting therefore must be attractive enough to make children wish to spend long hours.

As for education in school to be effective the environment needs to be conducive to learning, allowing the pupils' space and time to interact within the learning and teaching process. Creating and maintaining stimulating learning environment can be achieved through effective and classroom organization, interactive and whole school displays and a climate if innovation. It is important to note that good learning and teaching displays in classrooms and corridor reflecting a broad and balanced curriculum which is well matched to the needs of the pupils.

Therefore, if a good a well maintained learning environment is ensured, the pupils will appear to perform better and produce good result. But most of the schools in Kano state do not meet the entire requirement for effective learning environment particularly in rural areas. Thus, greater parts of many primary schools have their roofs blown-off by wind. Therefore, children under this condition are forced to study without being free from the effect of weather, rain, sun, and wind. In a situation where the physical comfort of the children is not guaranteed it is then not ideal for learning. NT.I (2000) puts it together that conducive teaching-learning environment is a pre-requisite

for effective learning in most primary schools in Kano state which is the basis of the study.

It is clear that for education in school to be effective, the environment needs to be conducive to learning, allowing the pupils' space and time to interact within the learning and teaching process. Creating and maintaining stimulating learning environment can be achieved through effective classroom organization interaction and whole school displays and a climate of innovation. In addition, instructional space such as classrooms, libraries, laboratories, is of great importance to conducive learning environment. While emphasizing the important of conducive leaning environment to students' academic performance, Mark (2002) maintained that one cannot expect high level of pupil's academic performance where school buildings such as classrooms, libraries, technical workshops and laboratories are substandard. He emphasized that clean, quiet, safe, comfortable and healthy environment are importance components of successful teaching and learning. Similarly, Ajayi, (2007) maintained that high level of academic performance may not be guaranteed when the learning environment is not conducive for teaching and learning process.

Consequently, it is therefore maintained that structural effectiveness, proper ventilation and well located place may lead to successful teaching and learning process. It appears that the secondary students' academic performance in Nigeria is poor. Dada (1987), Emesator(1995), Ajayi (1999) and Aikubuiro and Joshich (2004) reported that there was persistent mass failure of students in the Senior school certificate Examination

(SSCE) conducted by the west African examination council (WAEC). They observed that poor academic performance of the secondary school students in Nigeria may not be unconnected with seemingly poor instructional space planning in the schools.

In the context of this study, conducive learning environment refers to instructional space planning structural design, and facilities of places such as classrooms, libraries, textbooks, technical workshops and laboratories where students received academic instructions. In some of the secondary schools, classrooms are not spacious enough, there are no adequate lightening and ventilation in the classrooms, there are instances where classrooms are located very close to the technical workshops and the main roads, while academic furniture and fittings are not provided in some of the classroom. These problems are totally identical across the country. All these may not make such classroom conducive for teaching and learning process and hence good academic performance of the students may not be guaranteed. Stressing the importance of classroom planning, Philip, (1997) maintained that, classrooms the adequate lighting and ventilation and properly located within the school, play vital role in student academic performance.

Finally a thorough and careful study of the various opinions expressed in the materials consulted showed that quite a number of factors would enhance academic performance of learners at all levels of education. In all the factors, learning environment plays a greater and important role in enhancing learner's academic performance. This study therefore intends to find out if such things like good classroom condition, books,

learning aids, recreational facilities which are in learning environment determine primary school academic performance in Dala local government educational zone

The researcher is of the view that to have effective education, the learning environment must be conducive, for the children to have good academic performance. Sinks and water and plenty of storage cupboards need to be provided to create conducive learning environment. Therefore, well spaced classroom and suitable furniture must be made available for the pupils to be educationally oriented, and also perform better.

2.5 Objectives of Primary Education in Nigeria

Primary education is an education offered in an institution for children from age 6-11 plus. It lasts for six years. This stage of education system is seen as the bedrock of all educational pursuits of a child, government has reached a conclusion that the curriculum of the school should include for teaching the subject that prepare the child for pursuit of educational goals,(s) The curriculum of the primary school include things that have to do with literacy and numeracy, the study of science, the study of local and national social reforms and values, religion, local crafts and agriculture. To get admission to the secondary, a common entrance is set as a yardstick through which successive pupils are given admission in to junior secondary school.

Therefore, based on the above desired interest, the federal ministry of education made national policy on education in 2004, and set the following objectives to be achieved in primary education.

- inculcate permanent and literacy, and ability to communicate effectively,
- Lay a sound basis for scientific and reflective thinking.
- Give citizenship education as basis for effective participation in and contribution to the life of the society.
- Mould the character and develop sound attitude and morals in the child.
- Develop in the child changing environment.
- Give the child opportunities for developing manipulative skills that will enable the child function effectively in the society within the limits of the child's capacity, and provide the child with basic tools for further educational advancement, including preparation for trades and crafts for the locality.

The federal government of Nigeria is of the view that these stated goals will form the basis of primary education in all the states of the federation. The question here is, how feasible is it to achieve these stated goals considering the situation of most primary schools in Nigeria and Kano state in particular. Evidence on ground showed that most primary schools are lacking in basic infrastructures, resources and what is called for the study with intent of arriving at the factors of primary school pupil in the study area.

Consequently, in all the stated goals/objectives no one has been achieved hundred percent. This is because; education which is the bedrock of every country's development has not been given at least 45% on every annual budget, so as to achieve the expected objectives. Therefore, the researcher is of the view that if the country wants to really achieve those specific objectives on primary education, it is then necessary for

the Nigerian government to provide adequate and enough basis infrastructure, adequate funding, ensure constant and good supervision and also create more schools so as to cope with the problems of over-population in the country.

2.6 Problems of Primary Education in Nigeria.

The primary education in Nigeria forms the basic foundation upon which the entire system of education rest, as it is seen practically, the Nigerian experience is that: though it is the foundation experiences in that, and though is the foundation and preparatory ground for the other levels of education but yet, primary education continued to deteriorate every day. Thus, most primary schools in Nigeria and particularly Kano state suffer from one problem to the other. It is also important at this juncture to note that one of the major problems to Nigerian education system is the lack of adequate funding.

Although government at all level, i.e. federal, state and local government contribute in financing primary education in Nigeria, but still primary schools suffer from inadequate infrastructure. Thus, most primary schools in the study area are currently facing these problems, in some schools lesson is normally conducted under shades with pupils being exposed to hazard of wind, rain, and sun. This is because adequate structures are not provided due to poor funding or poor maintenance, therefore, it should be called in mind that the law stipulated that child is entitled to ten (10) square floor and 100 cubic feet of the classroom to enable him live comfortably and learn effectively (manual for effective management of primary schools in Nigeria 1999).

In normal circumstances, many teachers in most primary schools stay throughout their teaching career without moving forward to increase their knowledge due to either lack of interest or poor administrative policies. All these therefore affect their productivity and the overall objective of primary education. In addition, most of primary school teachers are not qualified teachers, because it is found that many of them are teaching with their secondary leaving certificate which is not supposed to be the case.

Therefore, it is important to point out that certified teachers are usually those who have graduated from accredited teacher education programs, some of these teachers are also required to complete an induction program or pass a national teacher examination test in order to obtain a licenses. In addition, studies on the effect of teacher experience on student learning have found a positive relationship between teachers effectiveness and their years of experience, but the relationship observed is not always significant or an entirely linear one (Kitgard and Hall 1974). The evidence currently available suggest that while inexperienced teachers are less effective than more senior teachers, the benefit of experienced level off after a few years (Rivkin, Hanushak, and Khan 2000).

The researcher is of the view that for education to be qualitative and standardized there must provide competent, talented and qualified teachers to all primary schools so as to achieve the specified and designed objectives. it is through this effort that the current problems facing educational sector will completely be solved.

2.7 Poor Supervision of Instruction and Pupil's Academic Performance

The place of education supervision is very important in school administration; this is so because, there should be a system of checking and controlling what is being taught in the school, federal government through its ministry of education has the prerogative of formation of education policies and standards in the country. It is therefore the function of the supervisory division of the federal ministry of education to ensure that educational policies are implemented as planned and directed by the federal ministry of education

Similarly, it is also the duty of the supervisory division of the ministry of education to ensure that educational standards are established and sustained. Therefore, the general function of the federal ministry of education is to supervise teaching instruction in the school system assess the qualification and experience and other useful suggestions that can improve teaching and learning situation in the school.

However, one of the major problems of primary education is poor supervision of instruction, section 1189 (3) of the National policy on education states that one of these objectives of supervisory services in education is to ensure quality control through regular inspection and continuous supervision of instruction and other educational services, But in many cases, there is level of or poor supervision of instruction, and this is one of the reason for poor achievement in schools. Therefore, it is only when activities are supervised and monitored those areas of weaknesses will not be exposed for corrections.

Through the effective supervision of instruction, administrators can reinforce and enhance teaching practices that will contribute to improve students' learning. By skillful analyzing, performance and appropriate data, administrators can provide meaningful feedback and direction to teachers that can have a profound effect on the learning that occurs in each classroom. Because student learning is the primary function of the schools, the effective supervision of instruction is one of the most critical functions of the administrator. If schools are provide equal access to quality educational programs for all students' administrators must hold teachers accountability for providing an appropriate and well-planned program. These programs include a variety of teaching strategies designed to meet the diverse needs of all students in the complex society.

Thus, to assess student progress towards the established standards and to facilitate the planning of various types of instructions, administration should ensure that teachers are utilizing information from a variety of valid and appropriate sources before they begun planning lessons or teaching. This could include data regarding students' background, academic levels and interest, as well as other data from students' records to ascertain academic needs and to planning and appropriate learning. It is important for the administration to note that information regarding students and their families is used by staff for professional purposes only, and is kept confidential as a matter of professional ethics.

The administrators need to determine if teachers are using the numerous formative and summative diagnostic processes available to assist in planning meaningful

instruction. Formative measures include on-going teacher monitoring of students progress during the lessons, practice sessions, and on daily assignment. Measures administered periodically like criterion-referred tests, grade level, examinations or placement tests that are teacher made also provide helpful information on the status of student learning as instruction progresses. But, summative measurers like minimum competency examinations, destruct mastering tests, and standardized tests, provide a different perspective from the on-going formative measures. This type of data enables the teacher to evaluate the long-term retention rate of their students and to compare student learning on a regional, state or national basis.

The administrators should verify that teachers are preparing and maintaining adequate and accurate records of student's progress will include the regular and systematic recording of meaningful data regarding student progress on specific concepts and skills related to the standards for each subject for the grade level or course they are teaching. Once students' successes levels have been identified from the records, the teacher should use the information to plan instruction and any necessary remediation and enrichment. By utilizing the on-going information on achievement, teachers can maintain consistent and challenging expectation for all students. Students and parents should be informed of the students' progress towards achieving district goals and objectives through comments on individual work, progress reports, conferencing, report cards, and other measures. The students could be encouraged to participate in self-assessment as a way of motivating students to improve academic achievement.

Consequently, formulating a well-defined objective of the lesson is a critical first step as it provides the directions and frame work for the decision which will follow. The objective should describe the specific content to be learned and the observable behaviour the students will exhibit to demonstrate that learning has occurred. No matter how expertly the objectives are stated, objective facilitates learning only if they are appropriate to the academic achievement of the student. A well-written objectives includes specific information on what is to be included in the lesson and what is not. This specifically expedites the next step, which is the identification of sub-skills or sub-objectives. A task analysis of each of the sub- objective enables the teacher to sequence then, in order of difficulty to provide a logical sequence to the lesson.

The administrators will know if the appropriate planning for instruction has taken place when the teacher is able to design a lesson that achieves the objectives, this means everything the teacher and students do during the lesson, is related to the objective. Bird walking is a term coined by Madeline Hunter that refers to the inability of a teacher to focus on the objective of the lesson (Gentile, 1987) Instead, the teacher bird walks, pecking at interesting ideas with what seems to be worthwhile, or informative digression, distracting the students' thinking process and leaving the students confused about the topic of the lesson.

2.8 Teachers' Qualification and Pupils' Academic Performance

The quality of education is directly related to the quality of instruction in the classrooms. It is a fact that the academic qualifications, knowledge of the subjects

matter, competence, and skills of teaching and the commitment of the teacher have effective impact on the teaching learning process, (National Education Policy 1998-2010). Quality improvement in education depends upon proper training of teachers- the teachers cannot play any of the role unless properly trained (Yadved and Singh, 1998). Therefore, teaching is an art and it can be refined by training and practice, thus, the availability of competent teachers is central in the reconstruction of the educational system, and government should always recruit or employ such competent teachers in order to develop the system.

The teachers' characteristic is related to the subject matter knowledge teachers require during their formal studies, and pre-services teacher education courses. Several studies showed a positive relationship between teachers' preparation in the subject matter, they later teach and student achievement (Darling- Hammond, 1999 and Brewer 2000). While others have less unequivocal result s Mouth and King (1994) found both positive and negative effects of teachers in field preparation on student achievement. Ingersoll (2003) considered the wide spread phenomenon in the united state for which they had formal qualifications. His study of out-of field teaching (as it is known) portrayed a severe situation where 42% to 49% of public grade 7 to 12 teachers of science and mathematics lacked a major and /or full certification in the field they were teaching (1999/2000 data)

The certified teachers are usually those who have graduated from accredited teacher education programs. Some of these teachers are also required to complete an

induction program or pass a national teacher examination test in order to obtain a license. There is debate in the U.S .A between those in favor of full certification (Darling, Hammond et al, 2001) and those who argued that students of teachers who hold full certification achieve similarly to those who study under teachers with temporary "emergency" credentials (Gold Haber and Brewer, 2000), These authors also argued that relaxing requirement for certification is a way not only of attracting academically talented college graduates to teaching but also of recruiting a more diverse of candidates needed for a diverse student population.

Consequently, studies on the effect of teacher experience on students learning have found positive relationship between teachers' effectiveness and their years of experience, but relationship observed is not always significant (kitgard and Phillips 1981). The evidence currently available made it clear that while the inexperienced teachers are less effective than more senior teachers, the benefits of experience level off after few years (Rivkin and Kain, 2000). Therefore, the relationship between teacher experience and student achievement is difficult to interpret, because this highly affected by motivation of women teachers to work during the child- rearing period.

The qualified teachers who have good and considerable qualifications are those who usually engaged in participating in professional development activities. The professional development activities can be conducted by different organization in school and out of school, on the job or during sabbatical leave. On these occasions, practicing teachers update their content knowledge and teaching skills so they can meet

requirements of new curricular, continue new findings on teaching and learning and adapt to changes in the needs of the student population and so no.

Therefore, it was found that teachers who are well- trained in teaching profession are likely to enhance pupil's academic performance. This is because, the qualified and certified teachers learned teaching method as result of this, the student/pupils proved to perform better than the students who studied under unqualified teachers. All in all, it can be inferred that teachers' qualifications greatly affect the students' academic performance.

The quality of education is directly related to the quality of the instructions in the classrooms. It is a fact that the academic qualifications, knowledge of the subject matter, competence, and skills of teaching and the commitment of the teacher have effective impact on the teaching – learning process (National Education Policy 1998-2010). Quality improvement in education depends upon proper training of teachers. The teachers cannot play any of the roles unless properly trained (Yadred and Siugh, 1988) Therefore, teaching is an art. It can be refined by training and practice, the competent teachers are central in the reconstruction of the educational system.

There is therefore the need to ensure the presence of 'highly qualified teachers in every classroom in each of the public and private schools in the study areas in order to determine how best to define and prepare these qualified teachers. Qualities of teachers are often seen simply as good teachers and are considered to be those who exhibit desirable traits and uphold the standard and norms of the profession. But qualities of

teachers are also considered to be those who bring about "students' learning". These teachers are called "effective" (Berliner 1987, 2005) or "successful" (Fenstermacher and Richardson 2005). These people distinguished between good teaching and successful teaching as follows:

Good teaching refers to the content taught accords with disciplinary standards of adequacy and completeness and the method employed are age appropriate, morally defensible and undertaken with the intention of achieving the learners' competence with respect to content. By successful teaching it means that learner actually acquires some reasonable and acceptable level of proficiency from what the teacher is engaged in teaching.

Thus, because of psychometric difficulties in assessing teachers by their normative attributes – the logical, the psychological, and especially the ethical, which are defined differently across cultures (Alexander, 2000) the tendency to evaluate teacher qualities on the basis of students' performance is given even greater emphasis. With increased demands for accountability in line with performance standards and with growing demand for evidence –based policy making, students achievement is considered as an accurate measure of teacher effectiveness and has become a basis value –added teacher assessment system (Braun, 2005, mc Caffren, and Hamiton 2004).

The above motions have also found favor in regard to the effectiveness of teacher education system. After training the development and reform of teacher education in terms of the major acquisitions shaping this field of education, Cochran-

Smith (2011) argues that "the outcomes questions are what currently motivate teacher education research and policy making; she set down three ways in which the outcomes of teacher education are constructed. One of them, long term impact outcomes, refers to the relationship between teacher qualification and students learning. Teachers' qualification encompasses teachers' scores on tests and examinations, their years of experience, and the extent of their preparation in subject matter and in pedagogy, what qualification they hold in their area of expertise and on their going professional development.

In many countries, teachers qualifications that are considered to be related to student learning have become targets of education reforms, however, the nature of this reform is under debate- some perceive the main problem to be the low academic and cognitive level of those who go into the teaching profession and call for policies aimed at attracting more capable candidates through shorter, less regulated alternative routes (Ballon and Podgursky 1997,1999, 2000, Goodhaber and Brewer, 2000; united states department of education, 2002). Others view the problem mainly as the result of inadequate teacher preparation and call for the "Professionalization" of teacher education by making it longer, upgrading it to graduate programs, and regulating it through mechanism of license, certification and promotion aligned with standards (Darlin Hammond and Frehow, 2002; National commission on Teaching and American future).

This characteristic is related to the subject matter knowledge teachers acquire during their formal studies and pre-series teacher education courses the evidence from different studies is contradictory. Several studies show a positive relationship between teachers preparations in the subjects matter they later teach and students‘s achievement, (Darling Hammand, 1999, 2006), while others have less unequivocal results. Mouk and King (1994) found both positive and negative effects of teacher's in field preparation on students' achievements. Gold Haber and Brewer, (2000) found that there was positive relationship for students mathematics achievement but no such relationship for science. Rowar. Et,al-(1997) reported a positive relationship between students achievement and teachers with a major in social studies.

However, Ingersoll (2003) considered the wide spread phenomenon in the united states of teachers teaching subjects other than those for which they had formal qualification, his study of out-of field of teaching (as it is shown), portrayed a severe situation where 42% to 49% of public grades 7 to 12 teachers of science and mathematics lacked a major and or full certification in the field of education (1999-2000 data). This existing condition is more common in Kano state government owned primary schools and private primary schools, where in every school whether public or private 60% of teachers have not been professionalized in education course.

The researcher is of the view that if experience, qualified and dedicated teachers are provided in all public and private schools in the study areas, there will be a greater achievement in educational sector not only in the study areas in particular but also in

Kano state in general. In addition, the presence of qualified and deserved teachers in both public and private primary schools within the study areas, it is likely for the pupils to perform better than before.

2.9 Instructional Facilities and Pupil's Academic Performance

In the review of instructional facilities it was found out that the quality of education is dependent on a variety of factors, some of which are the availability of classrooms, furniture, equipments, textbooks, libraries, laboratories and technical workshops which are very essential in teaching and learning process. Therefore, students in both developed and developing countries have shown that such factors contribute greatly to students' achievement. Heinemann (1980) research in developed and developing countries has led him to the conclusion that students in developing countries perform much below those of developed countries because of inadequate and poor facilities. He points out comparatively the achievement of Malawi standard eight students in mathematics and science is below that of Thailand, Iran, Chile and developed countries such as Sweden, U.S.A and United Kingdom.

Thus, at the minimum a school is acceptable if it can provide a place for students to work without the danger of a roof collapsing if neither wind nor rain sends students in to a corner for protection. If there is a place for each to sit down, a place write , material to write with, and a certain minimal number of maps, charts, and reference books from which to derive information (Heyneman, 1980. p.13).

Instructional spaces as classrooms, libraries, laboratories and technical workshops are very vital in teaching and learning process. The extent to which these spaces could enhance effective teaching and learning depends on their location within the school premises, their structure and instructional facilities. It is not unlikely that well planned instructional spaces in terms of location, structure and facilities will facilitate effective teaching and learning process and as well as enhance good academic performance of the pupils.

Consequently, on emphasizing the importance of instructional spaces to students' academic performance, Mark (2000) maintained that one cannot expect high level of students' academic performance where school buildings such as classrooms, libraries, textbooks, technical workshops, and laboratories are substandard. It is emphasized that clean, quiet, safe, and comfortable and health environment are important component of successful teaching and learning. Similarly, Ajayi, (2007) maintained that high level of student'/pupils' academic performance may not be granted where instructional facilities such as textbooks, classrooms, libraries, technical workshops, where necessary and laboratories are structurally defective, not properly ventilated and not spacious enough for use. It was further emphasized that structural effectiveness, proper ventilation space and well located instructional space may lead in the successful teaching and learning process in the school.

In the review of educational literature, it is frequently argued that the quality of education is dependent on a variety of factors some of which are the availability of

classrooms, furniture, equipment, textbooks, libraries, laboratories and technical workshops are crucial in teaching –learning process. Heinemanns (1980), Research in developed and developing countries has led him to the conclusion that students in developing countries perform much below than those of developed countries, because of inadequate and poor school facilities- He points out comparatively the achievement of Malawi standard eight students in mathematics and science is below that of Thailand, Iran, Chile, and developed countries such as Sweden, U.S.A. and U.K. Thus, in the context of this important aspect (school instructional facilities) there must be adequate and required number of school facilities so as to have better and qualitative education in all parts of the country.

Heyneman (1980) maintained that at the minimum a school is acceptable if it can provide a place for students to work without the danger of a roof collapsing; if neither wind nor rain sends students in to the corner for protection, if there is a place for each to sit down, a place to write, material to write with and a certain minimal number of maps, charts, and reference books from which to derive information. He goes on to argue that Malawi is far from attained the goal of acceptable schools. This would equally and inevitably be applicable to most developing countries. He maintained that, in Malawi classroom activities are frequently interrupted by rains or strong winds and it is not unusual for walls to collapse. Teachers have office or chairs, pupils' squat on the floors and write on slates or in their exercises books balancing them between their knees.

An interesting contrast is that between Maryland, U.S.A, and Malawi. A single school in Maryland invested about $ 518 per pupil for the purchase and maintenance of furniture, reading materials and equipment compared to less that is the case $ 1.00 in any given school in Malawi. Given this differences between developed and developing countries, it is evident that what pupils learn in school in less developed countries is much less than is the case in developed countries (Heinemann and Jamison, 1980)

2.10 Social and Emotional Learning Development and Pupils' Academic Performance

Social and emotional learning is processes for helping students develop knowledge, understanding and skills that support pupils' learning. It is now well established in the research that social and emotional skills are integral parts of academic success. A recent meta-analysis of 207 studies of social and emotional learning programs conducted by CASEL (Durlak etal,2008), found that students who participated in social and emotional learning programs improved significantly in their social and emotional skills and their attitudes to themselves, others and school. They also scored higher on standardized achievement tests relative to peers not receiving the program.

A research on the benefits of developing children's social, emotional and behavioral skills, (Weave and Gray, 2003), identified that emotional and social competencies have been shown to be more influential than cognitive abilities for personnel, career and scholastic success. The study demonstrated that education gains from programs that teach social and emotional competences include improve school

attendance, higher motivation and higher morale, social and emotional competences are becoming increasingly central in work places with growing emphases on team work, communication and management skills (Goleman, 1996).

It was found that social and emotional learning result in improved behaviour in students. Programs intended to teach social competence were shown to be effective in decreasing early behaviour problems (Wells, 2000). Studies showed that children with challenging behaviours have responded positively to programs that focus on developing their social and emotional skills. The teaching of social and emotional skills has been effective in improving learning environment for all students and promoting the inclusion of those with behavioral challenges. Teaching students the skills to manage emotions can assist teach (Green, 1994). There is evidence that cognitive processes need input from emotions to be effective. Emotions such as sadness and anger can block learning, while others such as sense of well-being or feeling safe and valued can promote learning.

There is strong link between social and emotional development and mental health (Greenberg, 2003). The development of social and emotional competence can reduce the mental health problems of young, people e.g. depression, anxiety, suicide, eating disorders and stress. Studies confirmed that children with emotional and behavioral problems are prone to the increased likelihood of social exclusion, offending and antisocial behavior and alcohol and other drug use. Children with high levels of

social and emotional competence do better in school, at work and even in their personal life

2.11 Physical development and pupils 'academic performance

The purpose of this aspect is to review relationship of academic performance and some of its determinants to participation in school-based physical activities, including physical education, free school physical activity and school sports. Therefore, linkages between academic achievement and environment in physical education, school Personal Assistant and sport programs will be examined based on a systematic review of currently available literature.

Thus, Quasi- experimental data indicated that allocating up to an additional hour per day of curricular time to physical activity programs does not affect the academic performance of primary school pupils negatively, even though the time allocated to other subjects usually shows a corresponding reduction. An additional curricular emphasize on physical education may result in small absolute gains in grade point average (GPA) and such findings strongly suggested a relative increase in performance per unit of academic teaching time.

The intent in this study is to assess the effects on academic achievement. It was found that physical activity programs may have a positive impact on learning and memory. It is now fairly well-recognized that physical activity is associated with the maintenance of cognitive function in older adults and offers some protections against

Alzheimer's disease. Nevertheless, any positive influence of physical activity on the cognitive functions of children is important for at least two reasons: One, it is a potential argument for increasing PE or other types of school PA without risk of decreasing academic progress, and two, it may offer a way to reduce disruptive at school and the drop-out from educational programmes

Further more, the overwhelmingly majority of such programs have demonstrated an improvement in some measures of physical fitness (PE). Cross sectional observation showed that a positive association between academic performance and Personal Assistant has positive influences on concentration, memory, and classroom behavior. Therefore, given competent providers, Personal Assistant can be added to the school curriculum by taking time from other subjects without risk of hindering students' academic achievement.

2.12 Presenting the lesson

The beginning of each lesson provides the challenge of how to change the focus of the students' attention from previous classes or discussions with friends to the objective of the lesson. The importance of eliciting appropriate association prior to presenting a lesson can be found in research on positive transfer and advanced organizers (Ausubel 1960, Gransford and Johnson 1972). Research indicates that the learning of facts is greatly facilitated when memories of organized principle and pre-requisite concepts related to the lesson are reviewed at the beginning of the lesson. The focus portion or anticipatory set as it is called by Madeline Hunter requires the students

overtly or covertly have the pre-requisites in memory. The activity must be designed effectively to elicit information relate to the lesson objective.

There is also the need during the opening for the students to know the direction of the instruction, the relevance of what they are learning and to have a sense of continuity. Students are often not able to see the relationship between today's work and the work from yesterday. Sharing the objective of the lesson informally with students would include teacher statements such as "What we are going to do today" and "the reason why we are studying a particular concept"

Stevens, 1986, Hunter 1982), periodic and formal assessments of students learning through a mid-term or final examination may be helpful in formulating grades, but are not frequent enough to enable the teacher to adjust the teaching to correct for misconceptions. Therefore, when observing a lesson, administrators should note the points in the lesson where teachers should monitor instruction as it progresses to enable them to immediately respond to students' misunderstandings and ensure that all students are learning the materials. Checking for understanding can be done in large groups having the entire students signal the response at the same time to the same question. This can be done with the use of their fingers to signal multiple choice answers 1, 2, or 3,the first letter of a word, or thumbs up or down to indicate true or false (Hunter, 1982). Other techniques for group signaling include the use of individual chalkboards, ceramics tile, or laminated cards on which students record their responses with a grease pencil or crayon and flash the answer. A group choral response can also be used. Students'

understanding can also be checked through the use of brief written responses, or min-diagnostic test. As students are competing the quick quiz, the teacher walks round the room monitoring the approach the students are using to solve the problems as well as their answers, and determines if adjustment in teaching needs to be made. Another method would be a pair share where students take turns telling each other the answers to two different questions related to the same objective while the teacher monitors. Although some, measures, may not indicate specifically which student are confused, they do provide the teacher with the information needed to determine if the direction or pace of the lesson needs to be adjusted.

Thus, teachers who monitor progress as part of their teaching have all students perform some observable behavior Congruent with the objective of the lesson while they check the behaviour. They analyze the correctness and competences of the responses and determine if it is necessary to re-teach certain segments of the lesson before they move on. Once this is completed they proceed to the next concept- teaching, re-teaching if necessary and providing the necessary practice.

2.13 The current situation of teaching/learning social studies in public and private schools

The teaching of social studies powerfully and authentically begins with a deep knowledge and understanding of the subject and its unique goals. Social studies programs prepare students to identify, understand, and work to solve the challenges facing the diverse nation in an increasingly interdependent world. Education for

citizenships should help students acquire and learn to use the skills, knowledge, and attitudes that will prepare them to be competent and responsible citizens throughout their lives. Competent and responsible citizens are, informed and thoughtful participate in their communities, are involved politically and exhibit moral and civic virtues.

The subject of social studies is taught to promote civic competence in the students and displinary, knowledge of social studies is drown primarily from the social science i.e. anthropology, economics, geography, history, political science, psychology etc. effectiveness of teaching depends on teachers' knowledge, attitudes, beliefs, and skills to develop close contact with students. The present study was undertaken to find out the current situation of teaching and learning of social studies in public and private schools- Data was solicited from thirty teachers and hundred students through structured interviews. The information collected through interview was organized under different themes. Response averages were calculated to support the narrative data, Narrative data was further reported as it was described by the interviewees. Teachers and students views were found contradictory on some points that raised some serious questions about important areas of concern in teaching and learning of social studies in public and private schools.

Consequently, the last decade of the twentieth century and the first decade of the twenty first have seen a marginalization of social studies curriculum, instruction, and assessment at all grade levels. Therefore, social studies are taught in both public and private schools in line with the curriculum instruction. Powerful social studies teaching

helps students to develop enduring understanding in the core content areas of crises, economics, geography, and history and assures their readiness and willingness to assume citizenship responsibilities. The powerful learning of social studies leads to a well-informed and civic minded citizenry that sustain and build on democratic traditions. In fact the current situation of teaching and learning of social studies in both public and private schools is found to be significant. This is because social studies, is normally taught to the students in order for them to know their identity and their respective environment. It is also taught to make the students aware of their cultures, traditions, political set up, their resources and relationship between their various communities.

The position of social studies teaching and learning is of great importance to students in particular and society in general. This is because social studies teaching is meant to achieve the levels of civic efficacy that the nation requires of its citizens. The emphasis is on principles of teaching and learning that have enduring applicability across grades levels, social studies core content areas, and scope and sequence arrangements. The current situation of teaching and learning social studies in public and private schools is powerful; Meaningful, integrative, value-based, challenging and active.

The vital task of preparing students to become citizens in a democracy is complex. The social studies disciplines are diverse, encompassing and expansive range of potential content engages students I comprehensive process of confronting multiple dilemmas and encourages students to speculate, think critically, and make personal and

civic decisions based on information from multiple perspectives. A powerful and rigorous social studies curriculum provides strategies and activities that engage students with significant ideas, and encourages them to connect what they are learning to their prior knowledge and to current issues, to think critically and creativity about what they are learning and to apply that learning to authentic situations.

2.14 Empirical Studies

In a comparative study on the academic performance among students in higher education of learning in Kano state, Yusif (2003) found that gender plays a role in determining the academic performance of the learners. He found out that male students perform better than female students in social studies because male students get enough time to go to library compared to their counterparts who are pre-occupied with many activities especially at home.

The above research is similar to this study because he made comparative study on the academic performance of male and female in social studies in the higher institution of learning. The only difference between his research and my study is that, his research was in higher institution of learning, while my research was carried out on the academic performance of public and private schools in social studies in the primary schools not in the higher institution.

Another comparative study was made by Aminu (2000), on the impact of social stratification on academic performance of students of secondary schools in English

language between the upper and lower classes in Kura local government area, Kano state. His study revealed that even though parents have great interest towards education of their children, hence some parent's financial and social background do not allow their children to be fully educated, and as a result of this a clear distinction was found in academic performance between students from the upper and lower classes.

The above study is different to my own research because it was a comparison of academic performance of secondary school students in English language in Kura local government area, while my research is based on the comparative of the performance of primary school pupils of public and private schools in Dala, Rimin Gado and Rano local government areas, Kano state not in the Kura local government area.

In another comparative study conducted by Kabir (2009) on the performance of N.C.E III male and female students in federal collage of education Gumel, Jigawa state in History, he found out that male students perform better than female because of the insufficient time for the female to read as much as possible. The male students produced excellent result because they had enough time to read and conduct researches as much as they desired. This makes it possible for the male students to perform better than female students.

The above comparative study is quite different from this research because his comparative study was in History of N .C.E III male and female students, but my study is aimed at finding out the differences in academic performance among primary school pupils in social studies in public and private schools

In a comparative study conducted by Umar (2012) on the academic performance of some selected private secondary school students in Kano State, he found that gender plays a role in determining the academic performance of the learners. He found out that male students perform better than female students in their Social studies subject, because male students always conduct extra researches both in school and at home, unlike the female students who often engage in some playing activities. This therefore made it possible for male students to perform well than female students.

The above research is similar to my own study, because he made comparative study on the academic performance of male and female in social studies in private secondary schools. The only difference between his research and my study is that, his research was on private secondary schools, while my research was carried out on the academic performance of public and private primary schools in social studies not in the private secondary schools.

In another comparative study carried out by Habib (2006), on the academic performance of Private secondary school students in Mathematics in Kano State, he found that no significant difference existed in the academic performance of students in all the private secondary schools he selected for his research.

The above study is different to my own research because it was a comparative study of academic performance of private secondary school students in Mathematics, while my research is based on the comparative of the performance of primary school

pupils of public and private schools in Dala, Rimin Gado and Rano local government areas.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presented the general method, procedure and strategies for collecting data for the research. The methodology was discussed under the following headings: research design, target population, sample and sampling techniques, instruments for Data collection, validity of instrument, reliability of the instrument for Data collection and procedures for data analysis.

3.2 Research Design

The research design of this study is multiple research design i.e. quasi-experimental design and survey. Quasi-experimental design involves selecting group upon which a variable is tested, without any random pre-selection processes. It is often integrated with individual case studies; the figures and results generated often reinforce the findings in a case study and allow some sort of statistical analysis to take place. In fact, quasi- experimental design is normally constructed to analyze the effects of different educational programs on two groups of children, which generates results that show that one program is more effective than the other. While survey research method according to Abdullahi (1995) is a form of descriptive research used when dealing with a very systematic collection of data or information from population or sample of the

population through the use of personal interview opinion scale, questionnaire and observation.

Rasaq (2000) also viewed survey research as a study which involves an investigation on entire population of people or items by collecting data from sample drawn from population and assuming that these samples are representative of the entire population.

3.3 Target Population

In line with the objective of the study that is to find out differences in academic performance among pupils of private and public schools in Dala, Rimin Gado and Rano Educational zones, the target population for this study is made up of primary school pupils and teachers from the following private and public schools in Dala, Rimin Gado and Rano Educational zones. They are totaling eighty thousand (80,000) in number. Their distribution is as shown in table 3.1.

Table 3.1 Target Students' population for the Study.

S/No	Schools	Number of schools	Pupils' Population
1	Public Schools	117	46348
2	Private schools	89	33652
3	Total	206	80,000

(Source: State Universal Basic Education Board 2012)

Table 3.2 Target Teachers' Population for the Study

S/No	Schools	Number of schools	Population of Teachers
1	Public Schools	3	15
2	Private schools	3	15
3	Total	6	30

(Source: Public and Private Primary Schools 2012)

3.4 Sample and Sampling techniques

The researcher drew his sample based on the recommendation of Krejie and Morgan, (1970) which states that, "out of 1,000,000 populations; 384 sample sizes can be used as the sample size for a study. This made the researcher to use 1104 pupils to serve as sample for the study. The sample was drawn from a population of eighty, thousand (80,000) pupils, teachers and Head teachers. The decision to use this sample by the researcher was informed by such factors as; cost, time and so on.

The researcher used stratified and proportionate sampling techniques in the selection of sample. Stratified sampling means the process of grouping members of the population in to relative homogeneous sub-groups before sampling. The strata should be mutually exclusive and every element in the population must be assigned to only one stratum. The researcher used stratified proportionate sampling by grouping the subjects of the study,

i.e primary school pupils into two (2) based on sex barrier and proportionate allocation was used in each of the strata i.e. males and females to that of the population, the decision to use this sampling technique was informed by fact that the number of male pupils was greater than that of female pupils and as such, equal numbers of males and females cannot be taken to form the sample for the entire population.

3.5 Instrumentation

The instrument for data collection used in this study was questionnaire designed by the researcher. A set of questionnaire for both pupils and teachers was used. Forty questions were constructed from the social studies subject selected by the researcher and the questions were answered by the pupils selected as sample from the entire population. A teacher questionnaire was also constructed in order to have vital information for making a good comparative analysis of public and private primary schools within the three different educational zones of Dala, Rimin Gado and Rano.

3.5.1 Validation of research instrument

According to Osuala (1987) an instrument for a research could be valid when it measures what is supposed to measure. Therefore, to establish the validity of the instrument, experts and professionals were consulted, as such the language can be adjusted and some items could be dropped. The research instruments were submitted to the research supervisor for further comments and suggestions before the final draft was taken for pilot testing.

3.5.2 Pilot study

The constructed test-items were tried in pilot test; this was to ascertain the suitability of the instrument. The pilot study was carried out in selected public and private primary schools outside the study area. Questionnaires were provided to the pupils and the questions were answered by the pupils. The researcher collected back the questionnaires and marked. The purpose of the pilot study was to determine the reliability of the questionnaire, its level of difficulty and to see whether it has power to disseminate over results.

3.5.3 Reliability of the Instrument

Pilot study was conducted to establish the reliability of the instrument. Therefore, test and retest method of establishing reliability was applied. In this study (20) questions were selected outside the study area for pilot testing. The instrument was first administered to one public primary school and the other was administered to one private school later for pilot testing. The Peason product moment Correlation Co-efficiency (PPMCC) was used to establish the reliability of the instrument, and the result shows that (r) was 0.95.It was based on this (r) figure that instruments were administered to the respondents.

3.6 Procedure for Data collection

The researcher collected a letter of instruction from the department of Education A.B.U. Zaria to the Kano state universal Basic Education Board division to help the researcher

to get permission from the schools authorities. Thus, one thousand one hundred and four (1104) copies of the questionnaires were distributed to the six different public and private primary schools in the three different educational zones, with the help of research assistants who were trained on the process of distributing and collecting the questionnaires on behalf of the researcher.

The researcher adopted self-administration method of test administration in the sense that the researcher administered the test –items with help of research assistants and then collected them back for analysis. This method was chosen because in some schools permanent teachers influence external exams by telling pupils correct answers e.g. common entrance exams. The completed questionnaires were collected back and checked and ensured that the respondents complied with the instruction given in the questionnaires.

3.7 Procedure for data analysis

The statistical techniques used in analyzing the data collected are: ANOVA (analysis of variance) and Chi-square (X^2) statistical tools as a non parametric method of testing hypotheses. The researcher used ANOVA to analyze the scores obtained after the study because the groups are two. The decision to use the variable sex was to see if gender can play a role in bringing about differences in the performance of both public and private school pupils. The researcher also used Chi-square which is used to establish whether or not a significant difference exist between the variables at 0.05 level of significance

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This research work titled "Comparative study of pupils' academic performance in social studies in selected public and private primary schools in Kano state". Comprises of six schools drawn from private and public schools each having head teacher and teachers. This chapter contains analysis of data in line with the research questions and research hypotheses.

The researcher conducted test for 1104 pupils from both private and public primary schools selected from three different local governments. The researcher marked the test and analyzed it statistically.

Table 4.1 Mean and Standard Deviation of pupils in Dala Local Government Area.

Groups	Number of pupils	X= Mean	S.D
Private	184	36	6.1
Public	184	36.2	6.2
Total	368		

From the above table, it can be inferred that no much difference exist in the Mean and Standard deviation of the two schools studied. The difference in the mean scores of private schools and public schools is less than one. The same thing applied to

standard deviation as depicted in the table. This therefore shows that no significant difference exists in the pupils' academic performance in their social studies subject of the two different schools studied.

Table 4.2 Mean and Standard Deviation of Pupils in Rano Local Government Area

Groups	Number of pupils	X= Mean	S.D
Private	184	39.0	6.4
Public	184	38.6	6.3
Total	368		

It can be seen from the above table that there is no much difference in the Mean and Standard deviation between the two different schools studied. The difference in the Mean scores of private and public schools is less than one. The same thing applied to Standard deviation as mentioned in the table. This shows that there was no significant difference that exists in the pupils' academic performance in the social studies subject of the two different schools studied.

Table 4.3 Mean and Standard Deviation of Pupils in Rimin Gado Local Government area

Groups	Number of pupils	X= Mean	S.D
Private	184	25.1	5.1
Public	184	24.6	5.4
Total	368		

Thus, it can be observed from the above table that no much difference exists in the Mean and Standard deviation of the two schools studied. This is because the difference in the scores of private and public schools is less than one. The same thing applied to standard deviation as indicated in the table. Therefore, it shows that there was no significant difference that exists in the pupils' academic performance in the social studies subject of the two schools studied.

4.2 Data analysis of pupils' answers to research questions

Data collected from pupils in response to the research questions of the study were analyzed in tables 4.1, 4.2, 4.3, 4.4, 4.5 and 4.6. Head teachers and teachers' responses in terms of qualified teachers and welfare of teachers in public and private schools were also analyzed in tables 4.3 and 4.3.4 in order to have better understanding and clear interpretation of data.

4.3 Testing of Research Hypotheses

The five research hypotheses were postulated for this research and analyses as well as interpretations are given in the sections below;

4.3.1; Hypothesis 1: There is no significant difference in the academic performance of male pupils in social studies subject of private and public primary schools.

The first hypothesis was tested using one-way analysis of variance to see whether a difference could be obtained in academic performance of male pupils in two schools and the result is presented below:

Table 4.1 Summary of the scores obtained by male pupils of private and public schools in Dala Local Government Area

Scores of variation	Sum of squares	Degree of freedom (d.f)	M-square	F-Ration	P
Between the group Within the group	5458. 5 384956	237 2	1293664.5 769912	0.60	0.05
Total		239			

The summary table above shows that the calculated value (0.60) is less than the critical value (3.00) a= 0.05 with d.f (2,237) which is less than 1. This means that the null hypothesis is accepted that there is no significant difference in the academic performance of male pupils of public and private primary schools in Dala Educational zone.

4.3.2. Hypothesis 2: There is no significant difference in the academic performance of female pupils in social studies subject of private and public primary schools in Dala local government area.

The same procedure was employed in analyzing female scores in the two schools and the result is presented below:

Table 4.2 Summary of the scores obtained by the female pupils of private and public schools in Dala Local Government Area

Scores of variation	Sum of squares	Degree of freedom (d.f)	M-square	F-Ration	P
Between the group Within the group	1659 11,4989	237 2	393183 229978	0.585	0.05
Total		239			

The summary table above shows that the critical value (3.00) is greater than the calculated value (0.585) a= 0.05 with d.f (2,237) which is less than 1. This means that the null hypothesis is accepted that there is no significant difference in the academic performances of female pupils of private and public primary schools in Dala local government area

Table 4.3 summary of the scores obtained by Male pupils of Private and Public primary schools in Rano Local Government Area

Scores of variation	Sum of squares	Degree of freedom (d.f)	M-square	F-Ration	P
Between the group Within the group	6745 425315	237 2	1598565 850630	0.532	0.05
Total		239			

The summary table shows that the calculated value (0.532) is less than the critical value (3.00) a= 0.05 with df (2,237) which is less than 1. This means that the null hypothesis is accepted that there is no significant difference in the academic

performance of male pupils in social studies subject of public and private primary schools in Rano local government area.

The same method was also used in analyzing the females' scores in the two schools and the result is presented below;

Table 4.4 summary of the scores obtained by female pupils of Private and Public primary schools in Rano Local Government, Area

Scores of variation	Sum of squares	Degree of freedom (d.f)	M-square	F-Ration	P
Between the group Within the group	5512 142744	237 2	1306344 285488	0.220	0.05
Total		239			

The summary table above indicated that calculated value (0.220) is less than the critical value (3.00) a= 0.05 with d.f (2,237) which is less than 1.This shows that the null hypothesis is accepted that there is no significant difference of female pupils in the social studies subject of public and private primary schools in Rano local government area Kano state.

The table 4.5 Summary of the scores obtained by male pupils of Private and Public primary schools in Rimin Gado Local Government Area

Scores of variation	Sum of squares	Degree of freedom (d.f)	M-square	F-Ration	P
Between the group Within the group	7147.75 181315.25	237 2	1694016.75 362630.5	0.214	0.05

Total		239			

The summary table above shows that the critical value (3.00) is greater than the calculated value (3.00) a= 0.05 with df (2,237) which is less than 1. This means that there is no significant difference in the academic performance of male pupils in social studies subject of private and public primary schools in Rimin Gado local government area.

Table 4.6 Summary of the scores obtained by Female Pupils of Private and Public primary schools in Rimin Gado Local government area

Scores of variation	Sum of squares	Degree of freedom (d.f)	M-square	F-Ration	P
Between the group Within the group	1314 757993	237 2	311418 151586	0.486	0.05
Total		239			

The summary table above shows that the critical value (3.00) is greater than the calculated value (0.486) a= 0.05 with d.f (2,237) which is less than 1. This shows that the null hypothesis is accepted that there is no significant difference in the academic performance of female pupils in the social studies subject of private and public primary schools in Rimin Gado local government area of Kano state.

Thus, the analysis conducted using one way analysis of variance (ANOVA) for the (6) different schools studied shows that all the null hypothesis earlier stated in

chapter one of the study have been accepted that no significant differences existed in the academic performance of pupils in social studies in the six different private and public schools in three different Educational zones.

4.3. Hypothesis 3: There are no significant differences in terms of better school facilities between the private and public primary schools.

4.1 Table below shows the Number of Private and Public schools' Teachers who have chosen "Yes" and "No" concerning better school facilities between private and public schools.

Better school facilities	Private	Public	Total
Yes	30%	25%	55%
No	10%	35%	45%
Total	40%	60%	100%

:. $X^2 = E\ (\underline{fo\text{-}fe})$

Fe

Cell a = $\underline{55 \times 40}$ = 22

100

Cell a = $\underline{55 \times 60}$ = 33

100

Cell a = $\underline{45 \times 40}$ = 18

100

Cell a = $\underline{45 \times 60}$ = 27

100

Table 4.2 Chi-square statistics showing the opinions of Private and Public primary school Teachers on the Better school Facilities in private and public primary schools

Cell	F0	Fe	F0-fe	(f0-fe)2	(fo-fe)2/fe
A	30	22	8	64	2.9091
b	10	33	-23	529	16.0303
c	25	18	7	49	2.7222
d	35	27	8	64	2.3704
Total					24.032

The table 4.3.2 above shows that the Chi-square value which is 24.032 is far greater than the Chi-square table value which is 3.841 at 0.05 level of significance with degree of freedom of 1. This shows that there are no significant differences in terms of school facilities among the private and public primary schools in six different schools selected from three local governments.

4.4 **Hypothesis 4:** There are no significant differences in terms of qualified teachers between private and public primary schools.

Table 4.3 Indicating the Percentage of Private and Public primary school Teachers that have chosen "Yes" and "No" about qualified teachers in private and public primary schools

Qualified Teachers	Private	Public	Total
Yes	40%	20%	60%
No	25%	15%	40%
Total	65%	35%	100%

Table 4.4 Chi-square statistics showing opinions of Private and Public primary school Teachers on the Availability of Qualified Teachers in private and public primary schools in three different local governments

Cell	F0	Fe	F0-fe	(f0-fe)2	(fo-fe)2/fe
A	40	39	1	1	0.0256
b	25	21	4	16	0.7619
c	20	26	-6	36	1.3846
d	15	14	9	1	0.0714
Total					2.2435

:. X^2 = 2.2435

Cell a = $\frac{60 \times 65}{100}$ = 39

Cell b = $\frac{60 \times 35}{100}$ = 21

Cell c = $\frac{40 \times 65}{100}$ = 26

Cell d = $\frac{40 \times 35}{100}$ = 14

The table 4.1 Shows that the calculated value of the Chi-square which is 2.2435 is less than the Chi-square table value, which is 3.842 at 0.05 of significance with degree of freedom of 1. This means that there are significant differences in terms of qualified teachers in private and public primary schools and based on the collected

data, it shows that private schools are having more qualified teachers than the public primary schools

4.5 Hypothesis 5: There is no significant difference in terms of teacher welfare in three different local governments.

Table 4.5 showing the statistical percentage of primary teachers of private and public schools that have chosen "Yes" and "No" about the welfare of the teachers in private and public schools

Welfare of Teachers	Private	Public	Total
Yes	20%	30%	50%
No	35%	15%	50%
Total	55%	45%	100%

:. $X^2 = E\ (fo\text{-}fe)$

Fe

Cell a = $\frac{50 \times 55}{100} = 27.5$

Cell b = $\frac{50 \times 45}{100} = 22.5$

Cell c = $\frac{50 \times 55}{100} = 27.5$

Cell d = $\frac{50 \times 45}{100} = 22.5$

Table 4.6 Chi-square statistics showing opinions of private and public school teachers on the teachers' welfare in private and public private schools

Cell	F0	Fe	F0-fe	(f0-fe)2	(fo-fe)2/fe
A	20	27.5	-7.5	56.25	2.0455
b	35	22.5	12.5	156.25	6.9444
c	30	27.5	12.5	6.25	0.2272
d	15	22.5	-7.5	56.25	2.5000
Total					**11.7171**

:. X^2 = 11.7171

The table 4.6 above shows that the Chi-square value which is 11.7171 is greater than the Chi-square table value which is 3.841 at 0.05 of significance with degree of freedom of 1. This shows that there are no significant differences in terms of welfare of teachers in private and public primary schools in three local governments studied.

4.4 Summary of Findings

The Data collected and analyzed from the six (6) different primary schools tests of private and public and responses of the teachers of private and public schools on better school facilities between private and public schools, qualified teachers and welfare of teachers in the private and public schools revealed the following:

a) There was no significant difference in the academic performance of male pupils in all the six private and public primary schools studied from three different local

governments selected. The male pupils in the six schools were separated from the females to see if any significant differences can be found in their performance, the results revealed that there are no significant differences in the academic performances of the male pupils in the social studies subject.

b) The study also revealed that there was no significant difference that exists in the academic performance of female pupils' social studies subject in the six (6) schools studied in three local governments. Although, the schools differ in many areas like funding, administrative management, location, number of teachers and variables such as incentives to teachers, adequate monitoring etc, yet no significant differences were noted in the performance of the pupils in social studies.

c) The study revealed that there were no significant differences in terms of school facilities between the private and public primary schools. This was arrived at after using the Chi-square value which is 24.032 which is far greater than the Chi-square table value which is 3.841 at 0.05 significance with degree of freedom of 1. This therefore confirmed that there were no significant differences between private and public primary schools in terms of school facilities.

d) The table 4.5 shows that there were significant differences in terms of qualified teachers between the private and public primary schools in all the six schools selected from three different local governments.. This was arrived at after calculating the Chi-square value which was 2.2435 is less than the Chi-square table value which

is 3.841 at 0.05 of significance with degree of freedom of 1. This means that there are significant differences in terms of qualified teachers between private and public primary schools, and based on the collected data, it shows that private schools are having more qualified teachers than the public primary schools in three different local governments.

e) The study was finally revealed that there were no significant differences in terms of teacher welfare in all private and public primary schools selected from three different local governments. This was arrived at after using the Chi-square value which is 11.7171 which is greater than the Chi-square table value which is 3.841 at 0.05 of significant with degree of freedom of 1. This therefore mentioned that there were no significant differences in terms of teachers welfare in all private and public primary schools selected from three different local governments. .

4.5 Discussion of Major Findings

This research was under taken on the "comparative study of pupils' academic performance in social studies in selected public and private primary schools in Kano state." Therefore, to realize this purpose, the researcher raised five specific objectives, research questions and five null hypotheses. Thus, ANOVA which is the analysis of variance was used in analyzing the scores of the pupils' tests. Similarly, Chi-square for the independent sample was also used to test the other three hypotheses at 0.05 level of significance. Because the researcher used two instruments

i.e. test for the pupils and teacher questionnaire. In a nutshell, the major findings of this investigation were presented below:

The analysis of first hypothesis showed that there was no significant difference in the academic performance of male pupils in their social studies subject of all the primary schools selected from three different local governments. This was ascertained after they were separated from the female pupils. This was arrived at after comparing the scores obtained by the pupils of each school. Thus, based on the data collected and analyzed, it became obvious that there was no significant difference in the academic performance of male pupils in social studies in all the private and public schools selected from three different local governments..

The outcome of the second hypotheses also indicated that there were no significant differences in the academic performance of female pupils after they were separated from the male pupils. This was arrived at after comparing the scores obtained by the pupils of each school. Thus, based on the data collected and analyzed, it has become clear that there was no significant difference exists in the female pupils academic performance in social studies subject of all the private and public primary schools selected from three different local government of Kano state.

It is therefore important to note that the main reason for classifying the pupils according to gender was necessitated by the fact that the researcher wanted to see whether or not gender plays role in determining academic performance among pupils

as expressed by Yusuf (2003) that gender plays role in determining academic performance. He supported his ideas using a study conducted on the academic performance of students in higher institutions of learning where he found out that male students performed better than the female students because the male students have enough time to go to library as compared to their female counterparts who are most often pre-occupied with domestic activities.

The analysis of the third hypothesis showed that there were no significant differences in terms of better school facilities between the private and public schools. This was clearly demonstrated by table 4.5 that the chi-square value which was 24.032 is far greater than the chi-square table value which is 3.841 at 0.05 level of significance with degree of freedom of 1. This obviously shows that no significant differences existed in terms of better school facilities between the private and public primary schools selected from three different local governments.

The outcome of the fourth hypothesis indicated that there were significant differences in terms of qualified teachers in the private and public primary schools. This was ascertained after calculating the chi-square value which was 2.2435 which is less than the chi-square table value which is 3.841 at 0.05 level of significance with degree of freedom of 1. This means that there were significant differences in terms of qualified teachers in private and public primary schools, and based on the

collected data and analyzed, it shows that private primary schools are having more qualified teachers than the public primary schools.

Moreover, it is now clear that the private primary schools that are selected from three different local governments in Kano state are having more qualified teachers than the public schools selected in the three local governments.

The analysis of the last hypothesis shows that there were no significant differences in terms of teachers' welfare in the private and public primary schools. This information was obtained after calculating the chi-square value which was 11.7171 which is greater than the chi-square table which is 3.841 at 0.05 level of significance with degree of freedom of 1. This shows that there were no significant differences in terms of teachers' welfare in the private and public primary schools that have selected from three different local governments in Kano state.

Although the two type of schools i.e. private and public schools differed in terms of administrative management, supervision, funding location, building styles, number of pupils and teachers etc yet no significant differences existed between private and public primary schools selected from three different local governments, in terms of better school facilities and teachers welfare.

Thus, many people might have thought that private primary schools have better school facilities and teachers welfare than the public primary schools. However, based on the collected data and analyzed, it now shows that private

primary schools do not have better school facilities than the public primary schools and vice versa. It is also important at this juncture to note that no judgment can be concluded in the field of education without conducting a research. This is because it is when educational research is conducted that the actual information could be obtained.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter deals mainly with the summary, conclusion and useful recommendations based on the analysis conducted in the previous chapter, with view to proper solution in the practice of education in the study areas.

5.2 Summary

The first chapter is the introduction which served as starting point. Statement of the problem, purpose of the study, research question, hypothesis, basic assumptions, and significance of the study to various stakeholders in the practice of education for obtaining good output and scope and delimitation of the study were all explained in this chapter. Chapter is the review of related literature consisting of theoretical frame work, it also includes review of related literature on major aspects like teachers qualification and pupils academic performance, instructional materials, instructional school facilities, supervision etc. Chapter three contained the procedure of conducting the research i.e. research methodology. It also provided a detail explanation of data collection procedure which consists of instrument and the procedure used in its administration. Another important thing highlighted in this chapter is statistical analysis procedure employed in analyzing the result of the study

based on the measuring instruments. While chapter four is the analysis and results of findings.

5.3 Conclusion

Following the review of related literature, the researcher found out that difference in academic performance among learners is attributed to such factors like socio-economic background of the learners, family size, gender differences, nature of schools in terms of facilities and qualified teachers. Thus, these variables that assisted in making a child to achieve higher in teaching/learning are very necessary for better productivity.

Consequently, the analysis showed that there are no significant differences in academic performance of the male pupils in social studies after they were separated from the female pupils. This was arrived at after comparing the scores obtained by the pupils of each school. Thus, based on the data collected and analyzed, it proved that there was no significant difference in the male pupils' performance of private and public primary schools.

The outcome of hypothesis two mentioned that there was no significant difference in the academic performance of female pupils in social studies of private and public primary schools from the male pupils. This was arrived at after comparing the scores obtained by the pupils of each school. It revealed that no significant

differences existed in the female pupils' performance in all the schools selected from three different local governments

On the third hypothesis, it was found that there were no significant differences in terms of schools facilities in private and public schools. This was ascertained after calculating the chi-square value which is far greater than the chi-square table value. This shows that no differences exist in terms of school facilities in the private and public primary schools.

However, the fourth hypothesis demonstrated that there were significant differences in terms of qualified teachers in private and public primary schools. This was confirmed after making analysis on the data collected from teachers of six different schools selected from three local governments. After calculating the chi-square value which is less than the chi-square table value. This shows that private primary schools are having more qualified teachers than the public primary schools.

The outcome of the test of hypothesis five showed that there were no significant differences in terms of teachers' welfare in the private and public primary schools. This information was obtained after calculating the chi-square value which is greater than the chi-square table value. This shows that there were no significant differences in terms of teacher-welfare in the private and public primary schools selected from three different local government areas of Kano state.

5.4 Recommendations

The following recommendations were made on the findings as dependable solutions and suggestions that will immensely help in improving the quality of primary education:

1. Primary education should be understood by parents and government as the basic foundation for future levels of education that is secondary, tertiary and university institutions. It is therefore recommended that both parents and government should ensure that adequate facilities for teaching/learning commensurate to this era of technological advancement are provided in all primary schools not only within the study areas of this work but in all other local government areas of Kano state.
2. Closely related to teaching –learning facilities is teachers' condition of service and remunerations. Government should provide teachers with necessary incentives so as to motivate them for greater input to the teaching-learning activities. Doing this will therefore curtail the chance of qualified teachers running to private schools.
3. The study recommends that government should empower fully supervisory unit of ministry of education for prompt supervision of instruction to ensure that education practice in the state is done in accordance with approved regulations by the ministry of education.

4. The study further recommends that government should create a forum where all stakeholders in the business of education will be meeting to discuss areas of problems in primary education in the state and proper solutions to the problems.

5.5 Suggestions for further studies

1. Research by nature is a continuous process and this study was conducted on differences in academic performances among primary school pupils of private and public schools in Dala, Rano and Rimin Gado local government areas of Kano state. Thus, the same study can be conducted in other local governments of Kano state. This will provide rich literature on academic performance that can be used for development in education practice.

2. The research restricts itself to academic performance. There is therefore the need for studies in other areas that affect learning and the learners like moral reasoning. The researcher recommends that a research can be conducted to see whether there is a difference in moral reasoning among the pupils of private and public schools.

3. The research also limits itself to the lower level of education that is primary education. The researcher recommends that the research should be extended to secondary education.

4. It further recommends that the findings of this research and other similar researches should be pursued and implemented by the state ministry of education for greater output in the education sector.

5.6 Implications of the study to curriculum Planners

This research has created awareness to the curriculum planners on the effective usage of social studies syllabus in the private and public primary schools. The study also resulted to the exposition of effective curriculum system in the private and public primary schools. This is because the research revealed no significant differences in the social studies subject, the implication is that the curriculum planners can understand that the knowledge, skills and alternative strategies needed for effective teaching of social studies in the public and private primary schools are proved to be similar. The research also revealed to them the process involved of curriculum implementation in these selected public and private primary schools in Dala, Rano and Rimin Gado local governments areas.

5.7 Contributions to Knowledge

This research is very crucial because, the stakeholders in education and supervisors more especially the teachers, government, curriculum planners and even general public have now known the current status of academic performance of pupils in social studies as a subject in private and public primary schools in the three different educational zones selected from three local government areas of Kano state. This study also contributed greatly in knowing the availability of instructional school facilities, qualified teachers and welfare of the teachers in the private and public schools in the three different local governments. This research contributed in

knowing the current standard of primary education in private and public primary schools in the three different educational zones selected from three local governments of Kano state.

REFERENCES

Abba. K. (2004): *The impact* of socio-*economic status on pupils' academic performance Kano State.*

Unpublished Dissertation, Federal college of education, Kano

Adams H.P and Bickey, F.G (1966): *Basic principles of supervision.* New Delhi; Eurasia publishing

House (PVT) ltd. Pp14-19

Adeniye, M.O and Mungut, S. E (2000): *Entry qualification as determination of final performance*,

Journal of education studies Vol.2 pp 114-119

Adewole, E.E. and Olaniyi, W.O. (1992): *School Organization and Management*. Ife: Oluwa Press

Awotunde, P.O and Ugodulunwa, C.A. (2004) Research *Methods in Education* (1st edition). Jos: Fabian

Anieh (Nig. Ltd) First Edition: Jos

Akinkrotu, Y. (1991): *Effective primary education and Basis for quality* education *at all levels*. Jos:

Ziklog Educational Publishers

Akpan R.J (1995): *Educational administration in Nigeria*. Owerri: Executive publishers

Aminu, M (2000): The impact of social stratification on academic performance of students in G. S. S.

Dala, Kano. Unpublished B.Ed Thesis, Department of education, Sa'adatu Rimi college of Education,

Kano

Azzum, A.S (1997): Financial Education in Nigeria. *Journal of development Studies* Vol.21 (October)

pp 1-21.

Abdullahi, S (1995) *A survey Research*, Unpublished B.Ed Project. Sa'adatu College of Education, Kano

Ausubel (1960) *Presentation of the lesson*. New York: Stars publishers

Yadred and Siugh (1988) The Qualification of Teachers and Students Performance. London: Sage

Publications

Alexander (2000): The Quality of Teachers and Students' Performance. London: North-Western Bureau

Ballon and Podgursky (2000) The Teachers' Qualification and Students' Learning. U. S. A: United States

Department of Education

Barrlett, J.E. Kortrlik. J.W Higgins C.C. (2001). *Information Technology*, *Learning and performance*

Journal, Vol. 19 No.1, Spring 2001. Retrieved on April 14, 2009 from http://www.jstor.org/pss. pp.

225-235

Berliner, K (1987-2005) The Quality of Teachers and Their Roles in Schools. New York: Mcgrasstiu

Bichi Y. (2004): *Introduction to research methods*. Kano: Debisco press and Publishing Company

Braun and Hamilton (2004) The Effectiveness and Teacher Assessment System. U. S. A: United States

Department of Education

Borer. D.R (1974): *When children learn*. T and A constable Ltd: Edinburg

Comparative education, Vol 23, No.3 http:// www.jstor.org/pss. PP 225-235

Darlin and Frehow (2002) National Commission on Teaching and American Future. U. S. A: Multi-

Purpose Publication Company

Darlin, H(2006) Teachers Preparation in the Subject Matter and Students' Achievement. U. S. A: Multi-

Purpose Publishers

David S. Moore (2005): "*Introduction to the practice of statistics*"(5th edition) W.H Freeman and

Company

Duluth, Patrick and Johnson (2008): *Social and emotional learning development*. A Research Material.

London: Common Wealth Secretariat

Eliametalor, E.T (2001) : *School facilities Management practice*" in N.ANwagu, E.T Eliametalor, M.A

Ogunu & M.O. N Nwandiani (Eds), Current issues in Educational Management in Nigeria Benin;

NAPEP

Ezekiel, J.S (2008): A comparative analysis of the Academic Performance of Students admitted through

JAMB & Pre N C E, in college of education Gashuwa, Gokaram journal of education, vol.1(1): 170-

185

Educational system. Http: // www.tcu. Or t2/education % 20 system.html.Retrieved on 15th June, 2007

Farrant, J.S (1982): *Principle and practices of education.* Hong Kong: Sheek WahTong printing press

Federal Ministry of Education (1993): Better school management Head Teacher education. A research

Material. London: common wealth: Secretariat

Federal Government of Nigeria (2004): National policy on Education. Reproduced Sections. 1, 6, 7, 8, 9

And 12

Fenstermacher and Richardson (2005) Good Teaching and Successful Teaching. New York: Yusterns

Publishers

Goleman (1996): *Social and Emotional Competence*. A research material. London common wealth:

Secretariat

Gold Haber and Brewer(2000) Teacher and Students Relationship. U. S. A: United States Department of

Education

Goodhaber and Brewer (2000) Inadequate Teacher Preparation and Call for Professionalization of

Teacher Education. U. S. A: United States Department of Education

Greenberg (2003): *The development of social and Emotional competence*. A Research Material. London:

Common wealth secretariat

Horny, A. S (2000) *Oxford Advanced Learner's Dictionary*: Oxford University, press

Haggai, M. P and Das, S (1996*): Inter-personal relationship in the classroom and its influence on pupils*

Attitude towards school and achievement. Innovation approaches to education and human

Development. Jos LECAPS (NIG) Ltd.

Hinchifle, K. (2000): *Basic on education Nigeria; Issues, estimates and Some implications*, Abuja World

Bank

Hunter (1982): *Techniques for grouping signaling*. Wiley and sons, New York

Heyne Manns (1980): *Factors contribute greatly to Students'achivement*. London, publishers

Imogie A. I (1998): *Improving teaching and learning* .Benin Joseg Ltd

John, C .C & Vicki, P .C (2007): *Designing and conducting mixed methods Research*. London Sage

Publications

Jean-Noel. B (1980): "*An essay concerning mankind evaluation*", Population, selected papers, Vol.4, P 1.

Kraft, A. (Ed)(1977). *The living Classroom*: *putting Humanistic Education into Practice*: Harper and

Row Publishers, London

Krejie, R V & Morgan, D. W (1970): *Determining sample size for Research activities in education and*

Psychological Measurements

Kabir. S (2009): the relationship between family background and Children's Academic Performance in

Kano State. Unpublished Project: Sa'adatu Rimi college of Education, Kano

Lahey, .B .B (2001): *Introduction to psychology*. New York: Mc grass/tiu

Mgbodile. T.O and Joseph. G (1986): *Educational Administration and supervision*. Ibadan; Heyneman

Educational Books (Nig) ltd

Mark (2000): Importance of instructional spaces to students' academic performance. London: Oxford

University Press

Martin Shuttle Worth (2008): Quasi experimental Design. Retrieved on 06 Apr 2012 from experiment

Resources; http//.www.experiment-resouces.com/quasi experimental design.html

Moore. K .D (1989): *Classroom Teaching Skills*. Random House. U.S.A

Morgan, D.W and Krejie, R.V (1971)*Determining sample size for research activities. Educational and*

Psychological Management, Vol. 30-P608

Mouk and King (1994), The Effects of Teachers in Preparation on Students' Achievement. London:

Zobreaus Publishers

National Teachers Institute (2002). NCE/DLC Course Book on Education Cycle 1, Module 12, NTI

Nwaogu, J.I. (1980). *A Guide to Effective Supervision of Instruction in Nigerian schools*; Fourth

Dimension Publishing Company limited, Enugu

Nworgu, B.G (1991): *Educational research basic issues and Methodology*. Ibadan. Wisdom publishers

Limited

National Teachers Institute (2000): "An investigation of a decade of Correlation study between the entry

Qualification for Grade and N.C.EToday, Vol, 10(1): pp 88-96.

Obanya, P. (2000). *General Methods of Teaching*: Macmillan Nigerian Publishing Limited, Ibadan.

Obolade, A.O (2003). Challenges of future of Education in Nigeria: A Programmatic Perspective in

Multidisciplinary. Journal of Research Development Vol. 1 Number 1, March 2003 p. 1-4

Olaitan, S.O & Agusiobo O.N (2000); *Principle of Teaching Practical*. New York: John Wiley and Sons

Ozigi, A.O and Carham, P. (1979): *Learning and Teaching: Principle and Practice of Education for*

Nigerian Teaching Training Colleges, London: Oxford University Press

Osuala, E. (1987): *Introduction to research methodology*, Enugu. Africana FEP publishers

Sambo, A. (2005): *Research methods in education striling.* Ibadan: Holden Publishers

Smith, R (2011) Relationship Between Teacher Qualification and Students' Learning. London: McMillan

Press

Stevens and Hunter (1986): *Period and formal Assessment of students' learning*. Wiley and Sons, New

York.

Rasaq, B. Gabriel, T. and Samuel .J (2000). *Research Method and Statistical Analysis,* Ilorin: Haytee

Press ad Publishing Company Limited

Richmond, K.W. (1983*). Theories of Education Administration and Planning.* New York: Prentice Hall

Rirkin, K. (2000): *Relationship between Teacher experience and Students' achievement*. London: Harper

And Row Publishers

Tijjani, A.K and Shehu, S(2009). *Education to Educational Organization, Administration, Planning and*

Supervisory, Zaria: Nasif Print

Torrance, H.(1986): *what can examination contribute to school evaluation*. Educational Review. Vol.

38(1): pp 31-43.

The International Encyclopedia of education, Second Edition, vol. 7.pp 41-55

Thomas, J. R & Nelson, J.K (1990): *Research Method in physical education,* 2nd campaign Human

Kinetic Books. London: Allied Publishers

Thitgard, P. (1981): *Effect of teacher experience on students learning*. London, Sage publications

Urebvu, J. (1994). *An Introduction to Teacher Education*. Practice Hall: Havana Press

Wilkins, E. (1975): *Education in practice*. Ibadan: Evans Brothers Ltd

Wood, W.A (1968): *Primary school inspection in new countries*. London: London Pp5-20.

Wells (2000): *Social and Emotional Skills*. Hong Kong Shackwahtong.

Weave, G. (2003): *Emotional and social competences*. A research Material. London: common wealth

Secretariat

Yusif, A (2003): *A comparative study of academic performance of N.C.E III in Federal college of*

Education, Kano. Unpublished B.Ed Thesis, Federal college of education, Kano

APPENDIX i

STUDENTS' QUESTIONAIRE

Department of Educational Foundation and Curriculum

Ahmadu Bello University, Zaria

These are test- items constructed to find out the differences in academic performance among primary school pupils in social studies in selected public and private primary schools in three different educational zones. Please. Kindly respond to all the questions. Information collected will be treated with confidentiality.

Instructions: Write the answer of the following questions and tick ( ) the answer you have chosen where necessary.

SOCIAL STUDIES

1. Is the knowledge of social studies important to you?

(a) Yes ☐

(b) No ☐

2. What do you think is the main benefit of learning social studies?

_____

_____

3. What do you feel when studying the subject of social studies?

_____

_____

4. Write four types of Transportation system.

(a) _____ (b) _____

(c) _____ (d) _____

5. Draw four farming tools which you know.

6. Co-operation is a good idea because;

(a) It allows people to achieve good result ☐

(b) It is a process of exploitation ☐

(C) All of the above ☐

7. What is your attitude towards the study of social studies?

_____

_____

8. The teaching/Learning of social studies makes a man to know his----

(a) Personality ☐ (b) Ideology ☐

(c) All of the above ☐ (d) None of the above ☐

9. Why do you want to study social studies?

_____

_____

10. The attitude of worshipping other supreme beings rather than God is----

(a) Good ☐ (b) wrong ☐ (c) All of the above ☐

(d) None of the above ☐

11. The teaching and learning of social studies in our societies is important.

(a) True ☐ (b) False ☐

12. Do you agree that man has control over his environment?

(a) Yes ☐ (b) No ☐

13. Which one of the following will you believe is the meaning of physical development?

(a) Boys and girls start having hair at armpit and private part ☐

(b) Boys and girls start to show dishonesty ☐

(c) Boys and girls do their work together ☐

(d) None of the above ☐

14. Regular exercise brings;

(a) Good health ☐ (b) Obstacle to the body ☐

(c) None of the above ☐

15. People who practice traditional religion believe that;

(a) They can approach God directly ☐

(b) They can approach God through their good effort ☐

(c) They cannot approach God directly ☐

(d) None of the above ☐

16. How many types of religious practices do you think are there in Nigeria? ☐

(a) 2

(b) 4 ☐

(c) 3 ☐

(d) 8 ☐

17. Do you believe that social studies is concerned with plant and animals?

(a) Yes ☐

(b) No ☐

18. Health promotion behaviour in every society is important.

(a) True ☐

(b) False ☐

19. Will you agree that mechanized agriculture is the new and better way that must be used to increase production of food?

(a) Yes ☐

(b) No ☐

20. Under-employment on the society leads to waste of workers' talents, training and skills.

(a) True ☐

(b) No ☐

21. List any 4 natural resources in Nigeria

a) _____ b) _____

c)_____ d) _____

22. Write the full name of the present president of Nigeria

_____

23. Mention five (5) states in Nigeria and their capital

a) _____ _____

b) _____ _____

c) _____ _____

d) _____ _____

e) _____ _____

24. How many political parties are there in Nigeria? _____

25. Mention any three types of marriage which you know.

a) _____

b) _____

c) _____

26. Which day is democratic day in Nigeria?

_____

27. Who was the first civilian president of Nigeria? _____

28. Social studies is the study of man and his physical environment.

a) True

b) False

29. The first military president in Nigeria was:

a) General Yakubu Gowon

b) Ironsi

c) Odumegwu Ojukwu

d) None of the above

30. Write two (2) importance of social studies only.

a) _____

b) _____

31. What is culture?

_____

_____

32. HIV/AIDS can be transmitted through the following sources except

a) Sexual intercourse ☐

b) Through blood of an AIDS patient entering a cut or a wound of another person ☐

c) Through water ☐

d) None of the above ☐

33. Write two effects of religious conflicts on society

1._____

2._____

34. Mention two qualities of a good government

1._____

2._____

35. What is resource preservation?

_____

_____

36. Write two causes of unemployment

1. _____

2. _____

37. Write two types of land transport

1. _____

2._____

38. Air pollution is ……..…….

a) When the air is no longer pure for the people to breath

b) When the air is to good for the people to breath

c) None of the above

d) All of the above

39. What is natural disaster?

_____

_____

40. Mention two similarities between men and women

a) _____

b) _____

APPENDIX ii

TEACHER QUESTIONAIRE

Department of Educational Foundation and Curriculum

Ahmadu Bello University, Zaria

These are test- items constructed to find out the differences in academic performance among primary school pupils in social studies in selected public and private primary schools in three different educational zones. Please. Kindly respond to all the questions. Information collected will be treated with confidentiality

INSTRUCTIONS: Write the answer of the following questions and tick ( ) the answer you have chosen where necessary.

1. What type of qualification do you have?

i- B.Ed ☐

ii- N.C.E ☐

iii- Diploma ☐

iv- O.level ☐

2. For how many years have you been teaching?

(a) 1-5 years ☐

(b) 5-10 years ☐

(c) 10-15 years ☐

(d) 15-20 years ☐

(e) 20-30 years ☐

3. Are your classes conducive for teaching and learning the subject of social studies?

(a) Yes ☐

(b) No ☐

4. How many teachers in this school who teach social studies for primary six pupils?

(a) 1------- ☐

(b) 2------- ☐

☐

(c) 3------

(d) 4------ ☐

5. What type of teaching aid are you using when teaching the subject of social studies?

(a) Physical materials ☐

(b) Cardboard ☐

(c) Farming tools ☐

(d) Pictures ☐

(e) All of the above ☐

6. Did your pupils understand everything you teach in social studies?

(a) Yes ☐

(b) No ☐

7. Do you have available text books and equipments?

(a) Yes ☐

(b) No ☐

☐

8. Do you have proper ventilation and well located school buildings?

(a) Yes ☐

(b) No ☐

9. How many pupils are placed in each class?

(a) 10-15 ☐

(b) 15-20 ☐

(c) 20-30 ☐

(d) 30-50 ☐

(e) 50 and above ☐

10. Do you have adequate furniture for your pupils?

(a) Yes ☐ (b) No ☐

11. How many toilets are available in this school?

(a) 1-5 ☐

(b) 5-10 ☐

(c) 10-15 ☐

☐

(d) 15 and above

12. Are you organizing social studies debate among your primary six pupils' classes?

(a) Yes ☐

(b) No ☐

13. Do you have arte-facts in your school?

(a) Yes ☐

(b) No ☐

14. How many game fields do you have?

(a) 1_____ ☐

(b) 2_____ ☐

(c) 3_____ ☐

(d) 4_____ ☐

15. Do you make a test for your pupils at the end of every topic or term?

☐

(a) Yes (b) No ☐

16. Do you need additional instructional materials and school facilities?

(a) Yes ☐

(b) No ☐

17. Is your learning environment effective for teaching and learning?

(a) Yes ☐

(b) No ☐

18. Do you have O. level teachers in your school?

(a) Yes ☐

(b) No ☐

19. Are you having recreational school facilities?

(a) Yes ☐

(b) No ☐

20. Do you have a school Bookshop?

(a) Yes ☐

(b) ☐

APPENDIX iii

SUMMARY OF PUPILS' SCORES OF PRIVATE AND PUBLIC PRIMARY SCHOOLS IN DALA EDUACTIONAL ZONE

Public School:

Ex1 = 6654

$Ex1^2 = 251872.25$

$$\text{Mean} = \frac{EX1}{N} = \frac{6654}{184} = 36.2$$

$$\text{S.D} = \sqrt{\frac{251873.25}{6654}} = 6.2 \quad \text{S.D} = 6.2$$

Private School:

Ex1 = 6617.5

$Ex1^2 = 248072.75$

$$\text{Mean} = \frac{EX1}{N}$$

$$\text{Mean} = \frac{6617.5}{184} = 36$$

$$\text{S.D} = \sqrt{\frac{248072.75}{6}} = 6.1 \quad \text{S.D} = 6.1$$

APPENDIX IV

SUMMARY OF PUPILS' SCORES OF PRIVATE AND PUBLIC PRIMARY SCHOOLS IN RIMIN GADO EDUACTIONAL ZONE

Public School:

$$\text{Mean Ex1} = \frac{7109}{184} = 38.6$$

$$\text{S.D} = \sqrt{\frac{277901}{7109}} = 63 \qquad \text{S.D} = 63$$

Private School:

$$\text{Mean Ex1} = \frac{7177}{184} = 39.0$$

$$\text{S.D} = \sqrt{\frac{290158}{7177}} = 6.4 \qquad \text{S.D} = 6.4$$

APPENDIX V

SUMMARY OF PUPILS' SCORES OF PRIVATE AND PUBLIC PRIMARY SCHOOLS IN RANO EDUACTIONAL ZONE

Private School:

$Ex1 = 4621.5$

$Ex1^2 = 125637.25$

$$\text{Mean} = \frac{EX1}{N}$$

$$\text{Mean} = \frac{4621.5}{184} = 25.1$$

$$\text{S.D} = \sqrt{\frac{12567.25}{4621.5}} \qquad \text{S.D} = 5.2$$

Public School:

$Ex1 = 4573$

$Ex12 = 1314.71$

$$\text{Mean} = \frac{4573}{184} = 24.6$$

$$\text{S.D} = \sqrt{\frac{1314.71}{4573}} = 5.4 \qquad \text{S.D} = 5.4$$

APPENDIX VI

SCORES AND SQUARES OF MALE PUPILS OF PRIVATE AND PUBLIC SCHOOLS IN DALA EDUCATIONAL ZONE

S/N	x_1	x_1^2	X_2	x_2^2
1.	38	1444	42	1764
2.	40	1600	44	1936
3.	28	784	26	676
4.	36	1296	35	1225
5.	29	841	32	1024
6.	42	1764	38	1444
7.	50	2500	48	2304
8.	38	1444	60	3600
9.	34	1156	32	1024
10.	26	2116	40	1600
11.	35	1225	40	1600
12.	42	1764	38	1444
13.	32	1024	34	1156
14.	37	1369	28	784
15.	40	1600	46	2116
16.	45	2025	39	1521
17.	28	784	35	1225
18.	25	625	30	900
19.	38	1444	28	784
20.	34	1156	42	1764

21.	52	2704	54	2916
22.	36	1296	34	1156
23.	30	900	32	1024
24.	36	1296	40	1600
25.	42	1764	46	2116
26.	56	3136	48	2304
27.	28	784	36	1296
28.	44	1936	48	2304
29.	38	1444	36	1296
30.	20	400	30	900
31.	40	1600	38	1444
32.	54	2916	56	3136
33.	30	900	36	1236
34.	37	1369	40	1600
35.	34	1156	36	1296

36.	40	1600	38	1444
37.	36	1296	40	1600
38.	28	784	33	1089
39.	36	1296	38	1444
40.	34	1156	38	1444
41.	45	2025	40	1600
42.	50	2500	52	2704
43.	43	1849	46	2116
44.	38	1444	40	1600
45	26	676	35	1225
46	24	576	30	900
47	32	1024	32	1024
48	20	400	24	576
49	26	676	26	676

50	22	484	30	900
51	30	900	20	400
52	38	1444	30	900
53	41	1681	36	1296
54	28	784	30	900
55	36	1296	32	1024
56	40	1600	38	1444
57	52	2704	46	2116
58	30	900	36	1296
59	35	1225	38	1444
60	34	1156	40	1600
61	38	1444	36	1296
62	26	676	28	784
63	34	1156	30	900

64	44	1936	36	1296
65	40	1600	38	1444
66	48	2304	42	1764
67	38	1444	44	1936
68	28	784	30	900
69	24	576	32	1024
70	30	900	36	1296
71	80	6400	65	4225
72	60	3600	68	4624
73	28	784	35	1225
74	44	1936	46	2116
75	52	2704	42	1764
76	30	900	40	1600
77	38	1444	35	1225

78	32	1024	36	1296
79	36	1296	28	784
80	31	961	24	576
81	42	1764	39	1521
82	36	1296	40	1600
83	32	1024	26	676
84	28	784	32	1024
85	42	1764	40	1600
86	41	1681	36	1296
87	56	3136	50	1296
88	50	2500	48	2304
89	48	2304	46	2116
90	36	1296	50	2500
91	38	1444	30	900

92	36	1296	60	3600
93	34	1156	38	1444
94	50	2500	49	2401
95	46	2116	48	2304
96	39	1521	44	1936
97	30	900	36	1296
98	35	1225	40	1600
99	40	1600	35	1225
100	56	3136	48	2304
101	65	4225	55	3025
102	40	1600	46	2116
103	34	1156	40	1600
104	32	1024	36	1296
105	36	1296	42	1764

106	42	1764	36	1296
107	35	1225	36	1296
108	36	1296	30	900
109	30	900	36	1296
110	40	1600	40	1600
111	50	2500	55	3025
112	35	1225	40	1600
113	28	786	30	900
114	36	1296	39	1521
115	44	1936	46	2116
116	30	900	35	1225
117	36	1296	34	1156
118	39	1521	40	1600
119	28	784	20	400

120	30	900	25	625
121	36	1296	30	900
122	45	2025	38	1444
123	40	1600	42	1764
124	50	2500	40	1600
125	60	3600	56	3136
126	36	1296	40	1600
127	38	1444	32	1024
128	40	1600	38	1444
129	30	900	40	1600
130	36	1296	35	1225
131	45	2025	42	1764
132	36	1296	38	1444
133	40	1600	42	1764

134	28	784	36	1296
135	22	484	28	784
136	29	841	30	900
137	40	1600	41	1681
138	20	400	32	1024
139	26	676	28	786
140	38	1444	44	1936
TOTAL	5417	209285	5430	216030

APPENDIX vii

SCORES AND SQUARES OF FEMALE PUPILS OF PRIVATE AND PUBLIC SCHOOLS IN DALA EDUACTIONAL ZONE

S/N	x_1	x_1^2	X_2	x_2^2
1.	44	1936	60	12600
2.	36	1296	36	1296
3.	40	1600	50	2500
4.	50	2500	48	2304
5.	38	1444	32	1024
6.	36	1296	30	841
7.	28	784	38	1444
8.	25	625	40	1600
9.	40	1600	36	1296
10.	46	2116	50	2500
11.	60	3600	86	3364
12.	46	2116	50	2500
13.	39	1521	44	1936
14.	32	1024	40	1600
15.	38	1444	39	1521
16.	30	900	26	676
17.	29	841	30	900
18.	30	841	35	2525
19.	35	1225	40	1600
20.	40	1600	38	1444

21.	32	1024	32	1024
22.	28	784	30	900
23.	34	1156	36	1296
24.	55	3025	54	2916
25.	46	2116	50	2500
26.	60	3600	56	3136
27.	38	1444	40	1600
28.	34	1156	32	1024
29.	30	900	20	400
30.	38	1444	34	1156
31.	20	400	24	576
32.	29	341	32	1024
33.	36	1296	39	1521
34.	48	2304	50	2500
35.	35	1225	36	1296

36.	38	144	40	1600
37.	40	1600	38	1444
38.	52	2704	48	2304
39.	32	1024	49	1600
40.	36	1296	38	1444
41.	28	784	30	900
42.	44	1936	38	1444
43.	48	2304	44	1936
44.	50	2500	46	2116
TOTAL	1692	68616	1747	74128

APPENDIX viii

SCORES AND SQUARES OF MALE PUPILS OF PRIVATE AND PUBLIC SCHOOLS IN RIMIN GADO EDUCATIONAL ZONE

S/N	x_1	x_1^2	X_2	x_2^2
1.	42	1764	39	1521
2.	38	1444	40	1600
3.	60	3600	58	3364
4.	30.5	930.25	32	1024
5.	25	625	20	400
6.	40	1600	38	1444
7.	35	1225	32	1024
8.	55	3025	52	2704
9.	20	400	26	676
10.	39.5	1560.25	35	1225
11.	28	784	34	1156
12.	33	1089	28	784
13.	35	1225	40	1600
14.	41	1681	36	1296
15.	39	1521	40	1600
16.	35	1225	33	1089
17.	38	1444	41	1681
18.	40	1600	36	1296
19.	38	1444	40	1600
20.	44	1936	39	1521

21.	30	900	35	1225
22.	36	1296	40	1600
23.	32	1024	36	1296
24.	28	784	30	900
25.	46	2116	44	1936
26.	34	1156	30	900
27.	39	676	41	1681
28.	26	676	28	784
29.	30	900	33	1089
30.	42	1764	36	1296
31.	28	784	30	900
32.	34	1156	36	1296
33.	32	1024	30	900
34.	35	1225	33	1089
35.	38	1444	41	1681

36.	25	625	28	784
37.	40	1600	41	1681
38.	36	1296	38	1444
39.	38	1296	36	1296
40.	35	1225	34	1156
41.	46	2116	44	1936
42.	50	2500	50	2500
43.	40	1600	42	1764
44.	42	1764	40	1600
45	40	1600	36	1296
46	39	1521	34	1156
47	52	2704	48	2304
48	46	2116	45	2025
49	47	2209	39	1521

50	48	2304	48	2304
51	53	2809	56	3136
52	48	2304	45	2025
53	55	3025	36	1296
54	52	2704	56	3136
55	49	2401	54	2916
56	28	784	30	900
57	27	729	29	841
58	32	1024	36	1296
59	31	961	32	1024
60	25	625	30	900
61	20	400	35	1225
62	26	676	20	400
63	35	1225	30	900

64	38	1444	36	1296
65	20	400	22	484
66	26	676	25	625
67	40	1600	32	1024
68	42	1764	42	1764
69	36	1296	36	1296
70	22	484	26	676
71	28	784	30	900
72	30	900	28	784
73	42	1764	44	1936
74	20	400	30	900
75	26	676	24	576
76	34	1156	24	1296
77	33	1089	35	1225

78	36	1296	38	1444
79	39	1521	40	1600
80	42	1764	44	1600
81	50	2500	48	2336
82	20	400	30	900
83	32	1024	26	676
84	33	1089	30	900
85	42	1764	40	1600
86	60	3600	20	400
87	26	676	36	1296
88	28	784	34	1156
89	25	625	30	900
90	30	900	25	625
91	24	576	30	900

92	35	1225	28	784
93	40	1600	36	1296
94	32	1024	40	1600
95	36	1296	20	400
96	46	2116	30	900
97	38	1444	40	1600
98	28	784	45	2025
99	46	2116	30	900
100	30	900	42	1764
101	29	841	22	484
102	35	1225	26	676
103	42	1764	30	900
104	42	1600	36	1296
105	46	2116	40	1600

106	48	2304	54	2916
107	30	900	20	400
108	36	1296	38	1444
109	40	1600	46	2116
110	55	3025	48	2304
111	28	784	35	1225
112	30.5	930.25	28	784
113	40.5	1640.5	39	1521
114	36	1296	40.5	1640.25
115	30	900	26.5	702.25
116	28	784	32	1024
117	26	676	28	784
118	40	1600	44	1936
119	39	1521	36	1296

120	49.5	2450.25	50	2500
121	30	900	28	784`
122	28	784	35	1225
123	45	2025	42	1764
124	26	676	30	900
125	37	1369	34	1156
126	38	1444	20	400
127	40	1600	52	2704
128	35.5	1260.25Q	30	900
129	42	1764	50	2500
130	24	576	28	784
131	26	676	30.5	930.25
132	46.5	2162.25	48	2304
133	36	1296	35	1225

134	28	784	32	1024
135	44	1936	42	1764
136	36	1296	40	784
137	32	1024	38	1444
138	46	2116	40	1600
139	35.5	1260.25	44	1936
140	46	216	38	1444
TOTAL	5094	195207.25	5041.5	189748.75

APPENDIX ix

SCORES AND SQUARES OF FEMALE PUPILS OF PRIVATE AND PUBLIC SCHOOLS IN RIMIN GADO EDUATIONAL ZONE

S/N	x_1	x_1^2	X_2	x_2^2
1.	42	1764	39	1521
2.	36	1296	38	1444
3.	50	2500	46	1089
4.	32	1024	40	1600
5.	28	784	30	900
6.	34	1156	32	1024
7.	44	1936	42	1764
8.	26	676	30	900
9.	30	900	28	784
10.	40	1600	36	1296
11.	24	576	28	784
12.	32	1024	40	1600
13.	38	1444	32	1024
14.	28	784	25	625
15.	48	2304	46	2116
16.	40	1600	36	1296
17.	26	676	32	1024
18.	30	900	28	784
19.	35	1225	40	1600
20.	28	784	30	900

21.	42	1764	34	1156
22.	32	1024	36	1296
23.	30	900	28	784
24.	24	576	30	900
25.	28	784	20	40
26.	39	1521	42	1764
27.	50	2500	54	2916
28.	46	2116	42	1764
29.	33	1089	30	1936
30.	46	1089	44	1936
31.	55	3025	50	2500
32.	35	1225	45	2025
33.	40	1600	46	2116
34.	28		30	900
35.	38	1414	35	1225

36.	42	1764	40	1600
37.	20	400	24	576
38.	32	1024	33	1089
39.	25	625	30	900
40.	56	3136	52	2704
41.	34	1156	42	1764
42.	30	900	28	784
43.	28	784	32	1024
44.	36	1296	35	1225
TOTAL	1560	56665	1576	58,324

APPENDIX x

SCORES AND SQUARES OF MALE PUPILS OF PRIVATE AND PUBLIC SCHOOLS IN RANO EDUCATIONAL ZONE

S/N	x_1	x_1^2	X_2	x_2^2
1.	29	841	31.5	992.25
2.	29.5	870.25	32.5	1056.25
3.	28	784	36.5	1332.25
4.	28	784	32	1024
5.	27.5	756.25	32	1024
6.	28.5	812.25	33	1089
7.	23.5	552.25	35	1225
8.	31	961	36	1296
9.	25.5	650.25	30	900
10.	31	961	32	1029
11.	26	676	35	1225
12.	29.5	870.25	36	1296
13.	30.5	930.25	32	1024
14.	29	841	32	1024
15.	25	625	38	1444
16.	24	576	35	1225
17.	32	1024	31	961
18.	27	729	32	1024
19.	28	784	21	441
20.	29	841	19	361

21.	30	900	29	841
22.	28	784	18	324
23.	25	625	24	576
24.	30	900	26	676
25.	31	961	35	1225
26.	22	484	5	25
27.	32	1024	15	225
28.	27	729	19	361
29.	37	1369	21	441
30.	31	961	22	484
31.	12	144	30	900
32.	26	676	10	100
33.	33.5	1122.25	18	324
34.	29.5	870.25	20	400
35.	28	784	27	729
36.	33	1089	20	400
37.	27	729	20	400
38.	22	484	22	484
39.	31	961	20	400
40.	32	1024	25	625
41.	31	961	30	900
42.	29	841	40	1600
43.	38	1444	36	1296
44.	27	729	10	100

45.	32	1024	10	100
46.	29	841	34	1156
47.	30	900	36	1296
48.	30.5	930.25	32	1024
49.	10	100	38	1444
50.	0	0	33	1089
51.	13	169	36	1296
52.	21	141	32	1024
53.	15	225	31	961
54.	23	529	32	1024
55.	25	625	32	1024
56.	10	100	33	1089
57.	17	289	36	1296
58.	29	841	32	1024
59.	30	900	21	441
60.	21	441	19.5	380.25
61.	36	1296	18.5	342.25
62.	28	784	26	676
63.	19	361	35.5	1260.25
64.	27	729	5	25
65.	15	225	20	400
66.	36	1296	21	441
67.	30	900	30	900
68.	33	1089	8	64

69.	29	841	20	400
70.	34	1156	20	400
71.	25	625	20	400
72.	30	900	30	900
73.	27	729	36	1296
74.	25.5	726.25	10	100
75.	29	841	10	100
76.	28	784	32	1024
77.	17	289	38	1444
78.	25	625	29	841
79.	28	784	27	729
80.	30	900	32	1024
81.	31	961	17	289
82.	28	784	29	841
83.	31	969	0	0
84.	30	900	29	841
85.	29	841	39	1521
86.	31	961	11	121
87.	22	484	30	900
88.	26	676	27	729
89.	30	900	15	225
90.	20	400	17	289
91.	22	484	12	144
92.	15	225	23	529

93.	10	100	29	841
94.	20	400	20	400
95.	13	169	7	49
96.	11	121	9	81
97.	30	900	27	729
98.	21	441	16	256
99.	19	361	31	961
100.	12	144	25	625
101.	14	196	23	529
102.	19	361	20	400
103.	23	529	15	225
104.	26	676	19	361
105.	27	729	31	961
106.	10	100	22	484
107.	14	196	5	25
108.	18	324	10	100
109.	25	625	16	256
110.	17	289	14	196
111.	25	625	26	256
112.	28	784	19	361
113.	30	900	20	400
115.	16	256	27	729
116.	0	0	26	676
117.	5	25	20	400

118.	13	169	15	225
119.	15	225	29	361
120.	0	0	27	729
121.	0	0	30	900
122.	29	841	32	1024
123.	16	256	0	0
124.	0	0	10	100
125.	10	100	15	225
126.	15	225	20	400
127.	0	0	25	625
128.	14	196	13	169
129.	17	289	20	400
130.	19	361	22	484
131.	25	625	26	676
132.	30	900	28	784
133.	0	0	13	169
134.	10	100	19	361
135.	17	289	28	784
136.	19	361	30	900
137.	30	900	40	1600
138.	39	152	31	961
139.	28	784	29	841
140.	32	1024	30	900
TOTAL	3295.5	87083.75	3354	94231.5

APPENDIX xi

SCORES AND SQUARES OF FEMALE PUPILS OF PRIVATE AND PUBLIC SCHOOLS IN RANO EDUCATIONAL ZONE

S/N	x_1	x_1^2	X_2	x_2^2
1.	30	900	37.5	1406.25
2.	29.5	870.25	22.5	506.25
3.	22.5	506.25	33	1089
4.	28.5	812.25	11.5	132.25
5.	31	961	14.5	210.25
6.	32	1024	38	1444
7.	31.5	992.25	10.5	110.25
8.	32	1024	33	1089
9.	31.5	992.25	10.5	110.25
10.	35	1225	20.5	420.25
11.	28	784	25.5	650.25
12.	28	784	36.5	1332.25
13.	26.5	702.25	20.5	420.25
14.	27.5	756.25.	30	900
15.	26	676	10	100
16.	26.5	702.25	34	1154
17.	30	900	35	1225
18.	30	900	22	484
19.	30	900	11	121
20.	30	900	10	110.25

21.	29	841	21	441
22.	25	625	37	1369
23.	31	961	32	1024
24.	22	484	30	900
25.	34	1156	32	1024
26.	22	484	38	1444
27.	30	900	21	441
28.	22	484	29	841
29.	15	225	35.5	1260,25
30.	30	900	19	361
31.	22	484	37	1369
32.	38.5	812.25	33	1089
33.	31	961	12	144
34.	32	1024	31	961
35.	38	1444	38	1444

36.	35	1225	14.5	210.25
37.	28	784	33	1089
38.	26.5	702.25	25	625
39.	26	676	36	1296
40.	30	900	34	1156
41.	30	900	35	1225
42.	40	1600	27	729
43.	35	1225	11.5	132.25
44.	38	1444	60	3660.25
TOTAL	1326	38553.5	1219	37239.5

APPENDIX xii

Result of Pilot Study

x_1	Y_1	X_2	Y_2
48	37	40	42
50	40	49	34
45	36	47	38
38	39	35	35
47	40	40	45
30	35	37	44
42	28	20	39
38	30	38	36
40	43	41	30
44	35	36	46

	Mean	STD	N	R
	40.25	6.34	20	0.95
Test II	36.10	6.00	20	

Correlation is significant at 0.01